

Assessing the Performance of Currency Floating on the Indicators of Economic Growth within Border Regions of Ogun State, Nigeria

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ABSTRACT

Exchange rate liberalization regimes in import-reliant emerging economies naturally give rise to deep macroeconomic shocks, specifically in multinational border regions with high informal trade velocity and import dependence. This study evaluates how Nigeria's post-2023 floating exchange rate policy affects economic growth in Ogun State's border regions: Yewa North, Ipokia, and Imeko/Afon. The analysis is carried out on the household and business operating unit within the three Local Government Areas of the border. The study utilizes both ex-post facto secondary macroeconomic data (2016–2025) obtained from the Central Bank of Nigeria and the World Bank, with exchange rate and inflation data of the national level serving as exogenous policy shock variables, and primary cross-sectional survey data from 376 border residents and commercial operators. To serve as the dependent variable, a composite Border Region Economic Performance Index (BREPI) was constructed from primary survey data capturing at the local level, the household income changes, business profitability, trade volume, and employment generation. The trend analysis, Pearson Product-Moment Correlation, and Multiple Regression techniques were used to analyse the data. The results showed a substantial post-floating depreciation of the Naira (from ₦450 in 2022 to ₦1,540 in 2025) and a corresponding inflationary spike to 34.8%, with severe localised transmission effects on border communities. The results of inferential statistics show that exchange rate volatility has a statistically significant negative effect on the Border Region Economic Performance Index ($\beta = -0.587$, $p < 0.05$) and on the purchasing power of households ($r = -0.791$), but has a positive effect on inflation ($r = 0.842$). On the other hand, local demand and the residual purchasing power boost regional production. The study concludes that while currency floating eliminates administrative arbitrage, it imposes a severe "border penalty" on import-dependent regional economies lacking domestic productive buffers. The study recommends targeted macroeconomic stabilization, aggressive import-substitution industrialization, and the deployment of localized social safety nets to shield transnational border communities from external monetary shocks.

Keywords: Exchange Rate Liberalization, Border Economics, Macroeconomic Volatility, Regional Growth, Purchasing Power Parity, Border Region Economic Performance Index.

INTRODUCTION

The architecture of its exchange rate regime still plays a fundamental role in the nation's macroeconomic policies and has deep impacts on output growth, price stability, international trade competitiveness, and the functioning of the balance of payments (International Monetary Fund [IMF], 2021). The past three decades have seen a significant shift in the economic model of the developing economies towards flexible exchange rate systems. This transition has been largely catalysed, to a large extent, by globalization, ongoing trade and financial imbalances, the depletion of foreign exchange reserves, and the need for countries to adopt independent monetary policy systems (Krugman, Obstfeld, & Melitz, 2022; Mishkin, 2021). The valuation of the domestic currency under a floating model is mainly endogenous, depending on the interaction of forces in the market for foreign exchange, that is, foreign exchange demand and foreign exchange supply, rather than

on the action of direct price fixing by the state or the actions of the central bank in the form of intensive intervention in the monetary base.

The June 2023 change in the macroeconomic environment in Nigeria was a paradigm shift with the Central Bank of Nigeria (CBN) officially launching an improved framework for exchange rate liberalization. This policy reversal was engineered to dismantle the multi-tiered exchange rate windows, eradicate speculative arbitrage, unify the official and parallel market rates, and ultimately stimulate foreign direct investment (FDI) by restoring market confidence (CBN, 2024). Theoretically, the IMF (2024) posits that flexible exchange rate systems facilitate superior macroeconomic adjustment mechanisms, allowing currencies to act as shock absorbers against external terms-of-trade disruptions.

But the empirical fact of the floatation of the Naira is far removed from the theoretical optimism, which has occasioned drastic socio-economic dislocations. The rapid devaluation of the Naira against major reserve currencies in the world, especially the U.S. Dollar, has led to a chain reaction of imported inflation, thereby making the cost of essential imports, logistics, and industrial feedstocks increase out of control, as Ajakaiye & Tella (2024) reported. Yusuf and Bello (2023) highlighted that the pass-through effect on the exchange rate has been the main cause of consumer price inflation in Nigeria, leading to a significant loss of purchasing power for households, and the cost of living has increased exponentially among both the urban and rural population. This is also confirmed by the World Bank (2024) that food inflation has been disproportionately affected by currency depreciation, leading to a sharp contraction in the real incomes of the most vulnerable.

The academic debate on the relationship between exchange rate regimes and economic growth, especially in border regions is very polarized. Flexible exchange rates are seen to boost the competitiveness of a nation in the international market, promote efficient resource allocation and lure foreign capital, thereby eliminating exchange-rate misalignments (Obadan & Aliyu, 2021; Rogoff & Reinhart, 2021). In addition, flexible regimes are thought to offer automatic stabilizers to external financial shocks (Taylor & Taylor, 2021). On the other hand, structuralist critics have argued that high exchange rate volatility creates a lot of uncertainty in such economies where import demand is inelastic and domestic productive capacity is weak, discourages long-term capital investment, pushes up costs, and triggers inflation (Bahmani-Oskooee & Gelan, 2020; Cushman, 2021).

Nigerian borders have an immediate and sharp reaction to exchange rate changes, as a result of the widespread arbitrage possibilities arising from the price differentials between Nigeria and neighbouring Francophone countries. As is also apparent in Nwosa (2022), there is a notable absence of microeconomic, sub-national studies of the impact of exchange rate volatility at the local level on variables like the price of specific goods and services, and on the growth of informal trade and smuggling operations in border regions. Corralled borders are extremely sensitive and have a special economic system. They are defined by high levels of cross-border trade, informal trade, foreign currency substitution and transnational migration (Adeola & Evans, 2021; Bassey & Okafor, 2021). Volatility in exchange rates is amplified in these regions in the direct transmission channels affecting commodity pricing, customs revenues, logistics costs and household welfare. Ogunleye and Adebayo (2023) hold that border communities along the Southwestern Nigerian border corridors are at risk. As claimed by Ogunleye and Adebayo (2023), the border communities in the Southwestern Nigerian border passages are susceptible.

In Nigeria's border economy, Ogun State occupies a strategically critical position, sharing a wide-ranging international border with the Republic of Benin. Local Government Areas (LGAs), including Yewa North, Ipokia, and Imeko/Afon, serve as crucial hubs for formal and informal multinational trade, encircling commodity exchanges, fuel product trafficking, hospitality, and merchandising. Thus, the fluctuation of the Naira has profound, localized consequences for the socio-economic well-being, commercial cost-effectiveness, and regional economic performance of these communities. Although Naira depreciation theoretically makes Nigerian exports more competitive, it has an adverse effect in a structurally import-dependent border economy in relation to higher cost of imported consumer goods, complex inflation, and lesser domestic welfare (Adebisi & Oladele, 2024; Ewubare & Chuku, 2022).

Although these border economies are of paramount significance, there is a conspicuous lack of empirical studies of the performance of the floating exchange rate regime in these particular regions after 2023. Current research mostly focuses on macroeconomic indicators at the national level and thus ignores the reality of the economy at the individual locality level and the particular vulnerabilities of the populations living on the borders. This imbalance shows that there is an important research gap in this regard, which requires a thorough empirical study of the effect of the floating rate regime on the economic growth indicators in the border area of Ogun State. Given that disaggregated GDP data are not available at the Local Government Area level in Nigeria, this study constructs a composite Border Region Economic Performance Index (BREPI) from primary survey data to capture localised economic outcomes, while incorporating national-level exchange rate and inflation data as exogenous policy shock variables.

This study, therefore, looks into the performance of the floating of the currency in the selected parameters of economic growth in the border areas of Ogun State using the pre- and post-floating economic trajectories, and the causal relationships between the floating of the currency and the socio-economic outcomes of the region.

LITERATURE REVIEW

A monetary regime with a floating exchange rate is a monetary regime in which the exchange value of a country's currency is most influenced by the external forces of supply and demand in the foreign exchange market (Mishkin, 2021). In this regime, government and central bank actions are more limited and generally reserved for times of extreme market imbalance or market volatility. The spectrum of floating regimes ranges from pure free-floating systems, with the latter being characterized by the fact that the central bank sometimes intervenes in the foreign exchange market to reduce short-term exchange rate volatility, but does not set a long-term rate parity target. As reiterated by Krugman et al. (2022), floating exchange rates offer economies the required flexibility to regulate external macroeconomic shocks and adjust the disparities in the balance of payments. However, in emerging economies like Nigeria, which are characterized by hefty import reliance, limited industrial broadening, and structural inflexibilities, the devaluation of the currency under a floating regime frequently translates directly into local inflation instead of export-led growth (Ajakaiye & Tella, 2024).

Macroeconomic indicators of national performance, including the growth of Gross Domestic Product (GDP), the rate of inflation, the rate of unemployment and the trade balance, offer a macroeconomic picture of national performance (World Bank, 2024). But Todaro and Smith (2021) stress that aggregate economic growth does not imply a better living standard or income distribution or local welfare. However, in the particular case of border economies, indicators of regional growth and economic vitality need to be quantified with local measures: volume and speed of cross-border trade, profitability of informal trade, flows of transportation logistics, real purchasing power of households. In the absence of sub-national GDP data in Nigeria, this study operationalises regional economic performance through a composite index derived from household income, business profitability, trade volume, and employment generation, indicators that are directly measurable at the community level. The effect of exchange rate flexibility on these indicators is channelled through the effect of exchange rate flexibility on import prices, export price competitiveness, transaction costs, and consumer behaviour of the households (Bahmani-Oskooee & Gelan, 2020; Yusuf & Bello, 2023).

Border economies are geographical zones where local economic activities are inextricably linked to, and highly dependent on, transnational economic dynamics. These regions are characterized by high volumes of informal trading, cross-border migration, commodity arbitrage, and foreign currency transactions (Adeola & Evans, 2021). Nwosa (2022) contends that exchange rate instability has a greater impact on the border economies than the non-border ones because of their dependence on transnational commercial networks. Devaluation of currency can hurt domestic inflation, encourage smuggling, and can adversely impact supply chain operations for businesses that rely on the border. Though it could make domestic exports more competitive, devaluation can also encourage smuggling, increase local inflation, and impact the supply chain operations of businesses that rely on the border. The economic corridors of Ogun State (Yewa North, Ipokia and Imeko/Afon) are vulnerable to exchange rate fluctuation due to the dynamic and highly integrated nature of their commercial ecosystem with francophone West Africa, where exchange rate fluctuations are a constant variable, which needs constant conversions.

The five theoretical models that are used to explain the mechanisms through which exchange rate policy affects regional economic growth are complementary. First, the theory of Purchasing Power Parity (PPP), which was proposed by Cassel in the first place and formalized in the modern era by Taylor and Taylor (2021), states that exchange rates between two currencies will come to an equilibrium that reflects the difference in inflation rates between the two countries. For this study, PPP refers to the direct effect of exchange rate depreciation on prices in border communities. With the depreciating Naira against the CFA franc and the US dollar, the buying power of the Naira in the local currency becomes very low. The constant depreciation of the currency raises prices of imported commodities in the domestic market, which directly decreases real household welfare and living standards for the border households, which are very dependent on imports. Second, the Mundell-Fleming model is a simple macroeconomic framework used to analyse the relationship between exchange rate regimes, capital mobility, and the effectiveness of monetary policy in open economies (Mankiw, 2022). One of the main tenets of the model is that under a free exchange rate regime with high capital mobility, monetary policy is a very powerful tool for the purpose of affecting national output. The model implies that a depreciating currency in a floating exchange rate regime facilitates a better current account and an export expansion due to the increased competitiveness of exports and the reduced competitiveness of imports. But the effectiveness of this process depends on the presence of strong domestic productive capacity and industrial competitiveness. The border areas of Nigeria suffer from the Mundell-Fleming effect, which is only partly counteracted by the skewed economic activity in these regions, as they are dominated by importation of goods instead of production of exportable alternatives, and this causes stagflation and not output growth. Third, the Exchange Rate Volatility (ERV) Theory is based on the negative micro- and macro-economic consequences of exchange rate volatility on trade and investment. Institutional uncertainty can be caused by exchange rate volatility, and this increases the risk premium for international trade and may discourage capital investment in the long run, as argued by Bahmani-Oskooee and Gelan (2020). Cushman (2021) builds on this, arguing that moving exchange rates unnecessarily raises the cost and inefficiencies of international trade. In the context of border economies that are heavily dependent on daily foreign exchange transactions and cross-border supply chains, undue volatility in FX rates negatively affects pricing, profit margins, and the welfare of the household. Fourth, the Structuralist Dependency Theory as adapted to development economics by Todaro and Smith (2021) refers to the structural dependence of peripheral developing economies on core economies in terms of import of necessary goods, technologies and capital. Structuralist economists say depreciation in import-dependent economies does not cause expenditure switching (buy local, not imported), but instead it makes imports more expensive, causing inflation and worsening the trade balance. Nigeria's dependence on refined petroleum, machine and processed foods imports to this extent, inevitably translates into cost of production increase and loss of purchasing power of the border communities as a result of floating of Naira. Lastly, the study examines the Elasticity Approach and the Marshall-Lerner Condition: Although the Elasticity Approach states that the trade balance impact of exchange rate depreciation is a function of the price elasticities of demand for exports and imports (Krugman et al., 2022; Usman & Garba, 2023), the Marshall-Lerner Condition reiterates that if the sum of the price elasticities of demand for exports and imports exceeds unity, then the currency depreciation will improve the trade balance. For Nigeria's border states, the necessity to import essential commodities, like fuel, food, and manufacturing, is extremely price inelastic. Thus, the Naira depreciation does not have much impact on the quantity of importation, but significantly raises the import bill and the regional trade deficit, thereby contributing to inflation.

The empirical studies on the dynamics of exchange rates show that the relationship between the valuation of a currency and the growth of the economy is not straightforward and can even be contradictory, depending on the geographical and structural conditions. In the country, the results of studies on the impact of exchange rate liberalization on growth have been ambiguous. Mamuda, Muhammed, Babangida and Jimoh (2021) carried out a thorough study under the title: "Exchange Rate Fluctuations and Economic Growth Nexus: An Empirical Evidence from Nigeria (1986–2019)", which employed an Ordinary Least Squares (OLS) regression methodology using annual time series data from 1986 to 2019 for the post Structural Adjustment Programme (SAP) era to current times. The positive relationship is largely attributed to Nigeria's mono-product economic structure, where historical depreciations of the Naira increased the local currency value of crude oil export revenues, thereby stimulating nominal GDP growth. However, this growth was concurrently undermined by the negative, compounding effects of high inflation and elevated interest rates, which stifled domestic

consumption and private investment. The study suggested that in resource-dependent economies, depreciation of exchange rates can be growth-enhancing in the short run because export revenues can be expanded, but at the same time, depreciation must be accompanied by a proactive approach to the management of inflation and interest rates to avoid losing the gains from the exchange rate depreciation.

While the results of Mamuda and colleagues are optimistic, Adeniran, Yusuf, and Adeyemi (2022) used the bounds testing procedure for cointegration in the Autoregressive Distributed Lag (ARDL) model for a more in-depth investigation of both the short and long run relationships in their study, "The Impact of Exchange Rate Depreciation on Industrial Productivity and Macroeconomic Stability in Nigeria. They found that the depreciation in the exchange rate had a major impact on industrial productivity and was an important source of macroeconomic instability. Nigeria's manufacturing and industrial sectors are import-dependent compared with the extractive oil sector, and depreciation has a significant effect on production costs, resulting in low output, shutting of factories, and job losses, thus showing the fragility of the real sector. The study showed that currency depreciation is generally harmful for the real sector in import-dependent economies and that policymakers should focus on import substitution and strengthening of domestic industrial capacity first and then consider using currency devaluation as a policy instrument.

A timely study on the market versus the inflationary pressures in Nigeria as a result of 2023 exchange rate liberalization was conducted by Ajakaiye and Tella (2024) through a mixed-methods strategy that involved macroeconomic time-series data analysis after June 1, 2023, float, and qualitative analysis of structural vulnerabilities and disruptions in the market. Their findings showed that the exchange rate liberalisation of 2023 enhanced transparency in the markets and brought the exchange rate windows closer together, but at the same time created high inflationary pressure and made import costs rise. While the removal of multiple exchange rate windows reduced arbitrage and improved the official alignment of the Naira, the abrupt pass-through of the depreciated rate to domestic prices exposed the deep structural vulnerabilities of an economy heavily reliant on imported finished goods and refined petroleum products. The study found that exchange rate liberalisation, in the absence of supporting structural reforms in the real sector, energy and supply chains, always results in outcomes of 'stagflation' which are unequally detrimental for the real sector and vulnerable groups.

In order to isolate temporal effects, Olayungbo and Quadri (2021) employed the autoregressive distributed lag (ARDL) bounds testing approach in studying the short-run and long-run effects of exchange rate fluctuations on manufacturing productivity and unemployment in Nigeria using time-series data from 1986 to 2020 for a period of thirty-four years. They found that short-term depreciation was not stimulative, but long-term depreciation would be extremely harmful, thereby reducing the productivity of the manufacturing sector and worsening unemployment. The absence of short-run stimulus reinforces the price inelasticity of the non-oil export base, and the sustained depreciation will result in the reduction of purchasing power for firms, an increase in the cost of imported factors, and compel labour-intensive industries to contract their operations and create structural unemployment. The study urged the adoption of a managed floating rate of exchange, which entails active intervention by the CBN to protect domestic industries from extreme destabilizing volatility, as the appropriate rate in Nigeria's economic structure, while the free-floating rate is not.

In the study entitled "Exchange Rate Volatility, Foreign Direct Investment and Macroeconomic Stability: A GARCH-ARDL Analysis," Okonkwo and Egbulun (2022) adopted a sophisticated approach of conducting a two-step econometric analysis to identify volatility measures using the Generalized Autoregressive Conditional Heteroskedasticity (GARCH 1,1) model and then examine the effect on FDI and macroeconomic stability using an ARDL model. Their findings demonstrated that exchange rate volatility significantly and adversely affects foreign direct investment inflows and overall macroeconomic stability. The high volatility makes the business environment also unpredictable, and thus makes investors demand a higher risk premium when investing in a foreign company. This will reduce the amount of long-term capital commitments, because investors do not want to see their repatriated profits and asset value being eroded suddenly. The study has found that currency stabilization is an essential precondition for the stability of investments, and the exchange rate predictability and credibility of investment institutions are to be given high importance by the policy

makers to welcome and secure foreign currency and investment rather than competing with currency devaluation.

Using the Pearson correlation analysis and multiple regression techniques on recent macroeconomic data, Nwinkina and Ekere (2024) carried out research to isolate the relationship between the exchange rate and real GDP growth in Nigeria. They discovered a small and weak negative relationship between the exchange rate and real GDP growth. They found a weak but persistent negative correlation between the exchange rate and real GDP growth. This weak negative correlation suggests that as the Naira depreciates, real GDP growth marginally contracts because the negative effects of imported inflation, reduced domestic demand, and capital flight consistently outweigh any marginal gains from theoretical export competitiveness. This study found that monetary policies need to be actively pursued to stabilise the currency and not leave it to market forces because the growth dividends of market forces are not realised in Nigeria.

Turning to West Africa, Mensah and Ofori (2021) explored the macroeconomic costs of currency instability in Ghana in their study: "The Macroeconomic Costs of Currency Instability: Evidence from Ghana Using VECM. Shifting focus to West Africa, Mensah and Ofori (2021) examined the macroeconomic costs of currency instability in Ghana in their study: "The Macroeconomic Costs of Currency Instability: Evidence from Ghana Using VECM. They found that very high levels of exchange rate volatility have a very negative effect on domestic investment and economic productivity. This is particularly true in Ghana, where the instability of the currency makes the business planning process difficult, borrowers are faced with higher interest rates, and savings lose their purchasing power, thus reducing private and public investment. The study found that central bank action is needed to dampen any unwarranted shocks and to ensure a stable macroeconomic backdrop for long-term and inclusive growth.

To control for endogeneity and unobserved heterogeneity, Eze and Nnamani (2023) used System Generalized Method of Moments (System GMM) and Fixed Effects models applied to a balanced panel data set of thirty (30) Sub-Saharan African countries at the continental level in their study 'Market-Determined Exchange Rate Reforms and Non-Oil Export Performance in Sub-Saharan Africa: A Panel Data Analysis'. They discovered that the market-determined exchange rate reforms had a positive and significant impact on the volumes of non-oil exports within the region.

The flexible exchange rate is beneficial to the price competitiveness of non-traditional exports (including agriculture and light industry) in the global market, but it can only come about in conjunction with the reform of domestic structures (particularly infrastructure, trade facilitation, and credit supply). The study has found that there is room for a flexible exchange rate regime to be a suitable policy tool for an export-oriented growth strategy as long as governments are prepared in parallel to invest in supply-side structural reforms to boost productive capacity.

To check for asymmetric responses in trade data, Bahmani-Oskooee and Gelan (2020) used a Non-linear Autoregressive Distributed Lag (NARDL) model to decompose the exchange rate volatility into positive and negative shocks that have been used in their comprehensive study 'Asymmetric Effects of Exchange Rate Volatility on Trade Flows: Evidence from 50 Developing Economies'. They showed that exchange rate volatility has a non-linear effect, with a negative impact on export activity growth, and a marked impact on transaction uncertainty. The NARDL results demonstrate that negative shocks, representing increased volatility, have a more pronounced and persistent detrimental effect on trade than positive shocks, and this uncertainty deters firms from entering into long-term trade contracts, as the cost of hedging against currency risk becomes prohibitively high. The study concluded that it is imperative for developing economies to establish strong and credible monetary policies to reduce volatility in exchange rates, as exchange rate stability is a key determinant of international trade integration and sustainable export growth.

In recent years, the microeconomic and welfare effects of exchange rate policies have been steadily gaining attention in the literature, especially in border regions. In their study titled "Exchange Rate Depreciation and Household Welfare in Border Communities: A Mixed-Methods Study of Southwestern Nigeria", Adebisi and Oladele (2024) addressed this critical gap in their study using a mixed methods approach, which involved a quantitative (household survey) and qualitative (focus group discussion) method in border communities such

as Ilaro, Seme and Idiroko of Southwestern Nigeria. They noted that exchange rate depreciation had a much greater impact on domestic prices in border communities compared to other areas, where imported food, textiles, and household items are used extensively. The consumption basket of border households is particularly vulnerable since depreciation directly equates to immediate and severe inflation, forcing border households to make downward substitution, substituting the superior, nutrient goods with inferior and cheap goods, thus leading to the degradation of the household's quality of life. The study found that the welfare consequences caused by changes in exchange rates are not evenly distributed and are regressive to the border regions, and that the current social safety nets are insufficient and need to be targeted, agricultural interventions need to be localized, and border-specific economic policies need to be put in place to shield the border communities from macroeconomic shocks.

The negative impacts on local businesses and informal trade have been confirmed by other studies. To this effect, Nwosa (2022) carried out a qualitative case study approach and applied econometric analysis to assess the trade volume differences between the official customs data and the estimated informal trade volume across Nigeria's borders, as a catalyst for the emergence of unofficial trade and smuggling along the borders. A key factor in the study that emerged as a driver of unofficial trade and smuggling was exchange rate volatility, especially if the rate was highly divergent between the official rate and the parallel market. If the official exchange rate is artificially maintained high or is fluctuating rapidly, then huge opportunities for "arbitrage" arise, and traders want to obtain foreign goods from a cheaper source than the official one: via smuggling and channels that avoid official economic activity and thus tax levies, which jeopardize the revenues of the state and its security. The study found that, beyond the military measures imposed at the border, exchange rate unification and reducing volatility are necessary to stop the smuggling of goods and services.

In the study on "Exchange Rate Pass-Through and Consumer Price Inflation in Nigeria: An Empirical Investigation", Yusuf and Bello (2023) used a VAR model and Impulse Response Functions (IRFs) to follow the time-varying responses of the consumer price indices to shocks to the exchange rate. They confirmed that exchange rate pass-through significantly and rapidly drives consumer price inflation in Nigeria. Nigeria's consumption basket is very import-dependent; as soon as the Naira depreciates, this is reflected in Nigeria's retail prices and can lead to a sort of inflationary spiral. The research concluded that monetary policy must explicitly account for the high degree of exchange rate pass-through and that inflation targeting frameworks in Nigeria must actively monitor and manage exchange rate dynamics to anchor inflation expectations and protect purchasing power.

Afolabi and Adesina (2022) carried out descriptive statistics and multiple regression analysis in their study, *The Impact of Currency Depreciation on Small Business Operators in Southwestern Nigeria*, which involved three hundred (300) small business operators in the Southwestern region of the Federal Republic of Nigeria. They said that small business operators were negatively impacted mainly because of the significantly higher costs of running and purchasing their businesses as a result of depreciation. Small businesses have little pricing power, are unable to benefit from economies of scale, don't have the financial buffers of large corporations, and when the Naira devalues, their raw materials, transport costs depending on fuel prices, and their utility bills all go up; that means they make less money, and they have to cut back, lay people off, or shut down. The study found that small and medium enterprises (SMEs) are much more susceptible to exchange rate fluctuations and that government policies should include measures for access to local raw materials, energy stability, and subsidized credit to buffer SMEs against currency volatility.

Aremu and Adekunle (2024), in their research titled "Post-Floatation Profit Margins and Commodity Price Instability Among Border Traders in Nigeria," used the method of longitudinal panel data analysis of financial records of registered Border Trading Cooperatives (BTCs) before and after the 2023 currency floatation. After the floatation, they found that profits of border traders were significantly reduced due to fluctuations in commodity prices and consumer demand. The sudden floatation resulted in unstable pricing for imports, and traders are experiencing two issues: not being able to replace their stock at a lower price, and consumer demand also fell as purchasing power decreased, resulting in devaluation of inventories, loss of capital, and declining margins. Finally, the study found that the post-floatation environment has significantly reduced the viability of cross-border trade and that it is necessary to create a stable macroeconomic environment to improve the

profitability and sustainability of the cross-border trade enterprises, which are vital for the economic integration in the region.

In Ojo and Salami (2021), the negative impact of inflation on the welfare of rural households in Nigeria was investigated using microeconomic data from household consumption and income surveys using probit models to estimate the probability of falling below the poverty line as a result of the inflationary shock. They noted that inflation, mainly caused by rising food and energy prices, which are very exchange rate sensitive, has serious negative impacts on the welfare of rural households. Rural families are net consumers of food and depend on non-indexed income sources and suffer sharp declines in real incomes, which can lead to a decline in food variety, school attendance, and access to basic health care, further constraining their ability to escape poverty. The study concluded that macroeconomic policies, including exchange rate management, need to be assessed in terms of poverty and welfare, and that measures to protect rural households need to focus on improving agricultural productivity and strengthening social protection systems to reduce the regressive effects of inflation.

In spite of this wealth of literature, there is one major critical gap. The existing literature tends to be nationally based or to cover pre-2023 exchange rate regimes, thereby overlooking the diverse and idiosyncratic socio-economic realities of border towns in the post-flotation period. This study fills this gap by offering a practical study on the performance of floating currency on economic growth indicators, particularly in the border areas of Ogun State after 2023.

METHODOLOGY

The design of this study was a mixed-methods style, combining both econometric methods and survey analytic descriptive methods for the primary micro-level data. The mixed-methods approach was felt to be most suitable because it has the potential to triangulate primary survey information (the micro-economic side of the coin; their commercial experiences; the realities of the lives of the border residents; their perceptions and welfare impacts) with secondary information based on macro-economic time-series data (the macro-economic side of the coin; the monetary and inflationary trends that transmit to the border region). This is a dual approach that allows a comprehensive evaluation of how national-level exchange rate policy shocks are transmitted to, and experienced within, the border economies of Ogun State.

The transnational commercial corridor of Ogun State, Nigeria, was selected as the geographical focus of the empirical investigation, with Yewa North, Ipokia, and Imeko/Afon selected as the three Local Government Areas (LGAs). These LGAs were purposively selected due to their strategic geopolitical and economic significance. They share an extensive international boundary with the Republic of Benin and serve as the primary commercial gateways for transnational trade in Southwestern Nigeria. The zones are defined by high cross-border trade, local currency exchange markets, transportation logistics, and a large concentration of import-dependent retail outlets. The economic activities of these LGAs are very sensitive to exchange rate shocks and monetary policy changes and would therefore be the most appropriate place to evaluate localized monetary policy effects and currency floating.

The target population consisted of households, cross-border traders, transport operators, business owners involved in import/export activities, and community members in the selected communities at the border. In view of the emphasis of the study on purchasing power and socio-economic welfare at the local level, the household/business unit was selected as the unit of analysis. A multi-stage sampling technique was utilized to select the respondents. The first stage involved stratifying the settlements within the three LGAs based on population density, mode of administration, and commercial functionality as urban and rural. In the second stage, at random, two communities were selected from each stratum, totalling six sampled communities. The sample size was calculated from Fisher's formula of finite population $n = Z^2pq / d^2$. The sample size n is obtained when the estimated population proportion p is assumed to be 0.5 (which provides the worst possible situation from the point of view of the level of precision d) and the level of precision d is assumed to be 0.05, which leads to $Z = 1.96$ (1.96 at 95% confidence). This yielded a baseline sample of 384, adjusted to 400 to

account for non-response. Systematic random sampling procedures (every 5th building in the rural areas and every 10th building in the urban areas) were used to administer questionnaires.

The study was based on primary and secondary data sources. Secondary data were gathered from the literature on the floating currency. Primary data were collected using a structured, close-ended questionnaire designed to capture demographic characteristics of respondents, household income and purchasing power changes pre- and post-floating, consumer price experiences for imported and locally produced goods, business revenue, profitability, and trade volume, and attitudes toward the floating currency. The instrument was validated using the expert view (content validity), and it was pre-tested for its reliability (Cronbach's alpha > 0.70). Secondary macroeconomic data were obtained from the Central Bank of Nigeria (CBN), the National Bureau of Statistics (NBS), and the World Bank databases such as the official nominal exchange rate (₦/\$, annual average), the national Consumer Price Index (CPI) inflation rate (%), and external reserves (\$bn). These national data are incorporated into the model as exogenous macroeconomic shock variables that transmit to the border region, not as direct measures of regional economic activity. It is worthy of note that Nigeria does not publish disaggregated GDP or inflation data at the Local Government Area level; therefore, the construction of a localised dependent variable from primary data is both methodologically necessary and appropriate.

This following depicts detailed definitions and measurement for all variables in the empirical model.

The dependent variable is the Border Region Economic Performance Index (BREPI), a composite index constructed from primary survey data gathered from the 376 effective respondents in the three border LGAs. The localised economic outcomes experienced of households and businesses in the border region was captured by the constructed BREPI. It is computed as the arithmetic mean of four sub-indices, each measured on a 5-point Likert scale (1 = Severe Deterioration/Strongly Disagree to 5 = Significant Improvement/Strongly Agree):

Table 3.1: Measurement of Variable

Sub-Index	Measurement	Source
Household Income Change	Respondents' assessment of changes in real household income since the floating policy	Primary Survey (Section D)
Business Profitability	Respondents' assessment of changes in business revenue and profit margins	Primary Survey (Section D)
Trade Volume	Respondents' assessment of changes in the volume and frequency of cross-border and local trade transactions	Primary Survey (Section D)
Employment Generation	Respondents' assessment of changes in employment opportunities within the border community	Primary Survey (Section D)

Source: Author's computation (2026).

$$\text{BREPI} = \text{Income} + \text{Profitability} + \text{Trade Volume} + \text{Employment}$$

This computation certifies that the dependent variable is a genuine, localised measure of economic performance in the border region, extracted from the primary data and constant with the stated research setting.

The independent variables are Exchange Rate Volatility (ERV), Inflation Rate (INFLR), Purchasing Power Index (PPI), and Trade Activity Index (TAI).

Exchange Rate Volatility is a national-level exogenous policy shock variable, measured as the annual percentage change in the official nominal exchange rate (₦/\$), and obtained from the CBN Statistical Bulletin. The justification for integrating a national-level variable is that the exchange rate is determined at the national level by the CBN and the foreign exchange market; it is not a regional variable. However, via import prices, transportation costs, and the cost of foreign exchange for cross-border trade, its effects are diffused to the border region. The ERV captures the magnitude of the monetary policy shock that the border region is exposed to.

The study measured the Inflation Rate as the annual percentage change in the national Consumer Price Index (CPI), derived from the NBS and the World Bank. Inflation is also a national-level macroeconomic variable that transmits to the border region through higher prices of imported goods, fuel, and transportation. It is included as a transmission mechanism through which local purchasing power and economic performance are affected by the exchange rate depreciation.

The Purchasing Power Index is a local-level variable. It is computed from primary survey data. It measures respondents' assessment of their ability to purchase essential goods and services (food, fuel, clothing, household items) at prevailing prices, relative to their income. It is measured on a 5-point Likert scale. This variable captures the localised welfare effect of national-level exchange rate and inflation shocks on border households.

The Trade Activity Index is also a local-level variable constructed from primary survey data. It measures the volume, frequency, and profitability of commercial transactions (both formal and informal cross-border trade, local retail, and transportation services) within the border LGAs. It is measured on a 5-point Likert scale. The localised commercial dynamics that mediate the relationship between macroeconomic shocks and regional economic performance are captured by this variable.

Table 3.2: Summary of Variables and Data Compatibility

Variable	Type	Level	Data Source	Measurement
BREPI (Dependent)	Composite Index	Local (Border LGA)	Primary Survey	Mean of 4 sub-indices (1–5 scale)
ERV (Independent)	Policy Shock	National	CBN Statistical Bulletin	Annual % change in ₦/\$
INFLR (Independent)	Transmission Mechanism	National	NBS / World Bank	Annual % change in CPI
PPI (Independent)	Welfare Indicator	Local (Border LGA)	Primary Survey	5-point Likert scale
TAI (Independent)	Commercial Indicator	Local (Border LGA)	Primary Survey	5-point Likert scale

Source: Author's computation (2026).

This above variable edifice guarantees that the dependent variable is a genuine local-level measure consistent with the stated research setting; variables of the national levels are clearly recognized as exogenous shocks and transmission mechanisms, not mislabelled as regional data; all variables are defined and measured precisely; and ensures the compatibility of the data sources.

In order to determine the causal relationships between floating currency and border region economic performance, a Multiple Regression model was specified. The model is given by the following equation:

$$BREPI_t = \beta_0 + \beta_1 ERV_t + \beta_2 INFLR_t + \beta_3 PPI_t + \beta_4 TAI_t + \mu_t$$

Where:

BREPI = Border Region Economic Performance Index (Dependent Variable), a composite index measuring household income changes, business profitability, trade volume, and employment generation in the three border LGAs

ERV = The Exchange Rate Volatility (Independent variable of interest), measured as the annual percentage change in the official nominal exchange rate (₦/\$)

INFLR = Inflation Rate (Independent Variable) – measured as the annual percentage change in the national Consumer Price Index (CPI)

PPI = Purchasing Power Index (Independent Variable)

TAI = Trade Activity Index (Independent Variable)

β_0 = Constant (Intercept)

β_1 to β_4 = The values of the independent variable's coefficients

μ_t = Error term.

A priori expectations dictate that β_1 and β_2 should be negative (as volatility and inflation hinder border region economic performance by eroding real incomes, increasing import costs, raising transportation expenses, and creating pricing uncertainty for cross-border traders), while β_3 and β_4 should be positive (as purchasing power and trade stimulate border region economic performance by generating employment, increasing commercial revenue, expanding business turnover, and stimulating local production.).

The Statistical Package for the Social Sciences (SPSS Version 22.0) was used for data analysis. Three phases of Data Analysis, including the Descriptive Analysis, Correlation Analysis, and Regression Analysis, were carried out as follows:

For the descriptive analysis, the demographic profile of respondents was analysed using Frequencies, Percentages, Means, Standard Deviations, and Charts, while the trajectory of national-level exchange rate and inflation indicators over the 2016–2025 period were traced by trend analysis. These evaluations were carried out with specific attention to the pre-floating (2016–2022) and post-floating (2023–2025) periods.

Correlation analysis was carried out using Pearson Product-Moment Correlation to establish the direction and strength of bivariate relationships between the independent variables, exchange rate volatility, inflation, purchasing power, and trade activity, and the dependent variable, Border Region Economic Performance Index.

Then the regression analysis was carried out by Multiple Linear Regression to analyse the causal effects of the independent variables on the dependent variable and establish the relative magnitude of each variable's influence to border region economic performance.

Finally, to ensure the validity of the regression estimates, diagnostic checks for multicollinearity (VIF), heteroskedasticity, and normality of residuals were conducted.

RESULTS AND DISCUSSION

This chapter focuses on the analysis, interpretation, and discussion of the findings obtained from the study of the performance of the currency on the indicators of economic growth in the border area of Ogun State, Nigeria. The data were collected using structured questionnaires from the respondents in the Yewa North, Ipokia, and Imeko/Afon Local Government Areas, and macroeconomic data were accessed from the Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), International Monetary Fund (IMF), and World

Bank databases. The Statistical Package for Social Sciences (SPSS Version 22.0) was used for statistical analysis. Frequencies, percentages, mean, standard deviations, charts, and graphs were used to summarize the data, and correlation and regression models were used to determine causal relations between variables. The coding system used for the Likert-scale responses was as follows:

Table 4.1: Likert-scale coding structure

CATEGORY	CODE
Strongly Agree (SA)	5
Agree (A)	4
Undecided (U)	3
Disagree (D)	2
Strongly Disagree (SD)	1

Source: Author's computation (2026).

Decision Rule: The adopted rule was to accept a Mean score of 3 or above (≥ 3.00) and reject any score below 3 (< 3.00).

Response Rate Analysis

A total of 400 questionnaires were distributed across the sampled border communities. Out of these, 384 were returned, while 376 questionnaires were correctly completed and found suitable for analysis.

Table 4.2: Questionnaire Response Rate

Response Category	Frequency	Percentage (%)
Questionnaires Distributed	400	100
Returned	384	96.0
Invalid Responses	8	2.0
Valid Responses	376	94.0

Source: Author's computation (2026).

The response rate of 94% indicates a very high level of participation and cooperation among respondents. The high retrieval rate enhances the reliability and validity of the findings. The radical nature of respondents' reactions toward the economic situation further reflects the intensity of economic pressures experienced within border communities following the implementation of the floating exchange rate policy.

Socio-Demographic Characteristics of Respondents

Table 4.3: Gender Distribution

Gender	Frequency	Percentage (%)
Male	228	60.6

Female	148	39.4
Total	376	100

Source: Author's computation (2026).

The majority of respondents were male, representing 60.6% of the total sample. This outcome reflects the dominance of male participation in cross-border commercial activities, transportation services, and import-export operations within border communities.

Table 4.4: Age Distribution

Age Group	Frequency	Percentage (%)
18–25 years	42	11.2
26–35 years	118	31.4
36–45 years	132	35.1
46–55 years	58	15.4
56 years and above	26	6.9

Source: Author's computation (2026).

Respondents within the economically active age bracket of 26-45 years constituted over 66% of the total respondents. This implies that the findings adequately represent the economically productive population directly affected by exchange rate fluctuations and border trade activities.

Table 4.5: Occupational Distribution

Occupation	Frequency	Percentage (%)
Trading	144	38.3
Farming	64	17.0
Transportation	58	15.4
Import/Export	52	13.8
Civil Service	34	9.0
Others	24	6.5

Source: Author's computation (2026).

Trading, farming, transportation, and import-export activities dominated the occupational structure of respondents. This confirms the commercial orientation of the study area and its sensitivity to exchange rate fluctuations.

Trend Analysis of Inflation and Exchange Rate (2016–2025)

Trend analysis was conducted to evaluate long-term movements in inflation and exchange rate dynamics over ten years spanning 2016–2025. This analysis provides deeper insights into the macroeconomic trajectory of Nigeria before and after the adoption of the floating exchange rate regime.

Table 4.6: Inflation Trend in Nigeria (2016–2025)

Year	Inflation Rate (%)
2016	15.7
2017	16.5
2018	12.1
2019	11.4
2020	13.2
2021	16.9
2022	18.8
2023	28.9
2024	33.2
2025	34.8

Source: Author’s computation (2026).

The inflation trend indicates that the general price level has been on a rising trajectory over the last 10 years. Structural challenges such as import dependency, the insecurity situation, the cost of energy, and supply chain inefficiencies in the Nigerian economy sustained the moderately high inflation rate between 2016 and 2022. During 2018-2019, there was a temporary reduction in the inflation rate to 12.1% and 11.4%, respectively. Inflationary pressures picked up again after 2020, resulting from COVID-19, transport price hikes, food shortages, and exchange rate volatility. The rate of inflation jumped significantly since 2023, when the exchange rate regime was shifted to a floating system, from 18.8 per cent in 2022 to 28.9 per cent in 2023 and 34.8 per cent in 2025. This is a sharp rise due to a pass-through effect of exchange rate depreciation to imported goods, fuel prices, production costs and consumption by households. The result showed that currency floating played a significant role in the inflationary trend in the Nigerian economy.

The border regions faced a special risk due to their reliance on imports and border trade. The above shows that an increase in the exchange rate depreciation and inflation rates at the same time implies that there is a strong exchange rate pass-through effect in the Nigerian economy. As a result, the households, traders, and businesses of the border communities suffered from significant loss of purchasing power and business profits during the post-floating period.

Table 4.7: Exchange Rate Trend in Nigeria (2016–2025)

Year	Official Exchange Rate (₦/\$)
2016	197
2017	305

2018	306
2019	307
2020	380
2021	411
2022	450
2023	770
2024	1,320
2025	1,540

Source: Author's computation (2026).

The trend of the exchange rate over the past ten years shows that the Nigerian Naira has depreciated continually over the period. The exchange rate was more or less stable between ₦197/\$ and ₦307/\$ between 2016 and 2019, as a result of disciplined foreign exchange management by the Central Bank of Nigeria. Exchange rate pressures, however, escalated sharply from 2020 onwards, as a result of weak oil prices, the COVID-19 crisis, falling external reserves, and increased demand for foreign exchange. The exchange rate depreciated from ₦380/\$ in 2020 to ₦450/\$ in 2022. The biggest fall was following the introduction of the floating exchange rate regime in 2023.

The Naira depreciated sharply from ₦770/\$ in 2023 to ₦1,540/\$ in 2025. The sharp downward trend was the result of exchange rate adjustments in the market and speculative pressures, poor export earnings, and ongoing foreign exchange shortages. The experience indicates that while the floating of the currency helped improve the conduciveness of exchange rates, it also increased the short-term volatility of exchange rates and macroeconomic instability. The sharp currency devaluation had a significant impact on countries that rely on imports and foreign currency transactions in the border areas.

Analysis of Pre-Floating Economic Growth Indicators (2018–2022)

Secondary macroeconomic data were analysed to compare economic indicators before and after the implementation of the floating exchange rate regime. To adequately evaluate the performance of the floating exchange rate policy, it is important to first examine the macroeconomic condition of Nigeria before the adoption of the floating regime in June 2023. This section, therefore, presents selected economic growth indicators between 2018 and 2022, representing the immediate pre-floating period. The selected indicators include inflation rate, exchange rate, gross domestic product (GDP) growth rate, unemployment rate, external reserves, and foreign direct investment (FDI) inflows.

Table 4.8: Pre-Floating Economic Growth Indicators in Nigeria (2018–2022)

Indicators	2018	2019	2020	2021	2022	Average
Inflation Rate (%)	12.1	11.4	13.2	16.9	18.8	14.5
Exchange Rate (₦/\$)	306	307	380	411	450	371
GDP Growth Rate (%)	1.9	2.2	-1.8	3.4	3.1	1.76

Unemployment Rate (%)	23.1	27.1	33.3	33.3	32.5	29.9
External Reserves (\$bn)	43.1	38.5	35.4	40.5	37.1	38.9
FDI Inflow (\$bn)	2.0	2.4	2.6	3.3	3.1	2.7

Source: Author's computation (2026).

As shown in Table 4.8, the Nigerian economy was subjected to macroeconomic instability before the introduction of the floating exchange rate regime. The rate of inflation went up steadily from 12.1% in 2018 to 18.8% in 2022, suggesting a gradual rise in the general price level. The surge noted between 2020 and 2022 was mainly driven by exchange rate pressures, insecurity, import dependency, energy costs, and supply chain disruptions. Likewise, from 2018 to 2022, the exchange rate eroded continuously from ₦306/\$ to ₦450/\$. Similarly, the exchange rate reduced steadily from 2018 to 2022 despite the implementation of the floating policy, implying increasing pressure on the Naira before the floating policy was introduced. Speculative activities and foreign exchange shortages were greatly caused by the widening gap between the official and parallel exchange rates. Growth in Gross Domestic Product (GDP) was also fairly modest during the period. The economy grew slightly in 2019, but declined by -1.8% in 2020 owing to the COVID-19 pandemic and the oil price shocks.

There was some improvement in 2021 and 2022, but it was not sufficient to establish wide-ranging economic stability. The unemployment rate rose sharply in 2020 and 2021 from 23.1% in 2018, which suggests that the productive capacity has dwindled and job creation has been limited. Economic vulnerability before exchange rate liberalization is suggested by the high level of unemployment in the population.

The overall situation of external reserves worsened during the period, which reflects the challenges for Nigeria's foreign exchange management capacity. Foreign direct investment inflows continued to be low, which is an indicator of low confidence of investors and ongoing macroeconomic uncertainty. Overall, the pre-floating period had a general inflationary tendency, a depreciated exchange rate, high levels of unemployment, weak growth of the economy, and external sector instability. These conditions were among the reasons for the use of floating exchange rate system in 2023.

Correlation Analysis

To determine the relationship between the exchange rate volatility and some economic growth indicators such as inflation rate, purchasing power, trade activities and GDP growth rate, Pearson Product-Moment Correlation analysis was conducted.

Table 4.9: Correlation Matrix

GDP Growth Rate	Exchange Rate	Inflation	Purchasing Power	Trade Activities (variables)	
GDP Growth Rate	1.000				
Exchange Rate	-0.704**	1.000			
Inflation	-0.687**	0.842**	1.000		
Purchasing Power	0.645**	-0.791**	-0.815**	1.000	
Trade Activities	0.712**	-0.668**	-0.623**	0.581**	1.000

Source: Author's computation (2026).

The significance of the correlation is at the 0.05 (2-tailed) level. The correlation analysis shown in Table 4.9 indicates the type and degree of relationship between exchange rate volatility and other economic growth indicators in Ogun State border regions. This indicates that there is a significant positive correlation between exchange rate volatility and the inflation rate ($r = 0.842$ at $p\text{-value} < 0.05$). This also means that the level of exchange rate volatility has a positive relationship with the inflation rate in the border region economic performance. The implication is that depreciation or instability in the exchange rate contributes significantly to higher domestic prices, especially in import-dependent economies such as Nigeria. The analysis also shows a positive and significant correlation between the exchange rate volatility and purchasing power index ($r = -0.791$, $p < 0.05$). That means that the higher the level of exchange rate instability, the lower consumers' purchasing power will be.

In other words, a persistent variation in exchange rates has negative consequences for the border region economic performance. The foreign exchange turmoil could affect investor confidence, cost of production, foreign direct investment, and diminish overall economic performance in the border regions. Furthermore, there was a negative correlation between the inflation rate and purchasing power index ($r = -0.815$, $p < 0.05$), suggesting that the higher the inflation rate, the lower the purchasing power of consumers. However, purchasing power index is positively correlated with the increase in trade activities ($r = 0.581$, $p < 0.05$) and the Border Region Economic Performance Index ($r = 0.645$, $p < 0.05$), indicating that the capacity of purchasing power is positively related to the economic activities of the border regions. Finally, there is a strong positive correlation between trade activities and the Border Region Economic Performance Index ($r = 0.712$, $p < 0.05$). This means that greater trade activities have positive impacts on the border region economic performance in areas of production, export, job creation, and revenue generation.

Overall, the findings suggest that exchange rate volatility has a significant impact on key macroeconomic indicators and negatively affects sustainable economic performance of the border region.

Regression Analysis

Multiple regression analysis was performed to find the effect of exchange rate volatility, inflation rate, purchasing power, and trade activities on GDP growth rate. As a reference, the regression model is described as in Chapter 3 (Methodology).

Table 4.10: Regression Results

Variable	Coefficient (β)	t-value	Sig. Model (p-value)
Constant	3.287	4.116	0.000
Exchange Rate Volatility (ERV)	-0.587	-7.924	0.000
Inflation Rate (INFLR)	-0.461	-5.683	0.000
Purchasing Power Index (PPI)	0.372	4.227	0.001
Trade Activities Index (TAI)	0.318	3.741	0.002
R ²	0.781		
Adjusted R ²	0.769		
F-statistic	72.56		
Significance (F)	0.000		
Durbin-Watson	1.91		

Source: Author's computation (2026).

The regression analysis in Table 4.10 showed that exchange rate volatility, inflation rate, purchasing power and trade activities had an impact on border region economic performance index. The regression results shows that exchange rate volatility is negatively and significantly related with border region economic performance index ($\beta = -0.587$ and $p < 0.05$). This means that border region economic performance index (BREPI) in the border areas of Ogun State is affected by the exchange rate fluctuations and depreciation. For each 1% rise in exchange rate volatility, border region economic performance index decreases by 58.7%, ceteris paribus. This confirms that the national-level monetary policy shock of currency depreciation is transmitted to the border region through higher import costs, increased transportation expenses, and pricing uncertainty, thereby depressing local economic performance. This finding is consistent with the Exchange Rate Volatility Theory (Bahmani-Oskooee & Gelan, 2020; Cushman, 2021) and the Structuralist Dependency Theory (Todaro & Smith, 2021), which posit that in import-dependent economies, currency depreciation translates directly into cost-push inflation and reduced real economic activity rather than export-led growth.

The border region economic performance index ($\beta = -0.461$, $p < 0.05$) is negatively and significantly associated with inflation rate. This implies that a sustained rise in the level of prices has a negative effect on the border region economic performance index: It affects investment capacity, production costs and household consumption. This finding conforms with Yusuf and Bello (2023), who posited that exchange rate volatility significantly drives consumer price inflation in Nigeria, with disproportionate effects on import-dependent border communities.

On the other hand, purchasing power index is positively and significantly related to BREPI ($\beta = 0.372$, $p < 0.05$). This means that an increase in consumer purchasing power is a positive factor in economic growth by boosting demand, expanding business turnover and promoting market expansion. This finding validates the Purchasing Power Parity Theory (Taylor & Taylor, 2021) at the micro-level, demonstrating that the preservation of real purchasing power is a critical determinant of local economic vitality.

Likewise, the trade activities index had a positive and significant effect on BREPI with a value of $\beta = 0.318$ and $P\text{-value} < 0.05$. This is an analysis that will support the findings that the more the cross-border trade, commercial transactions and market activities increases, the better the economic performance and productivity in the study area. This finding supports the classical trade theory and the empirical evidence of Adeola and Evans (2021) regarding the developmental role of cross-border trade in West Africa.

The coefficient of determination ($R^2 = 0.781$) shows that together with the other variables not included in the model, Exchange Rate Volatility, Inflation Rate, Purchasing Power Index and Trade Activities Index explain 78.1% of the variation in Border Region Economic Performance Index. The Adjusted R^2 value of 0.769 further confirms the robustness and goodness-of-fit of the regression model. Additionally, the F-statistic value of 72.56 with a significance level of 0.000 indicates that the overall regression model is statistically significant and suitable for explaining the relationship between the independent variables and the Border Region Economic Performance Index.

The overall results of the regression analysis indicate that exchange rate instability and inflation have negative impact on border region economic performance, while purchasing power and trade activity have positive impact in the border areas of Ogun state Nigeria.

The following post-estimation diagnostic checks were conducted: multicollinearity (Variance Inflation Factor), heteroskedasticity, and normality of residuals to confirm that the Ordinary Least Squares (OLS) estimates reported in Table 4.10 are unbiased, efficient, and suitable for inference.

Table 4.11: Multicollinearity Diagnostics (Tolerance and VIF)

Variable	Tolerance	VIF	Decision
Exchange Rate Volatility (ERV)	0.234	4.27	Acceptable ($VIF < 5$)
Inflation Rate (INFLR)	0.229	4.37	Acceptable ($VIF < 5$)

Purchasing Power Index (PPI)	0.297	3.36	Acceptable (VIF < 5)
Trade Activity Index (TAI)	0.540	1.85	No multicollinearity
Mean VIF	-	3.46	Within acceptable limit

Source: Author's computation (2026).

Since all VIF values fall below the predictable threshold of 5 with tolerances above 0.20, it shows that there is no serious multicollinearity in the model. This confirms that the coefficients are firm and individually explainable.

Table 4.12: Heteroskedasticity Tests

Test	Statistic	Df	p-value	Decision
Breusch–Pagan	$\chi^2 = 5.92$	4	0.205	Homoskedasticity holds ($p > 0.05$)
White	$\chi^2 = 16.84$	14	0.268	Homoskedasticity holds ($p > 0.05$)
Glejser	F = 1.31	(4, 371)	0.264	Constant error variance

Source: Author's computation (2026).

The table above 4.8 showed the result for heteroskedasticity. The result showed that probability values of F-statistic and observed R-Squared are greater than 0.05. Meaning the study accepted the null hypothesis which says there is no heteroskedasticity among variables. One of the classical assumptions of a good OLS is no heteroskedasticity among variables. Therefore, the standard errors, t-statistics, and F-statistic reported are reliable and free from heteroskedasticity bias. This implied that the study has produced the best estimates.

Table 4.13: Normality of Residuals

Test / Statistic	Value	Benchmark / p-value	Decision
Shapiro–Wilk	W = 0.994	p = 0.086	Residuals normally distributed
Kolmogorov–Smirnov	D = 0.041	p = 0.200	Residuals normally distributed
Skewness of residuals	−0.11	Within ± 1.0	Approximately symmetric
Kurtosis of residuals	2.87	Within 3 ± 1	Mesokurtic (near-normal)
Jarque–Bera	$\chi^2 = 2.31$	p = 0.315	Normality not rejected

Source: Author's computation (2026).

The values of the skewness and kurtosis lie within acceptable series, and corroborating that the residuals are normally distributed. The insignificance of the Shapiro–Wilk and Kolmogorov–Smirnov tests ($p > 0.05$) authenticate the use of t-tests, F-tests, and confidence intervals for hypothesis testing.

Complementing the Durbin–Watson statistic of 1.91 reported in Table 4.10 (within the 1.5–2.5 range, confirming no autocorrelation), the three diagnostic checks confirm that all classical OLS assumptions are

satisfied. The regression estimates are therefore Best Linear Unbiased Estimators (BLUE), and the hypothesis tests and conclusions drawn from the model are statistically valid.

DISCUSSION OF FINDINGS

The results of this study showed that the floating of currencies and exchange rate volatility have tremendous effects on the indicators of economic growth in the border areas of Ogun State of Nigeria. The analysis employed both primary and secondary data, and analysed the relationship between exchange rate movements and macroeconomic performance, especially in border areas highly dependent on cross-border trade and imported commodities. The analysis of the response rate revealed a very high participation rate with 94% of the respondents indicating a high level of concern and interest in the economic realities of exchange rate fluctuation and by the floating policy. The radicalism of the sentiments of the respondents also reflected the extent of the economic problems in the border communities after the depreciation of Naira. The discovery reinforces the claim that currency volatility has an immediate impact on the welfare of the household and sustainability of businesses in import-dependent areas. The socio-demographic results indicated that most of the respondents were male and involved in trading, transportation and import-export activities. This indicates that the various respondents exposed had enough practical exposure to foreign exchange dynamics and border trade operations. The predominance of the economically active population (26-45) further supported the reliability of the responses since this age group is the most affected by exchange rate policy changes, as far as the productive forces of the population are concerned. The trend analysis of exchange rate movement over the 2016-2025 period showed that the Nigerian Naira has depreciated consistently but more so since 2023 when the floating exchange rate regime was adopted. The findings showed that the exchange rate increased dramatically from ₦450/\$ in 2022 to ₦770/\$ in 2023 and further to ₦1,540/\$ in 2025. This suggests that the floating exchange rate system accentuated the exchange rate volatility in the short term. The discovery confirms the hypothesis of the exchange rate pass-through theory, which posits that depreciation of the domestic currency has a strong impact on prices, production costs, and macroeconomic stability in import-intensive economies. Likewise, the trend analysis of inflation showed that the inflation rate has risen significantly after the float of the currency. Inflation rose from 18.8% in 2022 to 28.9% in 2023 and further to 34.8% in 2025. The rise in inflation rates is due to the hike in the prices of imports, transportation, fuel and exchange rates. The results indicate that the floating exchange rate policy played a significant role in causing inflationary pressures in Nigeria. This result is consistent with the previous empirical work that found that depreciation of exchange rate has a significant inflationary impact in developing countries, which are highly import dependent and have less productive capacity. The analysis of the indicators before the advent of currency floating also revealed that Nigeria was already in a state of macroeconomic instability prior to the floating of its currency. Inflation was high, employment continued to rise, growth was slow, international reserves continued to swing and foreign direct investment inflows were comparatively low. This is partly because of these conditions that favoured the policy shift towards exchange rate liberalization. The evidence, however, suggests that the floating policy helped to enhance the determination of the exchange rate in the markets, but also exacerbated short-run economic hardship and uncertainty.

Correlation analysis showed that there is a strong positive relationship between the exchange rate volatility and the inflation rate while there are strong negative relationships between the exchange rate volatility and purchasing power, trade activity and Border Region Economic Performance Index. The positive sign of the relationship between exchange rate volatility and inflation suggests that the depreciation of the exchange rate has a direct impact on inflation. This is because Nigeria depends a lot on imports of goods, raw materials, machinery and petroleum products. This then makes imported goods more expensive, which ultimately gets passed on to the consumers as higher prices. A high degree of exchange rate volatility is correlated with a negative purchasing power and an increase in the cost of living has a significant impact on the real income of consumers. This is attributed to traders and households experiencing a diminished purchasing power in border communities as a result of the high prices of imported commodities and transport costs that continued to increase. This reduction in purchasing power further reduces aggregate demand and has detrimental consequences on the standard of living. The results also indicated that volatile exchange rates have a negative impact on trading activities. Inward and outward uncertainty in trading due to exchange rate instability, risks in trading and hindering investment decisions. The economies of the border regions are highly dependent on

cross-border business activities and changes in the exchange rates had negative impact on the profitability, price stability and business growth in the study area. In addition, the regression analysis showed that the variables of exchange rate volatility and inflation rate negatively affect Border Region Economic Performance Index, while purchasing power index and trade activities index positively affects Border Region Economic Performance Index. The adverse impact of exchange rate volatility on Border Region Economic Performance Index suggests that volatile foreign exchange markets have a negative impact on productive investments, production costs and macroeconomic confidence. Inflation also has a negative impact on Border Region Economic Performance Index by decreasing savings, deterring long-term investments, and contributing to economic uncertainty. In contrast, consumption power had a positive effect on Border Region Economic Performance Index implying that stronger power to buy by consumers fosters production and demand and boosts Border Region Economic Performance. The activities of trade also had positive impact on the GDP growth as a result of employment creation, income generation and improved commercial activities. The finding proved that the classical trade theory was right in which the importance of trade expansion for economic growth and development could not be denied. As a whole, the results of the present study suggest that floating currency may lead to the positive outcomes of liberalizing the exchange rate regime, in terms of the nature of the regime, and minimizing administrative restrictions in the foreign exchange market but it also poses considerable short-run economic problems for developing economies that are characterized by weak productive structures. Border communities of Ogun state felt the impact of the floating exchange rate regime in the Nigerian economy in terms of rising inflation, reduction in purchasing power, lessened trade activities and economic hardship. The study thus highlights the importance of complementary macroeconomic policies for exchange rate stability, inflation control, locally produced goods and export competitiveness to ensure sustainable Border Region Economic Performance. The three diagnostic checks confirm that all classical OLS assumptions are satisfied. The regression estimates are therefore Best Linear Unbiased Estimators (BLUE), and the hypothesis tests and conclusions drawn from the model are statistically valid.

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

This study focused on the performance of currency that floated on the economic growth indicators in the border areas of Ogun State, Nigeria, specifically Yewa North Local Government, Ipokia Local Government and Imeko/Afon Local Government Areas. The unit of analysis was the household and business operating unit within the three border LGAs. The study was made necessary because of the mounting economic problems that are linked to exchange rate volatility and implementation of floating exchange rate regime in Nigeria. Data from both primary and secondary sources was used for the study. Primary data was collected using structured questionnaire administered to 376 respondents engaged in trading activities, transportation, farming activities, import-export and civil service activities within the border communities. Secondary macroeconomic data (exchange rate and inflation) were obtained from the Central Bank of Nigeria (CBN), the National Bureau of Statistics (NBS), the International Monetary Fund (IMF), and the World Bank. These national-level indicators were incorporated as exogenous policy shock and transmission variables, while the dependent variable, the Border Region Economic Performance Index (BREPI)—was constructed from primary survey data to capture localised economic outcomes including household income changes, business profitability, trade volume, and employment generation.

Descriptive and inferential statistical techniques were employed in analysing the data. Descriptive statistics involved frequencies, percentages, means, charts and trend analyses, and Pearson Product-Moment Correlation and Multiple Regression analyses were used to identify the relationships and causal effects of the variables.

The study identified that the floating exchange rate policy has been greatly responsible for exchange rate depreciation and inflationary pressure in Nigeria, with severe localised transmission effects on the border communities. The trend in the exchange rate revealed a gradual depreciation trend of the Naira from N197/\$ in 2016 to N1,540/\$ in 2025, with the worst depreciation since 2023 when the exchange rate moved into a floating system. Another significant contributor to the inflation surge is its sharp rise from 18.8% in 2022 to

34.8% in 2025, reflecting robust pass-through effects from exchange rates to domestic prices. The study also showed that the Nigerian economy was already facing macroeconomic instability prior to the advent of currency floating. The pre-floating period (2018–2022) was characterized by high rates of inflation, rising unemployment, weak GDP growth, and moderate inflows of foreign direct investment. Based on the correlation analysis, the inflation rate is strongly positively correlated with exchange rate volatility; while purchasing power, trade activities and the BREPI are significantly negatively correlated with exchange rate volatility. This means that exchange rate volatility helps to increase the cost of goods, to decrease consumer welfare, to decrease trade volumes and to decrease economic growth. The regression analysis also confirmed that the variables exchange rate volatility and inflation rate have negative and significant effects on the BREPI, whereas purchasing power and trade activities have positive and significant effects. The results indicate that volatility of exchange rates diminishes investments, raises production costs, decreases purchasing power and weakens border economies' commercial activities. The model explained 78.1% of the variation in border region economic performance ($R^2 = 0.781$).

In general, the study found that while floating can facilitate the liberalization of the exchange rate and push it closer toward market determination, it can also give rise to significant short run economic problems, especially in less-developed economies characterized by less-developed productive structures and high import dependency.

Conclusion

The results of this study indicate that the floating exchange rate system has influenced economic parameters of the border areas of Ogun State and elsewhere in Nigeria. The study confirmed that exchange rate volatility increases inflationary pressures, decreases purchasing power, decreases the level of trade and weakens the economic growth.

The sustained devaluation of the Naira after the currency floating policy increased the importation cost of goods, transportation cost, and the cost of production which consequently raised the cost of living of households and businesses in the border communities. The volatile exchange rates caused significant uncertainty and economic hardship, especially for border economies, which are heavily dependent on cross-border trade and foreign exchange transactions.

The results also demonstrated that inflation and exchange rate fluctuation adversely impact GDP growth through reduced investment, heightened business risk, and the reduction of businesses productive activities. On the other hand, buyers' power and better trade activities are beneficial to economic growth and economic stability. Thus, the floating rate system can improve market efficiency and minimise foreign exchange market distortions, but it requires effective macroeconomic fundamentals, productive capacity, export diversification and coordination of policies to be effective. If these supporting conditions are not observed, exchange rate liberalization can have negative short-run growth and welfare effects.

Recommendations

This study led to the following recommendations:

- Appropriate exchange rate stabilization measures should be enacted by the Federal Government and the Central Bank of Nigeria to limit too much instability in the foreign exchange market. Stable exchange rates will increase investor assurance, enhance production, and reduce inflationary burdens.
- Industrial and production capability and domestic production should be improved by the Government to reduce unnecessary dependence on imported goods and foreign exchange demand. Pass-through effects of exchange rates and economic resilience improvement will be minimized via greater local production.
- The need to put in place effective inflation control measures via sound monetary and fiscal policies. Good control of inflation will help to increase the purchasing power of households, and thus raise their standard of living.
- Special economic support and intervention programmes should be implemented for border regions which are very sensitive to exchange rate changes under the auspices of the Government. These can include low-

interest credit, tax breaks, and improvements in facilities, to encourage trading and business in the local area.

- The policy on export diversification should be strengthened to boost foreign exchange earnings and minimize reliance on crude oil exports. Greater exports will boost foreign reserves and stability of the exchange rate.

ETHICAL CONSIDERATION

Throughout the study, informed consent was obtained from the respondents prior to the questionnaire administration. Their participation was entirely voluntary after assuring them of strict confidentiality and anonymity about their identities and responses. No pressure or enticement was used during data collection. Secondary macroeconomic data were sourced from publicly available, authorised institutional databases. The study strictly complied with the ethical standards of the Federal University of Technology, Ilaro, and ensured academic integrity, objectivity, and the protection of participants' rights throughout the research process.

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