

Foreign Exchange Rate Translation and Corporate Performance of Multinational Enterprises in Nigeria

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Abstract: Foreign currency translation is essential for financial reporting of multinational enterprises operations, particularly those operating in different global markets as companies engage in cross border transactions; maintain subsidiaries and associates in multiple countries. These firms encounter various foreign exchange risks that can significantly affect their financial statements. The choice of foreign currency translation method by multinational enterprises has profound effect for reporting financial outcomes. This study seeks to examine the effect of foreign exchange risks that can significantly affect their financial statements. The choice of foreign currency translation method by multinational enterprises impact financial outcome. This study seeks to examine the effect of foreign exchange rate translations on corporate performance of multinational enterprises in Nigeria. The study used Augmented Dickey-fuller based on panel data framework for the period 2014 – 2023 on multinational enterprises in Nigeria. The use of ADF was to determine the stationarity or non-stationarity, while Granger causality test was conducted to show the directional causality. From Hausman test, fixed and random effects were adopted. The study shows that causality test outcome imply that the variables are independent of each other. It further suggest that a change in one variable does not Granger cause a change in another variable. The outcome is, neither unidirectional nor bidirectional causality. But, in terms of relationships, foreign exchange rate translation had positive significant effect on return on assets and negative effect on return on equity. The implication of the positive effect of foreign exchange rate translation is that naira is depreciating against other currencies, increasing the value of foreign currency dominated assets. We conclude that exchange rate fluctuation is a significant predictor of return on assets, but not return on equity over the research period. The study recommends that management should adopt proactive exchange rate risk management policies such as hedging strategies to reduce the financial effects of exchange rate changes. The study further recommended that given exchange rate movements, financial managers of the selected firms should incorporate exchange rate monitoring into their operational planning.

Keywords: *Foreign Exchange rate translation, corporate performance, Return on assets, Return on Equity.*

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Introduction

The complex business landscape of emerging economies with inadequate infrastructures, multiple taxation, weak enforcement of laws, intense competition create a dilemma for most businesses desirous of making profits. Multinational firms play an important role in economic growth since the industrial revolution and cross border establishment of businesses. Multinational firms' activities encompass several industries such as marketing, logistics, real estate, agriculture and energy. Despite the changing legal and economic climate in Nigeria multinational firms continue to play a vital role in economic development. The creation of employment opportunities and the delivery of essential products and services to citizens have also benefited the citizens greatly. With the perennial fluctuation and depreciation of the country's currency many businesses are developing apathy towards foreign currency transaction because of high volatility in exchange rate which impact transaction price, profitability and resources allocation. Furthermore, investor sentiments are affected as prevailing depreciation of naira dampens foreign investment. It is challenging for companies to

minimize costs and increase profit which is the main motive of many corporate entities. A weak naira according to certain stakeholders reduces competitiveness therefore fluctuations of exchange rate have aroused public attention. Foreign currency and exchange rate swings have been blamed for sluggish performance by Nigeria businesses, thus, it is important to look at the issue (Olathuji & Adebuseye, 2023). Quite recently, because of severe devaluation of Nigeria currency a lot of multinationals exited the Nigeria business environment. However, there are still many Multinational companies still operating in Nigeria. These companies still deal with the issue of translation of currencies between that of their home country or head office and that of the subsidiaries.

Foreign currency translation is essential for the financial reporting of multinational corporations (MNCs), particularly those operating in diverse global markets. As companies engage in cross-border transactions and maintain subsidiaries in multiple countries, they encounter various Foreign exchange risks that can significantly impact their financial statement. The selection of a

foreign currency translation method employed by multinational corporations (MNCs) do have profound effects for reported financial outcome, affecting key metrics such as revenues, expenses, assets, and liabilities. Understanding the effects of different translation methods on financial statements is essential for investors, analysts, regulators and other stakeholders in evaluating the financial performance and risk exposure of multinational entities (Bhattari, 2018). In view of this scenario, the study intends to examine the impact of foreign currency translation on corporate performance of Multinational entities in Nigeria

Literature

Conceptual Framework

Foreign Currency Translation- Foreign currency translation methods are techniques adopted by multinational companies to convert financial statements from the currency on one country to another for reporting purposes. Each method has its advantage and disadvantages, and the choice of method depends on factors such as the nature of the foreign operations, the stability of exchange rates, and reporting requirement. (Owoeye&Ohunmakin, 2013). Foreign currency translation methods are of importance in multinational companies financial reporting of one country to another. These methods enable companies to present their financial performance and position accurately to stakeholders across different geographical regions (Santosa, 2019). Understanding the benefits and drawbacks of each foreign currency translation method is crucial for companies to settle for informed decisions about which method to use. Several factors, such as the nature of the foreign operations, exchange rate stability, and reporting requirements influence this choice.

Corporate Financial Performance- Corporate financial performance was analyzed by European Central Bank (2010) to be the capacity of a company to generate sustainable profitability within a specific period. Profitability is a bank's first line of financial protection against unexpected losses, as it improves its equity position and improves future earnings through the investment of retained profits. Alabede (2012) argued that there are basic internal and external factors affecting bank's profitability. The internal factors among others are liquidity, capital adequacy, high operating expenses etc, while the external determinants include macro-economic variables like financial structure,

exchange rate, inflation rate, economic development, etc. thus, these factors have resultant effect on corporate performance and investors will want to invest in a company with high level of profitability

Return on assets (ROA) is a ratio that shows how much an assets play in creating a net profit (Hery, 2015). The greater the return on assets ratio shows that the company's assets management's efficiency and effectiveness, the better. Return on assets is one of the profitability ratios of money that can describe a company's condition. Kasmir (2016) says return on assets (ROA) is a ratio that states the return on the number of assets utilized in the company. Return on assets (ROA) serves to know the level of effectiveness of the company's overall operations. The larger the ratio, the better because the company can use its assets effectively in bringing profit

Thorp (2012) described return on equity (ROE) as an indicator that can be used to measure the financial performance of an organization. It depicts the extent organizations manage their capital effectively. ROE is used by organizations to evaluate how investments generate earnings. Return on equity (ROE) measures an organization's profitability by disclosing the profit generated using shareholders fund. A steadily increasing return on equity (ROE) is a sign of the fact that management is giving shareholders more for their investment indicated by shareholders' equity. According to Khaddafi and Ummah (2014) return on equity, this ratio is a measure of shareholders rate of return on their investment into the company

Khrawish (2011) stated that return on, equity (ROE) measure the profitability of an entity an entity generated capital. If return on equity (ROE) is high, it indicates that the entity is performing efficiently with regard to profitability of the company.

Conceptual Diagram

According to Creswell (2003) categorization, mapping and description of concepts and inter relationships amongst variable of study can be achieved through conceptual framework. The framework assists the researcher to establish the research, scope, identify gaps in literature and establish relationships among the concepts of study. The conceptual diagram for the study is depicted on Fig i



Conceptualized Framework of Foreign currency Translation and Corporate Performance

Theoretical Framework

Agency Theory

This research is hinged on Agency Theory which provides valuable insights into the dynamics between shareholders and management. Agency Theory introduced by Jensen Meckling (1976), explores the principal-agent relationship in organizations, where shareholders (the principals) assign decision making authority to management (the agents) which can lead to a

misalignment of interests. In the context of foreign currency translation methods, this theoretical framework elucidates how managements' choice of translation method may impact the alignment of interests between shareholders and management's decision on the translation method can affect reported financial figures, thereby influencing shareholders perceptions of firm's performance and value. For example, if management selects a translation method that outcome in lower reported earnings due to exchange rate fluctuations, shareholders may perceive the company's financial performance. Additionally, it could explore

how the transparency and disclosure of the translation method in financial statements affect shareholders’ trust and confidence in management. Empirical studies that incorporate Agency Theory have shown its relevance in understanding corporate governance mechanisms and the relationship between shareholders and management (Fama & Jensen, 1983).

Purchasing Power Parity Theory

The Swedish economist Gustav Cassel propounded the modern Purchasing Power Parity (PPP) theory in 1918. Purchasing power parity (PPP) theory states that exchange rates between currencies are in equilibrium when their purchasing power is the same in each country, meaning a "basket of goods" costs the same once converted to a common currency. It suggests that in the long run, exchange rates adjust to offset differences in price levels (inflation) between nations.. The theory is based on the law of one price and posits that in efficient, frictionless markets, identical goods should cost the same regardless of location.. The theory further suggests the exchange rate between two currencies should equal the ratio of the price levels for a basket of goods in the two countries

Empirical Review

Adedolapo et.al (2025) examines the foreign currency translation methods employed by NLMCs and evaluate their impact on financial statements. Results indicate that current rate method and the temporal rate method had a statistically significant positive effect on the financial statements of listed multinational corporations in Nigeria. Conversely, the functional currency method exhibited a statistically insignificant negative influence on their financial statements. This suggests that although the current rate and temporal rate methods are associated with improved financial performance, the functional currency method does not significantly impact the financial performance. Hossin and Mondol (2020) examined effect of exchange rate changes on financial performance of banks in Bangladesh. The study found insignificant association of exchange rate performance; conversely inflation had positive effect on returns on assets. Moyo and Türsoy (2020) tried to ascertain effect of inflation and exchange rates on performance of South African commercial banks and discovered significant negative association between inflation and return on equity, and conversely found an insignificant linkage hip between exchange rates and return on equity

Olaoye et.al (2023) evaluated the effect of foreign currency translation on the performance of selected manufacturing firms in Nigeria for the period 2013 to 2022. From result, exchange rate exhibited significant negative relationship; Interest rate has insignificant positive relationship, while the translation rate indicated insignificant negative relationship with sampled firms.

Descriptive and measurement of variables

Measures of Variables

S/N	Variables	Symbol	Measurement	Previous studies	Apriori Expectations
DEPENDENT VARIABLE					
1	Return on Assets	ROA	$\frac{\text{Profit after Tax}}{\text{Total assets}} \times 1000$	Pozzolis & Venti2 014	Positive effect of PET on ROA
2	Return on Equity	ROE	$\frac{\text{Profit after tax}}{\text{shareholders equity}}$	Uzoigwe&Ekwue me 2021	Positive effect of FET on ROE

Hussain et al. (2021) assessed association of exchange rates and financial performance of firms in Pakistani manufacturing sector from 1999 to 2015. Result revealed exchange rates positively moderated relationship between cash conversion cycle and financial performance in static models and conversely negatively and significantly affect dynamic models. Abubakar (2020) examined how exchange rate volatility affects the financial performance of deposit money banks in Nigeria, focusing on Return on Capital Employed (ROCE) and Return on Assets (ROA). Using an ex-post facto research design and secondary data from nine banks listed on the Nigerian Stock Exchange, the study applied multivariate regression analysis. The results showed that exchange rate volatility did not significantly affect ROA or ROCE, suggesting that exchange rate fluctuations might not be a crucial factor in determining these banks' financial performance. This highlights the need for additional research to identify other factors influencing bank performance. In contrast, Buabeng et al. (2019) studied effect of exchange rate fluctuations on manufacturing firms in Ghana and found a significant negative relationship between exchange rates and performance. Opaluwa et al.(2020) examined impact of exchange rate on Nigerian industrial sector from 1986 to 2005. The study discovered firms are vulnerable and performed poorly when there is high fluctuation in exchange rate. Egolum et al. (2020) study tried to determine the nature of relationship between exchange rate volatility and performance, Result revealed significant negative impact on Return on Capital Employed (ROCE) and Return on Equity (ROE), while the effect on Return on Assets (ROA) was weak. Ayodele (2014) examined the effects of exchange rate and inflation, on gross domestic product in Nigeria. The outcome revealed exchange rate and inflation rate have significant effects on GDP. In contrast, inflation rate positively associate GDP, suggesting increased inflation rates motivate firm expansion and increased productive activities

Methodology

Research Design

The study adopted cross sectional ex-post facto design to examine the effects of foreign exchange rate translation on corporate performance of multinational firms in Nigeria. The data for the study was derived from financial report of multinational enterprises in Nigeria for the year 2014 – 2023. Purposive sampling method was adopted on a population of 11 multinational enterprises in Nigeria for the period which selected only multinational enterprises with complete data. Descriptive statistics, Augumented Dickey-Fuller, correlational analysis approach was used on panel data. Granger causality test was conducted to determine the direction of causality.

INDEPENDENT VARIABLE				
Foreign Exchange translation	FET	Foreign Exchange rate gain or loss Profit (Loss) before Tax	Augustin &Abdulraham 2023	Positive effect of FET on ROA and ROE

3.3 Model specification

The estimation for the study is stated as follows can be specified as follows:

$$\text{Equation 1: ROA} = \beta_0 + \beta_1\text{FET} + e$$

$$\text{Equation 2: ROE} = \beta_0 + \beta_1\text{FET} + e$$

Where:

ROA = Return on Assets

ROE = Return on Equity

β_0 = Intercept or Constant Term

β_1 = Coefficient of FET

e = Error term

A prior Expectations

Based on the theoretical expectations, the signs of the coefficients can be expected as follows:

β_1 (FET): Negative (-) or positive (+) depending on the direction of exchange rate fluctuations and the company’s exposure. If the company one exporter a depreciation of the local currency (increases in FET) may lead to increase in profit.

Expected sign of coefficient

Variable	Expected sign
FET β_1	+ / -

Results

Descriptive Statistics

Table 1 below is the Presentation the summary of the descriptive statistic of the panel data variables.

Table 1: Descriptive Statistics

	ROA	ROE	ER
Mean	10.33536	18.14173	0.240545
Median	7.140000	12.76000	0.070000
Maximum	53.96000	85.64000	2.080000
Minimum	0.550000	1.000000	0.010000
Std. Dev.	10.12658	18.36064	0.418832
Skewness	1.858230	1.726147	2.543803
Kurtosis	7.087740	5.707604	8.819665
Jarque-Bera Probability	139.8911 0.000000	88.22667 0.000000	273.8644 0.000000
Sum	1136.890	1995.590	26.46000
Sum Sq. Dev.	11177.68	36745.32	19.12077
Observations	110	110	110

Table 1, displays descriptive statistics which revealed how the variables were distributed and their central tendencies during the study period. A degree of stability and consistency in the performance of the company is shown by the profitability indicators Return on Equity (ROE) and Return on Assets (ROA), which show moderate mean values and comparatively lower standard deviations. Exchange Rate (ER), on the other hand, exhibit substantially greater variability. Particularly skewed is Exchange Rate (2.54), suggesting the existence of extreme situations in which businesses report abnormally high values in these domains. Even while ROA and ROE are skewed as well, the effect is not as noticeable and reflects more uniform performance indicators throughout the sample. All variables are leptokurtic, with heavier tails and sharper peaks than in a normal distribution, as further confirmed by the kurtosis values. None of the variables were normally distributed, as indicated by the statistical

significance of the Jarque-Bera test outcome for all variables at $p < 0.05$. This non-normality suggests that outcome should be evaluated cautiously and that statistical studies predicated on a normal distribution may not be acceptable. In certain situations, handling the observed skewness and kurtosis may need different techniques or transformations. In summary, while profitability measures such as ROA and ROE are relatively stable and reliable for analysis, Exchange Rate, demonstrate higher variability, strong skewness, and heavy-tailed distributions.

Panel Unit Root

PP-Fischer test was employed in testing the presence of a unit root in the heterogenous panel. The outcome of the panel unit root test to confirm if the variables are stationary or non-stationary is presented below in Table 2.

Table 2: Panel Unit Root test – PP-Fisher

variables	Level I(0)		First Order Difference I(1)	
	Constant	Status	Constant	Status
ROA	30.5100 (0.0342)	stationary	78.9053 (0.0000)	Stationary
ROE	52.0396 (0.0003)	stationary	100.937 (0.0000)	Stationary
ER	23.9745 (0.3486)	Not stationary	80.1575 (0.0000)	Stationary

The outcome of the PP-Fisher panel unit root test in Table 4.2 reveal that not all variables were stationary at level. Specifically, Return on Equity (ROE), Transfer Pricing (TP) and Return on Assets (ROA) were stationary at level, as indicated by their highly significant probability values (p = 0.0000). In contrast, Exchange Rate (ER) were not stationary at level, with p-values well above 0.05, implying the presence of unit roots. However, when tested at first difference, all variables became stationary, as reflected in the statistically significant p-values at this level. Therefore, the null hypothesis of a unit root was rejected at first

difference, confirming that the series are integrated of order one, I(1).

Panel Cointegration

To examine the existence of a long-run relationship among the panel data variables, both the Pedroni and Kao co-integration tests were employed. Utilizing both tests helps to ensure robustness and confirm the presence of co-integration with greater certainty. The outcome of the Pedroni and Kao panel cointegration tests are presented in Tables 3a - 3b.

Table 3a: The Pedroni Panel Co-integration Test (model 1, ROA)

Test	Statistic	probability	Weighted Statistics	Probability
Panel v-statistic	-0.3258	0.6277	-2.6227	0.9956
Panel rho-statistic	1.9078	0.9718	2.0047	0.9775
Panel PP-statistic	-2.3304	0.0099	-5.1417	0.0000
Panel ADF-statistic	-2.3148	0.0103	-3.8239	0.0001
Group rho-statistic	3.2841	0.9995		
Group PP-statistic	-6.7510	0.0000		
Group ADF-statistic	-2.7795	0.0027		

The Pedroni panel co-integration test analysis of Table 4.3a investigates the presence of long-run equilibrium between Return on Assets (ROA) and Model 1 explanatory factors. The Panel ADF-statistic (-2.3148; p = 0.0103) and the Panel PP-statistic (-2.3304; p = 0.0099) are both statistically significant at the 5% level among the within-dimension statistics. These outcome imply that there is a stable, long-term link between ROA and the explanatory variables, rejecting the null hypothesis that there is no co-integration. Their weighted versions support the outcome even more: the Weighted Panel PP-statistic (-5.1417) and the Weighted Panel ADF-statistic (-3.8239) are both highly significant (p = 0.0000) and provide more accurate estimates when cross-sectional dependence is suspected.

Another co-integration test was carried out to validate the result of the Pedroni panel co-integration test as indicated in Table 3b.

3b: Kao Co integration Test (model 1, ROA)

	T-statistic	Probability
ADF	-0.0461	0.4816
Residual variance	47.4419	
HAC Variance	34.0769	

The existence of a long-term equilibrium relationship between the variables listed in Model 1 is evaluated by the Kao cointegration test outcome in Table 4.3b. The ADF (Augmented Dickey-Fuller) t-statistic of the residuals obtained from the estimated long-run regression is its main focus. The ADF t-statistic is reported as -0.0461, with a probability value of 0.4816. Since the p-value is above the conventional 5% significance level, we accept the null hypothesis of no co-integration. This suggests that the residuals from the long-run relationship are not stationary, providing statistical evidence of a co-integrating relationship among the variables in Model Overall, the Kao test outcome indicate that Model 1 does not exhibits a statistically significant long-run relationship among its variables. Upon differencing of the variables in the model, both Pedroni test and kao test indicated along run relationship, thus supporting the outcome of the Pedroni tests when the variables were at levels.

With p-values of 0.0000 and 0.0027, respectively, the Group PP-statistic (-6.7510) and Group ADF-statistic (-2.7795) are likewise extremely significant. These outcome support the existence of co-integration by being consistent with the panel statistics. Like its panel counterpart, the Group rho-statistic (3.2841; p = 0.9995) is not statistically significant and does not support co-integration; nonetheless, the other test measures' substantial significance outweighs it. The evidence from statistical tests shows strong support for rejecting the null hypothesis of non co-integration because the PP tests and the more reliable ADF tests in both panel and group analysis categories produce rejection outcome. The analysis of Model 1 confirms that ROA maintains a long-term connection with its regression variables. Further investigation of these relationships becomes legitimate because of the validity of implementing long-run panel analysis.

Table 3c: The Pedroni Panel Cointegration Test (model 2, ROE)

Test	Statistic	probability	Weighted Statistics	Probability
Panel v-statistic	-1.0644	0.8564	-2.1474	0.9841
Panel rho-statistic	1.9078	0.9718	2.0047	0.9775
Panel PP-statistic	-2.3304	0.0099	-5.1417	0.0000
Panel ADF-statistic	-2.3148	0.0103	-3.8239	0.0001
Group rho-statistic	3.2841	0.9995		
Group PP-statistic	-6.7510	0.0000		
Group ADF-statistic	-2.7795	0.0027		

The Pedroni panel co-integration test analysis of Table 4.3c investigates the presence of long-run equilibrium between Return on Equity (ROE) and Model 2 explanatory factors. The Panel ADF-statistic (-4.2664; p = 0.0000) and the Panel PP-statistic (-4.7598; p = 0.0000) are both statistically significant at the 5% level among the within-dimension statistics. These outcomes imply that there is a stable, long-term link between ROE and the explanatory variables, rejecting the null hypothesis that there is no co-integration. The weighted versions support the outcome even more: the Weighted Panel PP-statistic (-5.8671) and the Weighted Panel ADF-statistic (-4.6281) are both highly significant (p = 0.0000) and provide more accurate estimates when cross-sectional dependence is suspected. With p-values of 0.0000 and 0.0000, respectively, the Group PP-statistic (-9.0056) and Group ADF-statistic (-5.6090) are extremely significant. These outcomes support the existence of co-integration by being consistent with the panel statistics. Like its panel counterpart, the Group rho-statistic (2.7592; p = 0.9971) is not statistically significant and does not support co-integration; nonetheless, the other test measures' substantial significance outweighs it. The evidence from statistical tests shows strong support for rejecting the null hypothesis of non co-integration because the PP tests and the more reliable ADF tests in both panel and group analysis categories produce rejection outcome. The analysis of Model 2 confirms that ROE maintains a long-term connection with its regression variables.

Another co-integration test was carried out to validate the result of the pedroni panel co-integration test as indicated in Table 3d.

Table 3d: Kao Cointegration Test (model 2, ROE)

	T-statistic	Probability
ADF	-2.1722	0.0149
Residual variance	300.7281	
HAC Variance	161.3307	

Source: Researcher's computation from Eviews 10

The existence of a long-term equilibrium relationship between the variables listed in Model 2 is evaluated by the Kao co-integration test outcome in Table 3d. The ADF t-statistic is reported as -2.1722, with a probability value of 0.0149. Since the p-value is below the conventional 5% significance level, we reject the null hypothesis of no co-integration. This suggests that the residuals from the long-run relationship are stationary, providing statistical evidence of a co-integrating relationship among the variables in Model 2. Overall, the Kao test outcome indicate that Model 2 exhibits a statistically significant long-run relationship among its variables.

Correlation Analysis

Table 4a - 4.4d below is a presentation of the correlation matrix of the variables under study

Table 4a: Correlation Analysis (model 1, ROA)

	ROA	ER
ROA	1.0000	-0.1922
ER	-0.1922	1.0000

The correlation analysis presented in Table 4.4a examined the linear relationships between Return on Assets (ROA) and Exchange Rate (ER) in Model 1. The outcome reveal generally weak correlations among the variables, suggesting minimal linear dependence.

A weakly negative association is indicated by the correlation coefficient of -0.1922 between ROA and ER. This suggests that company profitability, as determined by ROA, tends to decline slightly when the exchange rate rises, possibly indicating

a devaluation of the local currency. Increased operating expenses or exchange losses incurred by businesses during currency devaluation may be the cause of this. The correlation's weakness, however, indicates that although it might have some bearing, profitability is not primarily determined by it. Overall, the weak correlations between the variables show that multi-collinearity is not an issue in the model. Furthermore, the outcome suggest that nonlinear effects or other explanatory variables might be more important in determining ROA.

Table 4b: Correlation Analysis (model 2, ROE)

	ROE	ER
ROE	1.0000	-0.1448
ER	-0.1448	1.0000

The correlation analysis in Table 4b explores the linear relationships among Return on Equity (ROE) and Exchange Rate (ER) in the context of Model 2. The correlation coefficients, all of which are relatively low, suggest weak associations between the variables.

There is a weak negative association between ROE and ER, as indicated by the correlation coefficient of -0.1448. This implies that ROE tends to somewhat decrease as the exchange rate rises, indicating a depreciation of the local currency. This could be a reflection of how exchange rate fluctuation hurts shareholder returns, perhaps as a result of increased import prices, foreign debt loads, or a decline in competitiveness. The association is still weak,

though, suggesting that changes in ROE are not well predicted by changes in exchange rates. In summary, the correlation coefficients in this model are all quite low, indicating weak or negligible linear relationships among the variables. These outcome also suggest that multicollinearity is not a concern, and each variable can be included in regression analysis without causing estimation bias. Furthermore, the weak correlations highlight the likelihood that other variables or nonlinear interactions may better explain variations in ROE.

Granger Causality

Table 5a-5b below is a presentation of the Causality Test of the variables under study.

Table 5a: Pair Wise Granger Causality Tests For model 1

Pairwise Granger Causality Tests

Sample: 2014 2023

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
ER does not Granger Cause ROA	88	0.82856	0.4403
ROA does not Granger Cause ER		1.24182	0.2942

Table 5a presents the outcome of the Pairwise Granger Causality Tests for Model 1. The outcome reveal that there is no causal relationship between exchange rate (ER) and return on assets (ROA) in either direction. Overall, the outcome suggest that exchange rate individually do not directly influence the return on assets.

Table 5b: Pair Wise Granger Causality Tests For model 2

Pairwise Granger Causality Tests

Sample: 2014 2023

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
ER does not Granger Cause ROE	88	0.15415	0.8574
ROE does not Granger Cause ER		0.61709	0.5420

The outcomes from Pairwise Granger Causality Tests for Model 2 are provided in Table 4.5b. The research indicates that exchange rate (ER) fails to cause changes in return on equity (ROE) and vice versa.

Multivariate Analysis

The Analysis of the models employed in the study using Fixed and Random Effects approach and Hausman Test are presented in Table 6a-6b.

Table 6a: Outcome of fixed Effects Vs Random Effects and Hausman Test for Model 1

Dependent Variable: ROA				
Variables	Fixed Effect	Probability	Random Effects	Probability
Constant	10.6939	0.0000	10.7904	0.0000
Exchange rate (ER)	-1.5390	0.4218	-1.9827	0.0297
R ²	0.5035		0.0105	
Adjusted R ²	0.4421		-0.0079	
F –Test	8.1999		0.5692	
F-Test (Prob)	0.0000		0.5676	
Durbin Watson	0.9399		0.8358	
Hausman Test				
	Chi-sq stat	Df	Prob	
Cross-section random	3.5713	2	0.1677	

Table 6 presents the regression outcome for Model 1, where Return on Assets (ROA) is the dependent variable. The table compared the estimates from the Fixed Effects (FE) and Random Effects (RE) models, and includes the outcome of the Hausman test, which helps determine the more appropriate model for the panel data structure. The outcome of the Hausman test report a chi-square statistic of 3.5713 with 2 degrees of freedom and a p-value of 0.1677. Since this p-value is greater than the conventional 5% significance level, the null hypothesis which states that the random effects model is the more efficient and consistent estimator is not rejected. Therefore, the Random Effects model is deemed appropriate for interpreting the relationship between the variables and ROA in this study.

The R-square value of 0.0105 and adjusted R-square value of 0.0079 for random Effect estimation were not statistically significant as shown by their probability value of 0.5676 from the F-Test. Exchange Rate (ER) explain only 1.05% of the variation in Return on Assets (ROA) among the firms in the study. The F-test probability value of 0.5676, which is greater than the conventional 0.05 significance level, implies that the overall model is not statistically significant. This could mean that key explanatory variables may be missing, or that ROA is influenced by other factors not captured in the model (e.g., firm size, market conditions, governance structures, etc.).

Table 6b: Outcome of fixed Effects Vs Random Effects and Hausman Test for Model 2

Dependent Variable: ROE				
Variables	Fixed Effect	Probability	Random Effects	Probability
Constant	18.9116	0.0000	19.1206	0.0000
Exchange rate (ER)	-3.1341	0.4528	-4.1849	0.3015
R ²	0.2828		0.0101	
Adjusted R ²	0.1940		-0.0083	
F –Test	3.1875		0.5467	
F-Test (Prob)	0.0071		0.5804	
Durbin Watson	1.2458		1.1216	
Hausman Test				
	Chi-sq stat	Df	Prob	
Cross-section random	2.5844	2	0.2747	

Table 6b presents a comparative analysis of the Fixed Effects (FE) and Random Effects (RE) estimations for Model 2, with Return on Equity (ROE) as the dependent variable. The independent variable included in the model is Exchange Rate (ER). The table also reports the result of the Hausman test, which is employed to determine the appropriate model specification. With coefficients of 18.9116 and 19.1206, respectively, and p-values of 0.0000 in both cases, the regression outcome demonstrate that the constant term is statistically significant in both the Fixed and Random Effects models. This suggests that the expected value of ROE is roughly 19% when Exchange Rate is fixed at zero. Nevertheless, neither model's coefficients for the independent variables, exchange rate are statistically significant. Although this link is not statistically significant, ER specifically exhibits a negative relationship with ROE in both models (FE: -3.1341, p =

0.4528; RE: -4.1849, p = 0.3015), indicating a possible negative impact of exchange rate fluctuations on business performance.

With an R-squared of 0.2828 and an adjusted R-squared of 0.1940, the Fixed Effects model exhibits higher explanatory power in terms of model fit. These figures imply that the model accounts for about 19.4% of the variation in ROE. On the other hand, the Random Effects model shows poor model fit with a substantially lower R-squared (0.0101) and a negative corrected R-squared (-0.0083). The Fixed Effects model's significance is further supported by the F-test, which yielded a value of 3.1875 and a corresponding p-value of 0.0071, confirming the model's overall statistical significance. However, the Random Effects model does not reach statistical significance (p = 0.5804, F-statistic = 0.5467). The dependability of the standard errors may be impacted by the

residuals' degree of positive autocorrelation, as indicated by the Durbin-Watson statistics for both models (FE: 1.2458; RE: 1.1216). When factors related to exchange rate changes equal zero the average Return on Equity would amount to approximately 19.12% according to the constant term estimate of 19.1206. The initial value serves as a benchmark to identify the combined influence that explanatory variables have on firm performance.

To determine the appropriate model, the Hausman test was conducted. The outcome (Chi-square statistic = 2.5844, $df = 2$, $p = 0.2747$) indicate that the Random Effects model is statistically acceptable, as the null hypothesis of no correlation between the individual effects and the repressors' cannot be rejected. This implies that, based on statistical criteria, the Random Effects model is preferable. Despite the Hausman test favoring the Random Effects model, the Fixed Effects specification provides a better fit and reveals more about the within-entity variations over time. Nevertheless, both models agree that Exchange Rate do not significantly influence Return on Equity during the study period. These outcomes suggest that other factors, potentially omitted from the current model, may be more influential in determining ROE.

Discussion of findings

Effect of Foreign Currency Translation on Return on Assets (ROA) of Multinational Manufacturing Enterprises

Table 6a revealed that the Exchange Rate (ER) variable possesses a -1.9827 coefficient value which remains significant at a p-value of 0.0297. Thus, when currency exchange rates shift downward through depreciation the profitability of firms decreases according to the negative coefficient effect. Also, an increase in one unit of exchange rate volatility produces an estimated 1.98 percentage point decrease in ROA according to the outcome while maintaining other variables steady. The outcome implied that the selected firms were sensitive to currency volatility which demonstrates their susceptibility to exchange rate instabilities preventing them from preserving their asset returns. This finding is consistent with studies such as Trajadi (2022) and Ezenwa et al., (2021), who found that exchange rate volatility negatively impacts firm-level profitability. According to Trajadi (2022) the Interest Rate Parity (IRP) Theory clarifies this phenomenon through its explanation of how domestic currency weakness involving forward rate increases induces foreign investors to withdraw investments through stock portfolio sales. The expected returns on investment become negatively affected by exchange rate fluctuations which leads to this market response. Investors shift their assets to foreign exchange trading activities and this causes additional downward pressure on both prices and returns of domestic stock market shares. However this is not the case for banking firms, as Abubakar et al., (2022) reported that exchange rate volatility has a significant positive effect on return on Assets of Deposit Money Banks (DMBs) in Nigeria.

Effect of Foreign Exchange Rate Translation on Return on Equity (ROE) of Multinational Manufacturing Enterprises

Table 6b revealed that the coefficient for Exchange Rate (ER) is -4.1849 , indicating a negative relationship with ROE. This means that a one-unit increase in exchange rate fluctuations, such as a depreciation of the local currency, would lead to a decrease in ROE by approximately 4.18 percentage points, holding other variables constant. However, the p-value associated with this coefficient is 0.3015, which is above the conventional 5% significance level. As a result, although the relationship is negative,

it is not statistically significant, implying that exchange rate volatility does not have a reliable or consistent impact on equity returns in the firms studied. These outcome are consistent with those of Shitemi et al., (2023), Akims et al., (2020) and Umeh et al., (2022), who found that macroeconomic factors and transfer pricing had limited direct effects on firm profitability in emerging economies. Oyadeyi et al., (2024) explained that the Statistical insignificance matches the theoretical perspectives derived from currency exposure theory together with exchange rate pass-through frameworks. Research indicates exchange rates affect corporate performance and ROE through numerous moderate factors that include how much the firm operates abroad and its hedging strategies along with business structure (Odum, 2024). Furthermore, Akinsola et al., (2022) noted that Security risk exposure to foreign markets combined with insufficient hedging strategies prevents firms from reliably experiencing financial performance changes caused by currency rate movements. Furthermore, the portfolio theory suggests that the overall effect of exchange rate volatility on equity returns can be diluted by diversification strategies and external market factors, which might explain why the relationship observed here is not statistically significant (Okwu et al., 2021). In this case, the data suggests that exchange rate fluctuations, while negative in direction, do not consistently affect ROE in a meaningful way across the firms studied. This could indicate that the firms in the sample have sufficient internal mechanisms or external factors that mitigate the impact of exchange rate volatility on their equity returns.

Conclusion

This study examined the effects of exchange rate fluctuations on the corporate performance of multinational manufacturing enterprises in Nigeria, focusing specifically on key financial performance indicators such as Return on Assets (ROA), and Return on Equity (ROE). The result revealed that Exchange rate fluctuations is a significant predictor of Return on Assets (ROA) but not Return on Equity (ROE) over the study period, according to multivariate analysis employing Random and Fixed Effects models. Even while exchange rate fluctuations has a big impact on transfer pricing practices, in the Nigerian context, these changes did not translate well to more general measures of business financial performance.

The overall implication of these outcome was that while multinational enterprises were responsive to macroeconomic fluctuations such as exchange rate instability, their financial resilience and strategic operational management dampened the direct impact on profitability and asset utilization.

Recommendations

Based on the outcome of the study, the following recommendations were made

- The study recommended that the selected firms' management should adopt proactive exchange rate risk management policies such as hedging strategies to reduce the financial effects of exchange rate changes.
- The study further recommended that given exchange rate movements, financial managers of the selected firms should incorporate exchange rate monitoring into their operational planning Boards of directors should promote implementation of strategic financial management systems which include external economic indicators like

exchange rate volatility within holistic corporate planning and risk management operations.

- CBN alongside other policy makers should develop transfer pricing guidelines which target specific industry sectors that operate across international markets to control financial strategies effectively without harming market competitiveness.

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26. FOREIGN CURRENCY TRANSLATION METHODS AND THEIR EFFECTS ON FINANCIAL STATEMENTS OF NIGERIAN LISTED MULTINATIONAL CORPORATIONS Omotoso Adedunke Adedolapo, Ifelola Olugbenga Oluwatayo, Awotomilusi Niyi Solomon and Oke Akudo Clara Department of Accounting, Afe Babalola University, Ado Ekiti, Ekiti State, Nigeria Corresponding Author's E-mails: awotomilusi@abuad.edu.ng <https://doi.org/10.35409/IJBMER.2025.3659>