FOREIGN EXCHANGE AND FINANCIAL PERFORMANCE OF CONSUMER GOODS MANUFACTURING FIRMSIN NIGERIA

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Abstract

This study examined foreign exchange and performance of consumer goods manufacturing firms in Nigeria covering the period 2018-2022. All twenty-eight (28) consumer items listed on the Nigerian Exchange Group (NGX) comprise the study's population; ten (10) of these were chosen using a judging sample. While return on assets and earnings per share served as stand-ins for profitability, the exchange rate and interest rate served as stand-ins for foreign exchange. The Nigerian Exchange Group (NGX) and the annual reports of the companies under examination provided the data for the study, which used an ex post facto design. Regression analysis was used to conduct the analysis, and the results showed that the exchange rate had a negative significant effect on return on assets while interest rates had a positive insignificant effect on return on assets. Additionally, the study found that foreign exchange had a negligible impact on the financial performance of Nigerian manufacturing firms, and among other things, the monetary authority should continue to implement policies that will stabilize the exchange rate and eliminate the negative impact of exchange rate fluctuations on Nigeria's manufacturing performance.

Keywords: Foreign Exchange, Exchange Rate, Interest Rate, Financial Performance, Return on Assets, Earnings per Share.

Introduction

The significance of foreign exchanges to the global economy cannot be overstated. Foreign exchange can have a positive or negative impact on profitability. International capital flows are influenced by the risk and rewards of different assets. The rate of exchange is the main concern of the public, policymakers, and undoubtedly the media. Nigeria is currently confronted with the

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formidable task of reducing reliance on imports and optimizing an export-led economic strategy. According to Offiong et al. (2016), the daily turnover of foreign exchange operations in all currencies climbed from about USD 600 billion in 1998 to approximately USD 1.4 trillion (1,400 billion) in 1998 before declining to approximately USD 1.2 trillion in 2001.Consolidation of players in the forex market was the main cause of the downturn. In contrast to other parts of the world, the impacts of exchange rate fluctuations in emerging nations like Nigeria have drawn a lot of attention and discussion. The discussion focuses on how much the exchange rate fluctuations have caused abrupt internal and external effects on the Nigerian economy. Since no country can maintain its level of self-sufficiency due to a variety of factors, a country's exchange rate plays a significant role in international economic transactions.Oladipupo andOnotaniyohuwo (2011)claims that changes in the exchange rate have a knock-on effect on other economic factors including the money supply, unemployment, inflation, interest rates, and so on. These numbers demonstrate how important the exchange rate is to the economic well-being of every country when it facilitates international trade in goods and services. The relevance of the exchange rate stems from the fact that it allows for direct comparisons of traded goods in international trade by connecting the price systems of two different countries. In other words, it links local and international prices. According to Opaluwa (2010), the topic of exchange rate fluctuations has gained attention in Nigeria since the 1986 Naira changes, which were brought about by the structural adjustment program (SAP).

The reality of exchange rates has been very different from what was expected in 1973, when the major industrialized nations gave up on maintaining stable currency values. There is a complex perception that the exchange rate is more volatile now than it should be, should be anticipated to be, and possibly needs to be (Frankel, 1995). Because it introduces a particular kind of risk (foreign exchange risk), the exchange vitality poses a special challenge for corporate operations carried out abroad (importing and exporting). Future commercial transactions are made more difficult by fluctuations in the high exchange rate risk (Evans et al., 1985).The performance and profitability of businesses will undoubtedly be impacted by these exchange rate fluctuations, either favorably or unfavorably.

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Conceptual Clarifications

Foreign Exchange

Foreign exchange is the process of converting one currency into another. The foreign exchange market, also known as "the forex," is the global marketplace for exchanging currencies at their current values, which vary according to changes in supply and demand. Not all currencies trade on the foreign exchange market; a country may decide to freeze its currency value or peg it to that of another currency, like the US dollar. However, many countries freely exchange their currencies with one another, which causes each currency's value to fluctuate constantly in relation to other currencies.

Exchange Rate

The rate at which one currency is traded for another is known as the exchange rate. According to Jhingan (2015), it is the value of one currency expressed in terms of another. The cost of one unit of the foreign currency in terms of the domestic currency is known as the exchange rate. For several decades now, there has been an ongoing discussion on the factors that influence the selection of exchange rate regimes. Friedman (2013) contended that by enabling relative prices to move more quickly, floating rates would offer superior protection against external shocks in the context of sticky pricing. His generally accepted position that the exchange rate system has no real long-term impact is in favor of a floating exchange rate. He argues that monetary regimes ultimately determine the exchange rate system. Monetary policy has an impact in the short term but not in the long term for real amounts. According to Mundell (2013), the type of shocks that aneconomyencounter should dictate the optimal exchange rate regime in a capital mobility environment. For instance, a fixed exchange rate would be necessary for monetary shocks, whereas a flexible exchange rate would be necessary for real shocks.However, considering that determining exchange rates is one of the most important problems in the theoretical field of monetary macroeconomics, this has raised interest in exchange rate modeling. There are several exchange rate regimes that nations can select from, with the remaining regimes ranging from firmly set arrangements at one end of the spectrum to floating arrangements at the other. Pegs, target zones, and fixed but moveable are some examples. As the major goal of exchange rate management is to maintain exchange rate stability, the fixed exchange rate regime and its fluctuations are more important. An exchange rate regime that keeps prices at specified levels

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Each country's currency exchange rate is fixed and hardly ever changes. Nigeria, for example, had fixed exchange rates from the time of its political independence in 1960 until the fall of the Bretton Woods Monetary System in the early 1970s.

Interest Rate

Interest rate is the percentage of principal a lender charges a borrower for using assets, such as cash, consumer products, and significant items like cars or buildings. It is reported annually and is sometimes referred to as the lease rate.Borrowers who pose less risk will typically pay a low interest rate; those who pose a greater risk will pay a higher interest rate.

Interest rates have been set in a variety of ways throughout the last 200 years by central banks and national governments. "The U.S. Federal Reserve and Federal Funds rate, for example, varied from approximately 0.25% to 19% between 1954 and 2008; the Bank of England base rate varied from 0.5% to 15% between 1989 and 2009; and rates in Germany varied from almost 90% in the 1920s to about 2% in the 2000s (Mankiw, 2012). In 2007, the Zimbabwean Central Bank increased borrowing rates to 800% in an attempt to counteract the nation's escalating hyperinflation (worldeconomice.co.uk, 2012). The late 1970s and early 1980s saw much higher prime credit interest rates than had been seen in the United States since 1800, the United Kingdom since 1700, and the Netherlands since 1600.Since the advent of modern capital markets, long-term rates have never been this high. There may have been instances before contemporary capital markets where savings deposits might yield an annual return of at least 25% and as much as 50%. Teachings on the Industrial Life Phenomenon.

Financial Performance

Performance has many facets, and the type of business being reviewed and the goals being pursued will determine which measure is best used to analyze corporate performance (Kaguri, 2013). The three different areas that make up business performance are financial performance (profits, ROA, ROI, EPS, etc.); product market performance (sales, market share, etc.); and shareholder return (total shareholder return, economic value added, etc.) (Richard et al., 2009). The ability of a company to attain projected financial results in relation to its intended outputs is referred to as financial performance (Mutende*et al.,* 2017). Financial ratios including return on equity (ROE), return on assets (ROA), return on sales (ROS), and operating margin are typically

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used to gauge financial success (Gilchris, 2013).A company's ability to employ resources from its main business and produce income is measured subjectively by its financial success (Van Horn, 2005; Pandey, 2007). The financial performance of a company is significant to stakeholders, investors, and the overall economy.

Return on Asset

Return on assets, or ROA, is the proportion of net income that comes from a company's total assets. It determines the amount of money a company makes from each dollar of assets it utilizes and possesses. It is useful for comparing rival companies in the same industry. A manager, investor, or analyst can determine how well a company's management uses its assets to produce earnings by looking at its return on assets (ROA) (Hargrave, 2019). A percentage of return on assets is shown. As an accounting-based metric, ROA evaluates the company's financial and operational success (Klapper& Love, 2002)According to Haniffa and Huduib (2006), the measurement is such that the more ROA, the more efficiently assets are used for the benefit of owners. Increased ROA also shows how well the business uses its resources to support the financial objectives of its owners (Ibrahim & Abdul-Samad, 2011).

Theoretical Review

Abstinence or Waiting Theory

Nassau WilliamSenior introduced the abstinence idea in 1989. He claims that interest is a benefit of abstinence. A person makes a sacrifice when they take money out of their paycheck and give it to someone else. The word "sacrifice" suggests that the person does not spend all of their money, which they could easily do. Senior said that it is unpleasant to refrain from consuming. As a result, the lender needs to be compensated. According to Senior, interest can therefore be thought of as the compensation for forgoing the use of capital. Several economists also criticized abstinence hypothesis.Abstinence or Waiting Theory.The hypothesis states that people find saving unpleasant because it lowers their consumption. However, because they can meet their needs, wealthy people do not find saving unpleasant.

Mark-up Theory

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Professor Gardner Ackley first put forth the markup hypothesis of inflation in 1913. He asserts that demand-pull and cost-push activities work together to cause inflation rather than demand and cost variables acting alone. Demand-pull inflation is the term used to describe inflation brought on by an excess of aggregate demand, which in turn raises prices. Price rises boost production, but they also raise demand for production inputs. As a result, the price and cost both rise. Wages can sometimes grow in tandem with an increase in the excess demand for goods.

This leads to a decrease in supply at higher prices in order to offset the rise in salaries through product prices. Prices would rise even more as a result of the market's lack of products. As a result, Prof. Gardner has offered a markup inflation model that takes into account both demand cost and other considerations. When demand rises, consumers spend more money on goods, which drives up product prices. On the other hand, the cost of production rises when the products are sold to companies rather than consumers. Consequently, product prices rise as well. The cost of production also rises when salaries rise, which further boosts the price of products. Professor Gardner consequently contends that both fiscal and monetary policies should be employed to manage inflation since it is caused by either an excess of demand or an increase in pay rates. To limit inflation, however, these two measures are insufficient.

Empirical Review

The effect of exchange rate swings on Zimbabwean banks' profitability was investigated in the Gumbo *et al*. (2022) study. Thirteen commercial banks and one savings bank in Zimbabwe from 2016 to 2021 made up the study sample. Panel data analysis was performed using the E-views software. The study discovered a strong inverse link between exchange rates and bank profitability, indicating that bank profitability is significantly impacted negatively by the devaluation of the Zimbabwean currency. The study also found that while inflation has a negative significant link with bank profitability, the deposit to assets ratio has a negative significant relationship with bank profitability.

Iwedi (2021) examined how the foreign exchange crisis affected the performance of Nigeria's manufacturing industry during a 35-year period, from 1985 to 2019. The study's proxies for the foreign exchange issue were trade openness, foreign direct investment, and the US-Nigerian

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exchange rate; its performance was measured by the GDP of the manufacturing sector. The time series was taken from the Central Bank of Nigeria's 2019 statistics bulletin. Ordinary least squares (OLS), a regression technique, was used to evaluate the data. The results demonstrate that the foreign exchange rate has a major detrimental effect on the GDP of Nigeria's manufacturing sector.

Hossin and Mondol (2020)investigated how fluctuations in currency rates affected the financial performance of financial institutions in Bangladesh. Research on financial performance and exchange rates, both theoretical and empirical, was reviewed. Secondary sources of information included the consolidated financial statements of the banks and the World Bank database website. As descriptive statistics, measures of central tendency were used in the study to describe the data. This study also employed correlation analysis to explain the relationship between currency rates, interest rate spreads, inflation rates, and return on assets (ROA). Several linear regression models have been employed. The dependent variable was return on assets, while the independent factors were changes in exchange rates. Financial success and exchange rate fluctuations were shown to be modestly correlated by the study.

Godwin and Idaraobong (2019) examined the connection between Nigeria's manufacturing sector production and exchange rate deregulation. The Autoregressive Distributed Lag (ARDL) framework was used to analyze annual time series data from 1986 to 2017. The ARDL results showed that Nigerian industrial output was negatively impacted by exchange rate deregulation, although this effect was only noticeable after the third period lag. Additionally, the study found that, over an extended period of time, the manufacturing sector's productivity was inversely correlated with the rate of inflation at a significant level of 10%. It was found that increased labor employment enhanced productivity over time, that manufacturing output is significantly correlated with gross capital formation, and that the manufacturing sector's productivity grew with greater capacity utilization.

Victoria (2019) employed Neo-Classical theory with financial intervention using the Cobb Douglas growth model to assess the effects of manufacturing productivity and exchange rate volatility on inclusive growth in Nigeria using time series data from 1981 to 2015. The manufacturing sector had a larger long-term impact on per capita income, according to the study,

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which examined the long-term link between these variables using the Normalized Co-integration and Johansen Co-integration tests.

Celina et al. (2018) used data from Nigeria from 1981 to 2016 to examine the connection between exchange rate policy and manufacturing production. The analysis made use of the Johansen cointegration test and Vector Error Correction (VECM) models. The investigation used time series data collected from the Central Bank of Nigeria (CBN) statistical bulletin on manufacturing output (MOP), exchange rate (EXR), capital utilization (MCU) of the manufacturing sector, and import (IMP). After the necessary integration, co-integration, and correction of the estimated equation's error, a Granger causality test among the relevant variables confirmed the relevance of the exchange rate-led hypothesis to the growth of Nigeria's manufacturing sector output.The findings showed a decline in Nigerian industrial production as expansion increased the amount of naira worth in dollars. This effect, nevertheless, was determined to be negligible. Therefore, fluctuations in currency rates do have a big effect on Nigeria's manufacturing output growth.

Agubata and Odubuasi (2018) examined how exchange rates affected Nigerian manufacturing companies' financial results between the fiscal years 2005 and 2014. The study employed purposive sampling to choose eight businesses from the food, beverage, and tobacco manufacturing sectors. Secondary data was gathered from the Central Bank of Nigeria statistical bulletin and the businesses' financial statements. The study employed multiple regression analysis as the data analysis method and an ex post facto research design. The findings indicate that exchange rates and inflation have a favorable effect on the return on equity and return on assets of Nigerian manufacturing firms, whereas interest rates have a negative effect. However, none of these factors are statistically significant.

Olabode (2018)investigated how the performance of Nigeria's industrial sector was impacted by the foreign exchange rate. The years of the study were 1990–2016. Interest rates, inflation rates, parallel exchange rates, real effective exchange rates, and the money supply are the independent variables in this study. For fifteen manufacturing enterprises in Nigeria, the returns on equity are the dependent variable. Time series information was gathered from the CBN Statistical Bulletin 2016 and the annual reports of the businesses. For the inquiry, E-view 7.0 was utilized, and the

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ordinary least square (OLS), diagnostic, serial correlation, stability, unit root, Granger causality, and cointegration tests were employed as estimation methods.The findings showed that the money supply (MSP) is 0.017, the interest rate (INT) is 0.031, the inflation rate (INF) is 0.000, the parallel exchange rate (PER) is 0.000, and the real effective exchange rate (REER) is 0.036. These values suggest that the exchange rate affects the financial performance of manufacturing companies.

Ugwu (2017) employed multiple regression analysis based on the Ordinary Least Squares (OLS) technique and used company profitability as a stand-in for the performance of Nigerian manufacturing enterprises between 1986 and 2016. The Johansen cointegration test results indicate a long-term correlation between Nigerian manufacturing enterprises' profitability and fluctuations in currency rates. Additionally, the study tested for stationarity using the Augmented Dickey-Fuller (ADF) test, and the findings indicated that the variables were integrated of order one. Using a joint variation of the T and F tests and the corresponding p-values, additional analysis of the data also demonstrated a strong association between exchange rate volatility and the profitability of Nigerian manufacturing enterprises.

Nwokoro (2017)employed co-integration, Ordinary Least Square (OLS), and the related Error Correction Modeling to examine how interest rate and foreign exchange changes affected Nigeria's manufacturing production between 1983 and 2014. The following variables were included in the study: interest rates, foreign currency rates, capacity utilization, manufacturing output, government spending on the manufacturing sector, and industrial production investment.The results showed a negative and significant effect on manufacturing output (MANO) from both interest rates (INTR) and foreign exchange rates (FREX).

Nnamocha*et al.* (2017)investigated Nigeria's industrial sector growth and foreign exchange. The Central Bank of Nigeria's Statistical Bulletin, 2015 edition, included secondary data on Nigeria's foreign reserves, industrial production, foreign exchange disbursement, and foreign exchange rate from 1981 to 2015. A regression analysis was performed on the gathered data using the Econometric program, E-view version 9. The growth of the Nigerian industrial sector was found to be positively impacted by foreign exchange availability, as measured by foreign exchange

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disbursement, but not significantly. The expansion of Nigeria's industrial sector was shown to be positively and significantly impacted by the country's foreign reserves and foreign exchange rate.

Methodology

The ex-post facto research design was adopted for the study, with a population of the twenty-eight (28) consumer goods manufacturing firm listed on Nigeria Exchange Group (NGX) as at 2022. However, with the use of judgmental sample technique, the study adopted ten (10) of the firms as the sample for the study. Data were extracted from the audited financial statements of the sampled firms.

Model Specification

Model specification for this study is as stated below:

$$ROA_{ft}= \alpha + \beta_1 EXR_{ft}+ \beta_2 INR_{ft} + U_{ft} \quad - \quad - \quad - \quad - \quad - \quad - \quad (1)$$
$$EPS_{ft}= \alpha + \beta_1 EXR_{ft}+ \beta_2 INR_{ft} + U_{ft} \quad - \quad - \quad - \quad - \quad - \quad - \quad (2)$$

Where;
α = Constant
EXR = Exchange Rate (Independent Variable)
INR = Interest Rate (Independent Variable)
ROA = Returns on Asset (Dependent Variable)
EPS = Earnings Per Share (Dependent Variable)
FT= Firm (F) at time (T)
U = Error term used in the model.
$\beta_1 – \beta_3$ = Beta coefficient of the independent variables.

Descriptive Statistics

	ROA	EPS	EXR	INR
Mean	0.055561	52.77000	217.7062	10.14000
Median	0.034784	21.08500	338.3450	10.93750
Maximum	0.345596	413.0000	495.0000	22.00000
Minimum	-0.088296	-574.0000	0.000000	0.000000
Std. Dev.	0.087724	128.6801	189.8579	6.130476
Skewness	1.335408	-1.509810	-0.232099	-0.289020
Kurtosis	4.892569	13.77425	1.192511	2.320734
Jarque-Bera	22.32307	260.8386	7.255204	1.657360
Probability	0.000014	0.000000	0.026580	0.436625
Sum	2.778044	2638.500	10885.31	507.0000

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Sum Sq. Dev.	0.377081	811370.2	1766256.	1841.554
Observations	50	50	50	50

Source: Author's Computation Using Eviews 12.

From table above, we observed that the average value of Return on Assets (ROA), Earnings per share (EPS), Exchange Rate (EXR) and Interest Rate (INR) are 0.055561, 52.77000, 217.7062 and 10.14000 respectively. The variability in the distributions as captured by the standard deviation, suggests that the standard deviations of ROA, EPS, EXR and INR were found to be slightly dispersed from its mean with values of 0.087724, 128.6801, 189.8579 and 6.130476 respectively are below their respective mean values. Moreover, the skewness values ROA (1.335408), EPS (-1.509810), EXR (-0.232099) and INR (-0.289020), indicates that only ROA was positively skewed, while EPS, EXR and INR was negatively skewed. In conclusion, the Jarque-Bera statistic suggests that all of the variables were normally distributed, since the probability of the Jarque-bera statistic p-value exceeds the 5% significance threshold.

Correlation for ROA

Covariance Analysis: Ordinary
Date: 09/29/24   Time: 01:02
Sample: 2018 2022
Included observations: 50

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Covariance Correlation	ROA	EXR	INR
ROA	0.007542		
	1.000000		
EXR	-2.563168	35325.12	
	-0.157037	1.000000	
INR	0.077152	316.4028	36.83108
	0.146388	0.277390	1.000000

Source: Author's Computation Using Eviews 12

From table above, a negative association was observed amongst and between ROA and EXR, and a positive correlation between and amongst ROA and INR. However, only the correlation between ROA and EXR, and ROA and INR were observed not to be significant at 5% level.

Correlation for EPS

Covariance Analysis: Ordinary
Date: 09/29/24   Time: 01:06
Sample: 2018 2022
Included observations: 50

Covariance Correlation	EPS	EXR	INR
EPS	16227.40		
	1.000000		
EXR	1660.574	35325.12	
	0.069357	1.000000	
INR	190.7584	316.4028	36.83108
	0.246747	0.277390	1.000000

Source: Author's Computation Using Eviews 12.

From table above, a positive association was observed between EPS and EXR and EPS and INR. However, only the correlation between EPS and EXR and EPS and INR were observed to be insignificant at 5% level.

Table 4: Unit Root Test Results

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Variable	LL&C	IPS	ADF FISHERS	HADRI	ORDER OF INTEGRATION	REMARK
ROA	0.0000	0.1318	0.3433	0.0190	I(0)	Stationary
EPS	0.0000	0.0002	0.0116	0.0012	I(0)	Stationary
EXR	0.0000	0.0024	0.0827	0.0698	I(0)	Stationary
INR	0.0000	0.0000	0.0049	0.0011	I(0)	Stationary

Source: Author's Computation Using Eviews 12

The Iin, Pesaran& Shin Test and the Levin, Lin & Chu f-Test are two distinct panel unit root tests that were employed in this work to check for the stationarity of all the variables. Table 4 below shows that every variable was stationary at levels, meaning that every variable was integrated of order zero, or I(0). All of the variables of interest are I(0), or stationary at levels, according to the empirical findings of the Panel unit root test at five percent crucial levels in table 4.4 above. For LL&C, IPS, ADF Fisher, and Hadri, their p-values are less than 5%. To make sure the variables were stable, several of them were transformed to their log form.

Normality Test for ROA Model
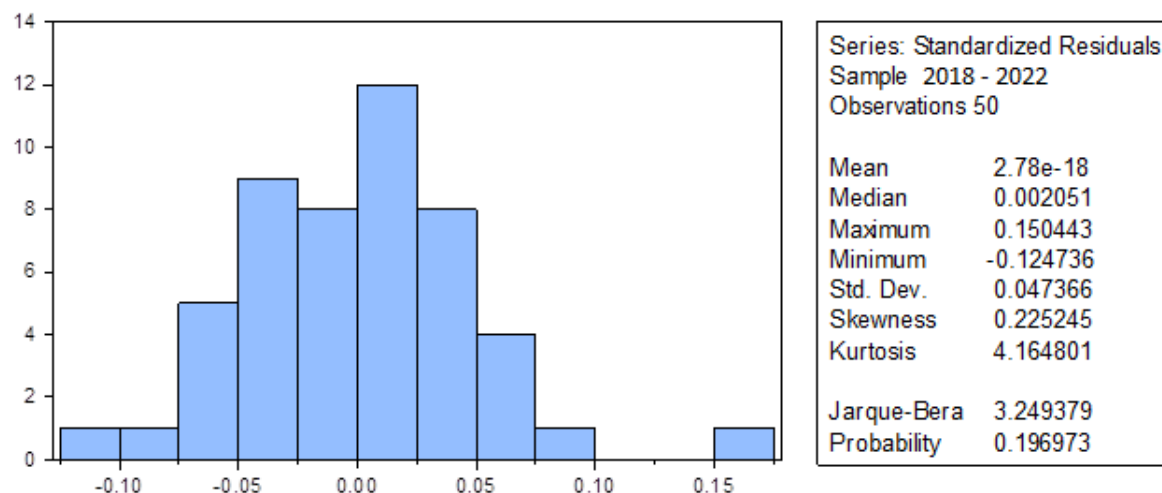
A statistical method for figuring out whether a sample or any collection of data fits a typical normal distribution is the Jarque-Bera test. The model residuals are normally distributed, according to the Jarque-Bera normality test result (3.249379) with a probability value of 0.196973.

Residual Normality Tests for ROE Model

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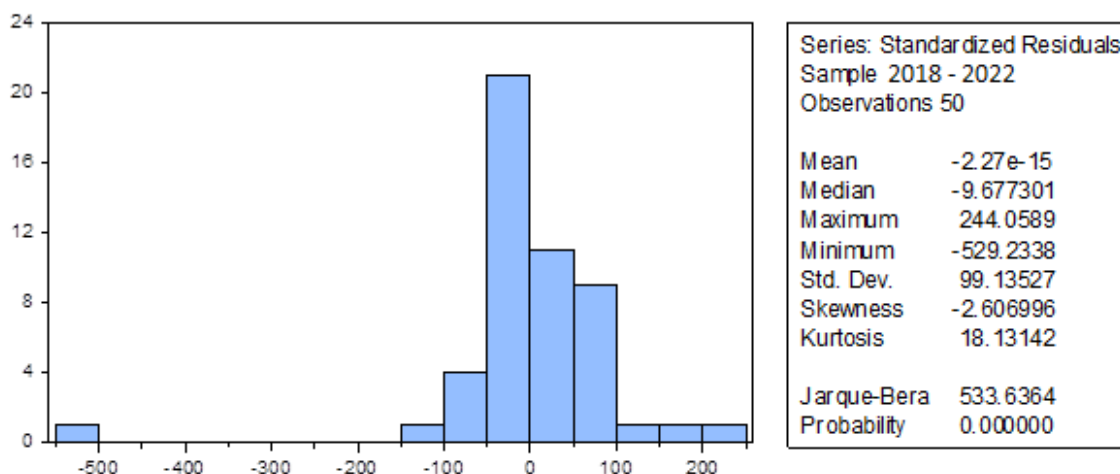
The result of the Jarque-Bera normality test (533.6364) with a probability value of 0.755890indicates that the model residuals are normally distributed.

ROA Regression Model

This study's variables were tested using Panel Generalized Least Square Regression model (GLS) through the use of Eviews version 12 to determine the extent to which the independent variables influence the dependent variables.

Effect of this study is to examine the effects of foreign exchange on financial performance of manufacturing firms in Nigeria. Using the ROA model.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXR	-0.000257	8.73E-05	-2.944822	0.0058
INR	0.003202	0.002638	1.214080	0.2331
C	0.079070	0.031558	2.505504	0.0172

R-squared	0.708461	Mean dependent var	0.055561
Adjusted R-squared	0.579841	S.D. dependent var	0.087724
S.E. of regression	0.056863	Akaike info criterion	-2.642023
Sum squared resid	0.109934	Schwarz criterion	-2.030175
Log likelihood	82.05057	Hannan-Quinn criter.	-2.409028
F-statistic	5.508161	Durbin-Watson stat	1.962445
Prob(F-statistic)	0.000019		

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Source: Author's Computation Using Eviews 12

The Adjusted R^2 = 0.579841 which means that about 58% of systematic variations in Return on Asset is accounted for by EXR and INR. The remaining 42% can be explained by other factors not captured by the model. The Prob. (F-statistics) = 0.000019 confirm that there is a joint significant linear relationship between the variables (dependent and independent). The D.W statistic indicates that there is no serial correlation exists in the residuals.

EPS Regression Model
Effect of foreign exchange on financial performance of manufacturing firms in Nigeria. Using the EPS model.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXR	0.079164	0.182758	0.433162	0.6676
INR	4.520543	5.520726	0.818831	0.4186
C	-10.30275	66.05034	-0.155983	0.8770

R-squared	0.806483	Mean dependent var	52.77000
Adjusted R-squared	0.644637	S.D. dependent var	128.6801
S.E. of regression	119.0109	Akaike info criterion	12.65064
Sum squared resid	481562.3	Schwarz criterion	13.26249
Log likelihood	-300.2661	Hannan-Quinn criter.	12.88364
F-statistic	1.552374	Durbin-Watson stat	2.055848
Prob(F-statistic)	0.001298		

Source: Author's Computation Using Eviews 12

The Adjusted R^2 = 0.644637 indicates that EXR and INR account for roughly 64.4% of systematic fluctuations in earnings per share (EPS). The model does not account for other factors that could account for the remaining 35.6%. It is confirmed by the probability (F-statistics) = 0.001298 that the dependent and independent variables have a combined significant linear relationship. The residuals show no serial association, according to the D.W. statistic.

Test of Hypotheses
HO1: Exchange rate has no significant effect on return on asset of manufacturing firms in Nigeria.

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In the first specific objective which was set to ascertain the effect of exchange rate on return on asset of manufacturing firms in Nigeria, findings reviewed that; exchange rate have a negative significant effect on the return on assets of manufacturing firms in Nigeria. Therefore, the we reject the null hypothesis

HO2: Interest rate has no significant effect on return on asset of manufacturing firms in Nigeria.

In the second specific objective which was set to ascertain the effect of interest rate on return on asset of manufacturing firms in Nigeria, findings reviewed that; interest rate have a positive insignificant effect on the return on asset of manufacturing firms in Nigeria. Therefore, we reject the alternative hypothesis and accept the null hypothesis.

HO3: Exchange rate has no significant effect on earnings per share of manufacturing firms in Nigeria.

In the third specific objective which was set to ascertain the effect of exchange rate on earnings per share of manufacturing firms in Nigeria, findings reviewed that; exchange rate has a positive insignificant effect on the earnings per share of manufacturing firms in Nigeria. Therefore, we reject the alternative hypothesis and accept the null hypothesis.

HO4: Interest rate has no significant effect on earnings per share of manufacturing firms in Nigeria.

In the fourth specific objective which was set to ascertain the effect of interest rate on earnings per share of manufacturing firms in Nigeria, findings reviewed that; interest rate have a positive insignificant effect on the earnings per shares of manufacturing firms in Nigeria. Therefore, we reject the alternative hypothesis and accept the null hypothesis.

Cross Sectional Dependent Test

Panel-data models are expected to significantly display cross-sectional dependence in the errors, according to a growing body of panel-data literature. According to Rodríguez-Caballero (2016), even if the number of cross section dimensions N is large with a finite time dimension T, cross-sectional dependence can complicate statistical inference and make estimators inconsistent if they are not taken into consideration. Because of the aforementioned, we must test for cross-sectional dependence, which is crucial for fitting panel data models. The following displays the findings of the cross-sectional dependence tests for the ROA and EPS models.

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Cross-Sectional Dependence Test for ROA

Residual Cross-Section Dependence Test
Null hypothesis: No cross-section dependence (correlation) in
    Residuals
Equation: Untitled
Periods included: 5
Cross-sections included: 10
Total panel observations: 50
Cross-section effects were removed during estimation

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	58.57061	45	0.0844
Pesaran scaled LM	1.430468		0.1526
Bias-corrected scaled LM	0.180468		0.8568
Pesaran CD	-1.171334		0.2415

Source: Author's Computation Using Eviews 12

The Breusch-Pagan LM test statistic is typically used when N is very large and T is finite, or when T is greater than N. However, we employ the Pesaran CD test statistic when N = T or when T and N are of the same magnitude. The aforementioned results demonstrate that the residuals either have no cross-sectional dependency or are cross-sectionally independent because the Pesaran CD test statistic of 0.2415 is greater than 0.05, which permits the null hypothesis that there is no cross-sectional dependence to be rejected.

Cross-Sectional Dependence Test for EPS

Residual Cross-Section Dependence Test
Null hypothesis: No cross-section dependence (correlation) in
    Residuals
Equation: Untitled
Periods included: 5
Cross-sections included: 10
Total panel observations: 50
Cross-section effects were removed during estimation

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	105.1684	45	0.0000
Pesaran scaled LM	6.342305		0.0000
Bias-corrected scaled LM	5.092305		0.0000
Pesaran CD	3.511451		0.0004

Source: Author's Computation Using Eviews 12

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Discussion of Findings

According to the study's findings, earnings per share are positively and negligibly impacted by exchange rates. This is in line with actual circumstances, such as rising raw material and manufacturing costs due to an increase in the exchange rate, whereby the selling price will be raised correspondingly to meet the company's profit margin. As a result, the ultimate consumers are the ones who suffer the most from rising exchange rates.This result is in agreement with Eme and Olugboyega (2012), and Enekwe*et al*. (2014).

The results also showed that interest rates have a beneficial but little impact on the manufacturing companies' financial performance. Importantly, a rise in interest rates will undoubtedly result in lower financial performance since higher finance servicing costs will be incurred. The unfavorable association between interest rates and manufacturing enterprises' financial performance is supported by Suranovic's (2012) research.

Summary of Findings

Based on the data collected, analyzed and tested, the following findings were made and summarized thus:

1. Exchange rate have a negative significant effect on the return on assets of manufacturing firms in Nigeria.
2. Interest rate have a positive insignificant effect on the return on asset of manufacturing firms in Nigeria.
3. Exchange rate has a positive insignificant effect on the earnings per share of manufacturing firms in Nigeria.
4. Interest rate have a positive insignificant effect on the earnings per shares of manufacturing firms in Nigeria.

Conclusion

Since the findings of this study revealed that exchangerates have effects on the profitability of consumer goods firm in Nigeria, though an insignificant one, the study therefore concludes that exchange rates have an insignificant effect on the financial performance of consumer goods manufacturing companies in Nigeria.

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Recommendations

Based on the findings, the study there recommends the following:

1. The central bank should keep implementing measures to stabilize the currency and eliminate the detrimental impact of exchange rate swings on Nigeria's manufacturing output.

2. By lowering the interest rate banks and other credit institutions should manage to attract as many borrowers (manufacturing firms) as possible, so that the income of manufacturing firms increase as a result the profitability of manufacturing firms will also do same.

3. The industrial sector is heavily dependent on foreign input, thus, efforts should be directed at raising the degree of technological advancement, boosting agricultural output, and producing domestic raw materials in order to prevent the importation of these foreign inputs from continuing.

4. Since it is evident that any increase in interest rates might result in a decline of more than 20% in the profitability indices evaluated, the government should implement a program that would give manufacturers zero-based credit-rate facilities.

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