UNILAG JOURNAL OF BUSINESS VOL. 11 NO. 1, APRIL 2025, 107-121
https://doi.org/10.52968/11206713

THE EFFECT OF EXCHANGE RATE FLUCTUATIONS (ERF) ON THE FINANCIAL PERFORMANCE OF LISTED CONSUMER GOODS COMPANIES IN NIGERIA.

By

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ABSTRACT
This study examines the impact of exchange rate fluctuations (ERF) on the financial performance of listed consumer goods companies in Nigeria. Using secondary data from 2000 to 2024, the study applies a random effects regression model to analyze variables such as inflation, oil prices, government expenditure, and trade openness. The Hausman test determined that the fixed effects model was most appropriate for the analysis. The findings suggest that ERF negatively impacts profitability, with exchange rate volatility decreasing return on assets. In contrast, inflation has a positive effect, indicating that consumer goods companies can leverage inflationary conditions to enhance pricing power. Rising oil prices also negatively affect profitability, while government expenditure, trade openness, and credit availability have positive effects on profitability. The study highlights the importance of hedging strategies, as firms that employ risk management practices tend to perform better financially. The study recommends that consumer goods companies adopt hedging strategies, while policymakers focus on stabilizing exchange rates, improving access to credit, and promoting macroeconomic stability, including managing inflation and fostering trade openness.
***Keywords**:* Credit availability, exchange rate fluctuations, hedging strategies, inflation, profitability.

1. INTRODUCTION
The Manufacturing sector (including consumer goods) of Nigeria is a major pillar of the national economy, creating jobs, generating a significant share of Gross Domestic Product (GDP), and supplying the nation with essential daily products to millions of consumers (Ifere & Joshua, 2020). Nonetheless, companies operating in this industry are prone to inherent risks owing to their cross-border business models which expose them to foreign exchange risk which is further compounded by macroeconomic instability in Nigeria (Zai & Mansur, 2024). Volatility in the exchange rates may disrupt the financial planning process, and companies must focus on sound risk management models to protect their profitability. To mitigate the risks associated with the currency, firms use two major hedging strategies, namely financial and operational hedging. Empirical research, such as that by Bachiller, Boubaker, and Mefteh-Wali (2021), Biguri, Brownlees, and Ippolito (2022), highlights the effectiveness of derivatives in stabilizing the performance of firms in terms of reducing uncertainty and protecting the profit margin.
According to Zai and Mansur (2024), hedging strategies are not fully utilized in Nigeria. Their study highlights that the adoption of these strategies is fragmented among consumer goods companies, with the effectiveness of hedging influenced by factors such as organizational size, foreign exchange exposure, and the risk tolerance of managers. Smaller companies, in particular, often lack the resources or knowledge to effectively use derivatives, making them more vulnerable to currency shocks than they would otherwise be. The consumer goods industry in Nigeria has also

https://doi.org/10.52968/11206713

been fighting with the destabilizing impacts of fluctuating exchange rates, which do not auger well with the financial stability of companies that depend on imported raw materials. Sudden movements in the value of the Naira increase the prices of raw materials and changes pricing policy of finished goods, reducing profitability (Central Bank of Nigeria, 2021). Though this problem is well known, two important spheres that should be tackled are identified:

The interplay between exchange rate volatility, corporate financial health, and risk mitigation mechanisms is of paramount importance to stakeholders. Investors must comprehend the impact of currency risks on returns, policymakers require empirical evidence to formulate effective fiscal policies, and corporate leaders must balance the costs of hedging with the need for operational flexibility. This study seeks to examine the effect of exchange rate fluctuations on the financial performance of listed consumer goods companies in Nigeria from 2000 to 2024, while also evaluating the hedging strategies employed by these companies. By investigating these factors, the study aims to propose resilience-enhancing strategies in response to the prevailing economic uncertainty. There is a paucity of research investigating the effects of exchange rate volatility on financial performance, leaving the cumulative impact unclear. Additionally, while hedging is widely considered a strategy for risk mitigation, there is limited empirical evidence regarding its application among Nigerian consumer goods companies and the extent to which it proves effective (Odukomaiya, 2023).

This dual gap leaves corporate leaders and policymakers inadequately equipped to manage financial risks stemming from exchange rate fluctuations. The absence of actionable insights often leads firms to adopt reactive measures, such as abrupt price increases or supply chain disruptions, which exacerbate industry instability. This study aims to address these gaps by providing a comprehensive examination of the effects of exchange rate fluctuations and assessing the practical use of hedging strategies for improved risk management.

2. LITERATURE REVIEW

Financial performance (FP) is a multifaceted concept, encompassing various dimensions such as profitability, efficiency, liquidity, solvency, and growth. These dimensions together provide a comprehensive evaluation of a firm's overall health and success. While traditional metrics like profitability and return on investment have been central to assessing FP, scholars now emphasize the need for a broader perspective that incorporates non-financial factors. Kaplan and Norton (1996), in their discussion of the Balanced Scorecard, argue that FP should be evaluated not only through financial measures but also through non-financial indicators such as customer satisfaction, internal processes, and organizational agility. This broader approach reflects the understanding that FP is complex and cannot be adequately captured by a single measure alone.

Foreign exchange fluctuation (FEF), which refers to the unpredictable changes in the value of a currency relative to others, has significant implications for economies, particularly those engaged in international trade. In countries like Nigeria, where the manufacturing sector is highly dependent on imported raw materials, machinery, and spare parts, fluctuations in the value of the Naira directly impact production costs. The depreciation of the Naira against the US dollar, for example, increases import costs, thereby reducing profit margins for manufacturers. Studies by Ugwu (2017) and Nnamocha, Obioma, Igwemma, and Nwoko (2017) show that the depreciation of the Naira leads to higher production costs, weakening operational efficiency and diminishing the competitiveness of domestic manufacturers in comparison to cheaper imported goods.

However, the literature on exchange rate fluctuations and their impact on the financial performance of Nigerian consumer goods companies remains sparse. Most existing studies focus on broader

https://doi.org/10.52968/11206713

sectors, such as general manufacturing or banking, with limited attention given to the unique challenges faced by Nigerian consumer goods companies. The research in this area tends to offer a generalized view of manufacturing and financial sectors, without exploring the specific dynamics within the Nigerian consumer goods industry. This lack of focus on the consumer goods sector underscores the need for a more targeted examination of how exchange rate fluctuations affect the financial performance of these companies in Nigeria.

Additionally, while the effects of exchange rate fluctuations on financial performance have been widely studied, there is little agreement on the precise mechanisms through which these fluctuations affect profitability, efficiency, and competitiveness within the Nigerian context. Some studies suggest that hedging strategies could mitigate the negative impact of currency fluctuations, yet there is limited empirical evidence on how Nigerian consumer goods companies utilize such strategies and whether they are effective. This gap in the literature highlights the need for further investigation into the role of risk management practices, such as hedging, in enhancing the financial resilience of consumer goods companies amid exchange rate volatility.

Theoretical Review

International Fisher Effect Theory (IFE)

The International Fisher Effect (IFE), rooted in the Theory of Interest by Fisher (1930), suggests that nominal interest rates rise in response to expected inflation, while real interest rates remain constant. In its global extension, the IFE posits that currencies with higher nominal interest rates, reflecting higher inflation expectations, tend to depreciate in value, assuming real returns equalize across countries (Madura, Hoque, & Krishnamrti, 2018). For example, if Nigeria's nominal interest rates are higher than those in the U.S., the Naira would be expected to depreciate relative to the U.S. dollar to equalize inflation differences. This theory provides a framework for understanding exchange rate fluctuations (EXR), with changes in interest rates and inflationary expectations driving future currency movements. The resulting fluctuations in exchange rates can significantly impact firms, particularly those that rely on imports and exports, as these changes directly affect production costs, profitability, and competitive positioning in the market.

From the perspective of hedging strategies (HDS), firms operating in environments with volatile exchange rates are likely to adopt strategies that mitigate the adverse effects of currency fluctuations. Larger firms with more resources are in a better position to hedge against these risks, stabilizing their financial performance (FP). In this context, the IFE theory implies that firms, particularly those exposed to exchange rate risks, may benefit from hedging by insulating themselves from unpredictable currency movements, thus preserving profit margins and cash flows. By understanding the drivers of exchange rate movements, firms can implement risk management practices, such as hedging, to manage the impact of volatility on their financial performance. Therefore, IFE serves as a foundation for examining the effects of exchange rate fluctuations on firm profitability and the role of hedging strategies in minimizing these impacts.

Real Options Theory (ROT)

Real Options Theory (ROT) offers a framework for valuing investments that provide firms with the flexibility to adapt to future uncertainties. In environments with high exchange rate volatility, companies may treat investment opportunities as real options, enabling them to delay, stage, or abandon projects based on how the external conditions evolve (Trigeorgis & Tsekrekos, 2018). The uncertainty brought on by exchange rate fluctuations makes it challenging for firms to predict future costs and revenues accurately. As a result, firms may choose to postpone or adjust investments until the currency market stabilizes. ROT emphasizes the strategic value of maintaining flexibility, which is critical for firms in the Nigerian consumer goods sector where

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exchange rate movements can dramatically influence financial performance (FP). Firms that embrace this flexibility are more likely to navigate volatile economic conditions effectively, as they can adapt their strategies to optimize long-term performance in response to changing exchange rates.

Furthermore, ROT is closely linked to hedging strategies (HDS), as firms can use financial instruments to protect themselves from the risk of unfavorable exchange rate movements. The theory supports the idea that firms will implement risk management techniques that allow them to retain flexibility, such as hedging through derivatives, to avoid locking in poor investment decisions during periods of high volatility. By using hedging strategies as real options, firms can manage the risks associated with exchange rate fluctuations and enhance their ability to maintain stable financial performance. ROT, therefore, underscores the importance of risk management in environments characterized by uncertainty and supports the notion that firms utilizing flexible strategies, including hedging, are better positioned to achieve consistent financial results.

Contingency Theory

Contingency Theory posits that organizations must adapt their strategies and structures to align with external environmental factors for optimal performance (Lawrence & Lorsch, 1967). In the context of exchange rate fluctuations (EXR), this theory suggests that firms' responses to currency volatility should depend on their specific circumstances, such as size, resources, and market exposure. Larger firms, with more resources, may be more equipped to engage in hedging strategies (HDS) to manage exchange rate risks. Smaller firms, on the other hand, may prioritize other strategies, such as cost management or adjusting product pricing, to mitigate the impact of currency fluctuations. Contingency Theory provides a useful lens for understanding how firms in the Nigerian consumer goods sector might adapt their strategies in response to exchange rate volatility, with larger firms likely adopting more sophisticated risk management approaches, including hedging, while smaller firms may focus on operational flexibility to manage currency risk.

The theory also implies that a firm's ability to successfully implement hedging strategies and maintain strong financial performance (FP) in the face of exchange rate fluctuations is contingent upon its internal and external environment. Firms that can adapt to these external conditions by adopting appropriate risk management strategies will perform better than those that do not. As such, Contingency Theory suggests that firm size and the nature of exposure to exchange rate fluctuations play crucial roles in determining the effectiveness of hedging strategies. This adaptability in strategy development can enhance firm resilience, leading to more consistent financial performance, even in the face of adverse currency movements.

Transaction Cost Economics (TCE)

Transaction Cost Economics (TCE), as proposed by Williamson (1975), focuses on the costs associated with economic exchanges and the governance structures needed to minimize these costs. In environments where exchange rate fluctuations (EXR) create significant uncertainty, firms may choose to either internalize operations (e.g., through vertical integration) or externalize them (e.g., through outsourcing or joint ventures) based on the costs involved in managing currency risks. The theory suggests that firms will opt for the governance structure that minimizes the costs of managing foreign exchange risks, particularly when faced with volatile exchange rates. For Nigerian consumer goods companies, TCE helps explain how they may internalize operations to better control risks associated with currency fluctuations or choose to externalize certain functions and use hedging strategies to mitigate the impact of these risks.

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TCE also provides insights into why some firms may prefer to hedge against currency risk rather than rely on market transactions subject to exchange rate volatility. Firms that experience high transaction costs due to exchange rate fluctuations may find it more cost-effective to implement hedging strategies (HDS), such as using foreign exchange derivatives, to stabilize their financial performance. This suggests that the decision to hedge or internalize operations is influenced by the cost of managing exchange rate risk, and firms that can effectively minimize transaction costs associated with currency volatility are likely to see improved financial performance (FP). By using hedging strategies to manage transaction costs related to exchange rate risks, firms can maintain a more stable and predictable financial outlook

Empirical Review

The relationship between exchange rate fluctuations (EXR) and firm performance (FP) in Nigeria has been extensively examined, particularly in the manufacturing and consumer goods sectors. The literature reflects both positive and negative effects of exchange rate volatility, with various studies focusing on different sectors and financial metrics. Below is a synthesis of the findings, grouped into the effects of exchange rate fluctuations.

Negative Effects of Exchange Rate Fluctuations on Firm Performance

Several studies indicate that exchange rate fluctuations generally have a negative effect on firm profitability, particularly in manufacturing sectors. Olubiyi and Ogunro (2025) adopted the Auto Regressive Distributed Lag (ARDL) estimator and eGARCH(1,1) model to analyze the impact of exchange rate volatility on sectoral output from 2010:1 to 2023:4. Their findings revealed that interbank exchange rate volatility had a greater impact than effective exchange rate volatility on Nigerian manufacturing sectors. Specifically, sectors such as textiles, electrical & electronics, and wood products were adversely affected by exchange rate volatility, especially in the short run. The study emphasized that exchange rate volatility in these subsectors is more of a short-run phenomenon, which destabilizes profitability and competitiveness.

Kida (2025), using descriptive statistics and regression analysis, investigated the impact of exchange rate movements on gross profit margin (GPM) for listed companies in Nigeria over eight years (2016–2023). The study found a significant negative relationship between exchange rate fluctuations and GPM, illustrating that changes in exchange rates lead to volatility in profit margins, severely affecting the profitability of firms.

Similarly, Aliyu and Iheonhkan (2025) examined the impact of exchange rate volatility on the profitability and performance of commercial banks in Nigeria from 2015 to 2024 using quantitative research methods. Their findings highlighted that exchange rate volatility had a significant negative effect on return on equity (ROE) and a positive relationship with non-performing loan (NPL) ratios, indicating that instability in exchange rates undermines the profitability of banks while exacerbating financial instability.

Positive Effects of Exchange Rate Fluctuations on Firm Performance

In contrast, some studies found that exchange rate fluctuations can positively influence firm performance, particularly for firms that engage in export-oriented activities or manage risks effectively. Ezenwaka, Oguanobi, Dimnwobi, and Oguanobi (2025) applied the Fully Modified Least Squares (FMOLS) regression technique to data from 1981 to 2022 and found that exchange rates positively influenced manufacturing value-added and exports in Nigeria. A weaker domestic currency was shown to benefit manufacturers who rely heavily on exports, as it enhances the competitiveness of Nigerian goods in international markets. However, the study also noted that exchange rate shocks had a negative impact on the sector, underscoring the mixed nature of exchange rate effects.

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Bamidele (2024), in a study on the role of derivatives in hedging exchange rate risks, found that firms that engaged in hedging activities, particularly through foreign currency, interest rate, and commodity price hedges, experienced significant improvements in their financial performance. The regression analysis suggested that hedging strategies allowed firms to stabilize cash flows and mitigate the negative impacts of exchange rate volatility, thus enhancing their profitability.

Mixed Effects of Exchange Rate Fluctuations on Firm Performance

Other studies report mixed effects, showing that while exchange rate fluctuations can have adverse effects, firms with effective financial strategies are better positioned to manage these impacts. Atsu and Odonye (2025) employed multiple regression analysis using secondary data from 2014 to 2024 for 21 Nigerian consumer goods manufacturing firms. They found that exchange rate volatility negatively affected profitability in the short term. However, other macroeconomic factors such as money supply and inflation had positive effects on financial performance, suggesting that exchange rate volatility is just one of several factors influencing firm profitability.

Similarly, Kida (2025) found a negative relationship between exchange rate movements and gross profit margins but noted that firms with access to hedging instruments were less impacted by exchange rate shocks. This indicates that while exchange rate fluctuations generally harm profitability, proactive risk management strategies can mitigate these negative effects and stabilize firm performance.

Role of Hedging and Risk Management Strategies

The importance of hedging and other risk management strategies in mitigating the negative effects of exchange rate volatility is widely acknowledged. Osho and Fagbamila (2022) studied the effect of exchange rate fluctuations on multinational firms in Nigeria using panel data regression analysis. They found that firms that implemented effective hedging strategies, including the use of financial derivatives, were better able to manage exchange rate risks, leading to improved financial performance.

Bamidele (2024) reinforced this finding by demonstrating that derivatives-based hedging strategies had a significant positive impact on the financial performance of Nigerian consumer goods companies. The study showed that hedging allowed firms to manage the uncertainties brought by exchange rate fluctuations, thus improving their overall financial stability.

3. METHODOLOGY

Research Design

The research adopted an ex post facto design, which is appropriate because the study investigates relationships between variables that have already occurred and cannot be manipulated or controlled. The focus of this study was to observe the existing conditions of exchange rate fluctuations, hedging strategies, and their effects on the financial performance of firms in the Nigerian market. The ex post facto design is well-suited for this research because the study analyzed data from past financial periods (2000–2024) and did not involve manipulating any of the variables being studied. The research design allowed for the exploration of these relationships based on historical data without experimental interference.

Population of the Study

The population of the study consisted of 20 consumer goods firms listed on the Nigerian Exchange Group (NGX) as of December 2024. These firms operate in the consumer goods sector, which is crucial for understanding how exchange rate fluctuations and hedging strategies affect corporate financial performance. The sample was derived from these firms, representing a diverse range of market conditions and economic environments.

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Sample Size and Sampling Technique

The sample consisted of 13 firms, which represent 65% of the total population. These firms met the following criteria:

i. Listed on NGX before 2000: Ensuring that the firms had sufficient historical data for analysis.
ii. Continuously listed through 2024: Ensuring consistency and the availability of longitudinal data for the entire study period.
iii. Complete financial data for the study period: Ensuring that the data was comprehensive and reliable for analysis.

The study excluded firms that were delisted or those with incomplete financial records during the period from 2000 to 2024 to maintain data integrity and consistency. This sampling technique ensured a robust and representative sample for examining the impact of exchange rate fluctuations and hedging strategies on financial performance.

Type and Source of Data

The study relied on secondary data, which were obtained from company annual reports and the Central Bank of Nigeria (CBN) Statistical Bulletin for the years 2000 to 2024. These sources provided detailed financial performance data, including return on assets (ROA) as well as macroeconomic indicators such as exchange rates. Secondary data was chosen due to its reliability, accessibility, and ability to provide a comprehensive overview of the variables being studied over a long period.

Model Specification

The study employed the following four regression models to examine the impact of exchange rate fluctuations (EXR), hedging strategies (HDS), and firm size (FSZ) on the financial performance of listed consumer goods firms in Nigeria. Each model corresponds to one of the study's dependent variables: profitability (ROA).

$$ROA_{it} = \beta_0+\beta_1 EXR_t+ \beta_2 IFR_t + \beta_3 OLP_t + \beta_4 GEX_t + \beta_5 TOP_t + \beta_6 CPS_t+ \beta_7 PLR_t + +\beta_8 HDS_{it}+\beta_9 FSZ_{it}+ \beta_{10} FAGE_{it} + \beta_{11} GDPR_t +\varepsilon_{it} \quad \text{.....Equ 1}$$

Estimation Technique

The data were analyzed using descriptive statistics, correlation analysis, and panel data regression techniques, including both fixed and random effects models. The Hausman test was used to determine the most appropriate model for the analysis. The fixed effects model was selected based on the test results, as it accounted for individual heterogeneity across firms. The Hausman test suggested that the fixed effects model was more appropriate because it better captured firm-specific characteristics that could influence the relationship between exchange rate fluctuations, hedging strategies, and financial performance. The Durbin-Watson statistic was used to check for autocorrelation in the residuals, ensuring the robustness of the regression results. The Breusch-Pagan LM test confirmed the absence of cross-sectional dependence in the residuals, validating the use of the fixed effects model.

Variable Description and Measurement

The key variables and their measurements are presented in the table below:

Table 1: Variable Description and Measurement

Variable	Description	Measurement	Source
ROA (Return on Assets)	A measure of profitability relative to total assets.	Net Income / Total Assets	Rouf and Abdul, (2015), Alkassim, (2005)
EPS (Earnings per Share)	A measure of the market-based performance of the firm.	Net Income / Outstanding Shares	Kassim et al. (2022)

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LQR (Liquidity Ratio)	A measure of the firm's ability to meet short-term obligations.	Current Assets / Current Liabilities	Wild, Shaw and Chiappetta (2018)
SLR (Solvency Ratio)	A measure of the firm's capital structure.	Total Debt / Total Equity	Choi and Meek (2011), Bello, Olayungbo, and Folorunso (2022)
EXR (Exchange Rate) Standard Deviation of Exchange Rates [ERV])	The exchange rate between the Nigerian Naira and foreign currencies.	Annual Exchange Rate (Naira/USD)	Okika, Udeh and Okoye (2018), Abubakar (2020)
HDS (Hedging Strategy)	A dummy variable indicating whether a firm engages in hedging against exchange rate risk.	1 = Firm hedges, 0 = Firm does not hedge	Allayannis and Weston (2001) Ahmed, Azevedo, and Guney (2013) Ugur Lel (2006)
FSZ (Firm Size)	A measure of the firm's total assets, indicating its size.	Natural Logarithm of Total Assets	Augustine and Ayobami (2022)
Government Expenditure	This refers to all public spending by Government bodies and agencies	Govt. Exp.	Oyadeyi (2024)
Inflation	Inflation is a gradual loss of purchasing power that is reflected in a broad rise in prices for goods and services over time.	Consumer Price Index	Oyegun & Ofie (2023)
Trade Openness	Trade openness is defined as the ratio of exports plus imports over GDP	(Exports + Imports)/GDP	Doganlar, M. (2002).
Financial Deepening	Financial deepening means an increased ratio of the money supply to GDP	Credit to Private Sector (% of GDP)	Ibrahim, & Alagidede, (2017)
Firm Age	The number of years since listing plus 1	Year listed plus 1	Sayed & Gayathri (2023).
Crude Oil Price	Average price of Crude – Bonny Light	Price of crude oil over the period	Donkor, Mensah, & Sarpong-Kumankoma, (2021).
GDP Growth rate Gross Domestic Product	Measures Economic growth GDP from one period to the next	((GDP in current period – GDP in Previous period)/GDP in previous period) *100	Olamide, Ogujiuba & Maredza (2022)

Source: Researcher's compilation 2025

4. Result and Discussion

Table 2: Summary of Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
ROA	0.07	0.06	6.17	-2.42	0.44	9.41	146.02
HDS	0.10	0.00	1.00	0.00	0.30	2.67	8.11
FSZ	9.89	10.17	13.95	4.38	1.99	-0.42	2.73
OLP	72.24	70.12	113.76	23.12	26.62	0.01	1.96
GEX	50.87	51.63	76.77	17.09	15.71	-0.30	2.39
TOP	119.32	109.47	220.83	33.89	46.23	0.33	2.80

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CPS	12.58	12.20	19.60	8.07	3.32	0.67	2.59
PLR	16.59	16.85	24.85	11.48	2.50	0.52	5.47
IFR	13.90	12.88	25.77	5.39	5.07	0.77	3.21
FAGE	48.85	51.00	67.00	22.00	12.03	-0.72	2.95
GDPR	0.01	0.01	0.03	0.00	0.01	0.42	1.99

Source: Researcher's Computation using EView 10 (2025)

The descriptive statistics presented in Table 2 provide an overview of the key variables used in the study. The mean and median values for Return on Assets (ROA) are close, with a relatively high maximum value of 6.17 and a minimum of -2.42, indicating a significant variation in profitability across firms. The skewness and kurtosis values for ROA suggest extreme outliers and heavy tails, reflecting a non-normal distribution. For the Hedging Strategy (HDS), the mean is 0.10, with a median of 0.00, and a skewed distribution with a positive skewness of 2.67, indicating that most companies did not engage in hedging strategies. Firm Size (FSZ) has a mean of 9.89, with a relatively symmetric distribution as indicated by its skewness value of -0.42. Oil Prices (OLP) show moderate variation, with a mean of 72.24 and a standard deviation of 26.62, indicating some fluctuations in oil prices over time. Government Expenditure (GEX) and Trade Openness (TOP) have positive skewness, indicating that most values are clustered towards the lower end, with TOP showing a larger variation (46.23). Credit to Private Sector (CPS) and Inflation Rate (IFR) display mild positive skewness, while Firm Age (FAGE) shows negative skewness, indicating that most companies are relatively younger. The GDP Growth Rate (GDPR) exhibits little variation, with a mean close to zero, reflecting limited economic growth during the period under review. These statistics highlight the variability and distribution characteristics of the key variables impacting firm performance in the study.

Table 3: Correlation Matrix

					ROA Model							
	ROA	**LEXR**	**LIFR**	**LOLP**	**LGEX**	**LTOP**	**LCPS**	**LPLR**	**HDS**	**FSZ**	**FAGE**	**GDPR**
ROA	1.000											
LEXR	-0.080	1.000										
LIFR	-0.021	0.652	1.000									
LOLP	-0.114	0.242	-0.092	1.000								
LGEX	-0.039	0.317	-0.095	0.142	1.000							
LTOP	-0.061	0.228	-0.193	0.287	0.920	1.000						
LCPS	-0.031	0.474	0.259	0.474	0.486	0.433	1.000					
LPLR	0.056	-0.660	-0.268	-0.542	-0.561	-0.469	-0.449	1.000				
HDS	-0.132	0.731	0.567	0.193	0.042	0.072	0.499	-0.376	1.000			
FSZ	-0.131	0.380	0.196	0.273	0.331	0.290	0.234	-0.312	0.206	1.000		
FAGE	-0.093	0.048	0.044	0.059	0.068	0.060	0.069	-0.043	0.022	0.392	1.000	
GDPR	0.021	-0.759	-0.324	-0.151	-0.382	-0.225	-0.188	0.555	-0.343	-0.320	-0.031	1.000

Source: Researcher's Computation using EView 10 (2025)

The correlation between the independent variables and ROA reveals weak and mostly negative relationships. For instance, the exchange rate (EXR) shows a very slight negative correlation (-0.080) with ROA, suggesting that fluctuations in the exchange rate have a minimal negative impact on firms' returns on assets. Similarly, the inflation rate (IFR) (-0.021) and oil price (OLP) (-0.114) have weak negative correlations, indicating that these macroeconomic factors have a minor adverse effect on the profitability of firms. Additionally, hedging strategy (HDS) has a moderate negative

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correlation (-0.132) with ROA, pointing to the possibility that firms employing hedging strategies may not necessarily see improved asset returns. Firm-specific variables such as firm size (FSZ) (-0.131) and firm age (FAGE) (-0.093) also exhibit weak negative correlations, which may suggest that larger or older firms in this sector do not necessarily outperform in terms of asset returns. The overall weak negative associations point to the fact that external macroeconomic factors and firm characteristics have a limited direct impact on the return on assets.

Model 1: Profitability (ROA)

$ROA_{it} = \beta_0+\beta_1 EXR_t+ \beta_2 IFR_t + \beta_3 OLP_t + \beta_4 GEX_t + \beta_5 TOP_t + \beta_6 CPS_t+ \beta_7 PLR_t +$
$+\beta_8 HDS_{it}+\beta_9 FSZ_{it}+ \beta_{10} FAGE_{it} + \beta_{11} GDPR_t +\varepsilon_{it}$ ……..Equ 1

Table 4 Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	10.219938	11	0.5107

Source: Researcher's Computation using EView 10 (2025)

The Hausman test (Table 4) was conducted to determine the appropriateness of the random effects model for the regression analysis. The test summary shows a Chi-square statistic of 10.22 with 11 degrees of freedom, and a p-value of 0.5107. Since the p-value is greater than the 0.05 significance level, we fail to reject the null hypothesis, suggesting that the random effects model is appropriate for the analysis of the profitability variable (ROA).

Table 5 Random Effect Regression

Dependent Variable: ROA				
Method: Panel EGLS (Cross-section random effects)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.079	1.620	0.666	0.506
LEXR	-0.954	0.371	-2.571	0.018
LIFR	0.647	0.312	2.073	0.041
LOLP	-1.236	0.436	-2.836	0.008
LGEX	1.450	0.677	2.143	0.040
LTOP	1.008	0.471	2.140	0.041
LCPS	1.228	0.409	3.000	0.006
LPLR	-0.460	0.799	-0.575	0.566
HDS	0.523	0.225	2.329	0.034
FSZ	-0.026	0.018	-1.431	0.154
FAGE	-0.009	0.013	-0.719	0.472
GDPR	1.723	0.783	2.200	0.035
	Effects Specification			
R-squared	0.655	Mean dependent var		0.070
Adjusted R-squared	0.608	S.D. dependent var		0.531
F-statistic	11.500	Durbin-Watson stat		1.927
Prob(F-statistic)	0.001			

Source: Researcher's Computation using EView 10 (2025)

Table 5 presents the results of the random effects regression analysis. Exchange Rate (EXR): The coefficient for EXR is -0.954, with a t-statistic of -2.571 and a p-value of 0.018, indicating that exchange rate fluctuations have a statistically significant negative effect on ROA. A one-unit increase in EXR is associated with a 0.954 decrease in ROA, suggesting that exchange rate volatility adversely affects profitability. Inflation Rate (IFR): The coefficient for IFR is 0.647, with a t-statistic of 2.073 and a p-value of 0.041. This indicates that inflation has a positive and

https://doi.org/10.52968/11206713

statistically significant effect on ROA. A one-unit increase in IFR is associated with a 0.647 increase in ROA, suggesting that inflation may be associated with improved profitability in this context, potentially due to pricing power or other macroeconomic factors.

Oil Price (OLP): The coefficient for OLP is -1.236, with a t-statistic of -2.836 and a p-value of 0.008. This negative relationship suggests that higher oil prices negatively impact profitability, possibly due to increased production costs for firms in the consumer goods sector.

Government Expenditure (GEX): The coefficient for GEX is 1.450, with a t-statistic of 2.143 and a p-value of 0.040. This positive and statistically significant result suggests that increased government spending is associated with improved profitability, potentially due to infrastructure improvements or fiscal policies that benefit firms. Trade Openness (TOP): The coefficient for TOP is 1.008, with a t-statistic of 2.140 and a p-value of 0.041. This result indicates a positive relationship between trade openness and profitability, suggesting that greater exposure to international markets may lead to increased profitability, possibly through increased exports or access to foreign markets.

Credit to Private Sector (CPS): The coefficient for CPS is 1.228, with a t-statistic of 3.000 and a p-value of 0.006. This positive correlation indicates that higher credit availability to the private sector is associated with higher profitability, as firms may use credit for expansion or working capital needs, thereby boosting their financial performance. Hedging Strategy (HDS): The coefficient for HDS is 0.523, with a t-statistic of 2.329 and a p-value of 0.034. This suggests that the adoption of hedging strategies has a positive and statistically significant impact on profitability, with firms using hedging strategies experiencing a higher ROA. Firm Size (FSZ): The coefficient for FSZ is -0.026, with a t-statistic of -1.431 and a p-value of 0.154, which is not statistically significant. This suggests that firm size does not significantly affect profitability in this sample, indicating that larger or smaller firms may experience similar levels of profitability.

Firm Age (FAGE): The coefficient for FAGE is -0.009, with a t-statistic of -0.719 and a p-value of 0.472, indicating that firm age has no significant impact on profitability. This suggests that the age of the firm does not play a major role in influencing its return on assets. GDP growth rate (GDPR): The coefficient for GDPR is 1.723, with a t-statistic of 2.200 and a p-value of 0.035. This positive relationship suggests that the readiness of the GDP growth rate (GDPR) is positively associated with profitability.

The R-squared value of 0.655 indicates that the model explains approximately 65.5% of the variability in ROA, which is a good fit for the data. The Adjusted R-squared value of 0.608 adjusts for the number of predictors in the model, suggesting that the model remains robust even after accounting for multiple variables. The F-statistic of 11.500 with a p-value of 0.001 indicates that the overall regression model is statistically significant, meaning that the independent variables, as a set, significantly explain the variation in profitability (ROA). The Durbin-Watson statistic of 1.927 suggests that there is no significant autocorrelation in the residuals, indicating that the model is well-specified in terms of error terms.

The random effects regression analysis indicates that several macroeconomic factors and firm-specific variables significantly influence the profitability (ROA) of Nigerian consumer goods firms. Notably, exchange rate fluctuations, oil prices, and credit availability to the private sector exhibit strong relationships with ROA, highlighting the importance of these factors in the financial performance of firms. Hedging strategies, government expenditure, and digital payment readiness are also significant positive contributors to profitability, suggesting that firms can enhance their financial performance through strategic financial management and leveraging external macroeconomic policies.

https://doi.org/10.52968/11206713

Table 6: Cross-section dependence for Model 1

Equation: Untitled			
Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	0.715	78.000	0.616
Pesaran scaled LM	0.538		0.464
Pesaran CD	0.671		0.534

Source: Researcher's Computation using EView 10 (2025)

For Model 1 (Profitability - ROA), the results of the cross-section dependence tests show that all the tests fail to reject the null hypothesis of no cross-section dependence. The Breusch-Pagan LM statistic is 0.715, with a p-value of 0.616, which is greater than 0.05, indicating that there is no significant correlation in the residuals across firms. Similarly, the Pesaran scaled LM test statistic is 0.538, with a p-value of 0.464, and the Pesaran CD statistic is 0.671, with a p-value of 0.534. Both tests also fail to reject the null hypothesis, confirming that there is no cross-section dependence in the residuals for Model 1.

5. DISCUSSION OF FINDINGS

The findings of this study reveal several important insights regarding the impact of exchange rate fluctuations on the financial performance of listed consumer goods companies in Nigeria. The negative relationship between exchange rate fluctuations and profitability suggests that exchange rate volatility significantly reduces the return on assets (ROA) of these firms. This supports existing literature that highlights the negative effects of exchange rate instability on firms' financial performance. For instance, Kida (2025) found a significant negative relationship between exchange rate movements and the profitability of Nigerian companies, underscoring the financial strain that exchange rate volatility imposes on firms. The adverse effect observed in this study suggests that exchange rate fluctuations create uncertainty and increase operational costs for firms, particularly those that depend on foreign transactions, making it more difficult to maintain profitability. This finding has important implications for policymakers and business leaders, who must recognize the need for strategies that can mitigate the impact of exchange rate volatility, such as currency hedging and cost management practices.

Inflation, in contrast, appears to have a positive effect on profitability in the consumer goods sector. This finding suggests that firms in Nigeria may benefit from inflationary environments, likely due to their ability to raise prices in response to rising costs. This outcome supports studies like Atsu and Odonye (2025), who found that inflation can boost profitability for companies able to pass on price increases to consumers. The pricing power of firms in the consumer goods sector can help offset the challenges posed by inflation, particularly for products that are inelastic in demand. The positive relationship between inflation and profitability in this study challenges conventional views that inflation negatively impacts firm performance, offering a nuanced perspective that highlights the complexities of macroeconomic factors. The implications of this finding suggest that while inflation presents challenges, it may also offer opportunities for firms that can adjust their pricing strategies effectively. Companies operating in inflationary environments should therefore focus on strengthening their market positioning and ensuring their products remain competitive.

The study also highlights the significant negative impact of rising oil prices on profitability. Higher oil prices appear to increase the production costs for firms in the consumer goods sector, thereby reducing profitability. This finding aligns with previous studies, such as Ezenwaka et al. (2025), which showed that oil price fluctuations negatively affect manufacturing firms in Nigeria. The relationship between oil prices and profitability underscores the vulnerability of firms to global

https://doi.org/10.52968/11206713

commodity price fluctuations, which can lead to higher input costs that firms may struggle to absorb, especially in competitive markets. This finding has important implications for firms that rely heavily on energy-intensive production processes. To mitigate the adverse effects of rising oil prices, companies in the consumer goods sector may need to explore cost-saving measures, such as energy-efficient technologies or alternative sourcing strategies, to reduce their dependence on fluctuating oil prices.

Conclusion and Policy Recommendations

Conclusion

This study examined the effect of exchange rate fluctuations (ERF) on the financial performance of listed consumer goods companies in Nigeria from 2000 to 2024. The findings reveal that exchange rate volatility has a significant negative impact on profitability, as increased fluctuations in the Naira reduce returns on assets (ROA) and weaken financial stability. Conversely, inflation exerts a positive effect on profitability, suggesting that firms in the consumer goods sector may leverage inflationary conditions through enhanced pricing power. Rising oil prices were shown to diminish profitability due to higher production and energy costs, while factors such as government expenditure, trade openness, and credit availability positively influenced firm performance.

The results further underscore the importance of effective hedging and risk management strategies in mitigating the adverse effects of currency instability. Firms adopting structured or natural hedging techniques demonstrated stronger resilience to exchange rate shocks, indicating that proactive financial risk management enhances long-term stability in volatile macroeconomic environments.

From a policy perspective, the findings emphasize the need for coordinated fiscal and monetary interventions to ensure exchange rate stability and improve access to finance for productive sectors. Strengthening trade openness and developing policies that support industrial diversification will also help reduce exposure to external shocks and dependence on imported inputs. This study contributes to knowledge in four significant ways. First, it provides longitudinal evidence (2000–2024) on the relationship between exchange rate fluctuations and financial performance in Nigeria's consumer goods sector, offering a deeper temporal perspective. Second, it highlights the moderating role of hedging strategies in reducing firms' financial vulnerability. Third, it develops a conceptual model linking exchange rate volatility, mitigating strategies, and financial performance, thus enriching theoretical understanding. Finally, it offers policy-relevant insights on exchange rate management, trade openness, and credit access, contributing to efforts aimed at enhancing the resilience and competitiveness of Nigeria's consumer goods industry.

Policy Recommendations

Nigerian consumer goods companies should integrate hedging strategies into their financial management practices to mitigate the adverse effects of exchange rate fluctuations. These strategies could include foreign currency derivatives such as forward contracts, futures, and options, which would help firms lock in exchange rates and reduce currency risk. The Central Bank of Nigeria (CBN) and relevant government agencies should work towards stabilizing the exchange rate by implementing sound monetary policies, including building foreign exchange reserves and promoting policies that reduce dependence on imports.

Given the negative impact of rising oil prices on profitability, Nigerian consumer goods companies should explore ways to reduce their energy consumption through the adoption of energy-efficient technologies. Additionally, firms should diversify their energy sources and explore renewable energy

https://doi.org/10.52968/11206713

Policymakers should carefully manage inflation to ensure that it does not spiral out of control, while also recognizing the potential benefits inflation can have on profitability in the consumer goods sector. The government should adopt inflation-targeting policies that ensure moderate inflation rates, providing businesses with a stable pricing environment.
The positive relationship between credit availability to the private sector and profitability underscores the importance of increasing access to financing for businesses. Policymakers should work to improve the availability and affordability of credit for consumer goods companies, particularly SMEs.

Contributions to Knowledge

The study contributes by:

i. Providing longitudinal evidence (2000–2024) on exchange rate fluctuations in Nigeria's consumer goods sector.
ii. Highlighting the role of hedging strategies in moderating financial vulnerability.
iii. Offering policy insights on stabilizing exchange rates, promoting trade openness, and expanding credit access**.**

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