

THE EFFECT OF MONETARY POLICY ON EARNING PER SHARE OF MANUFACTURING COMPANIES LISTED IN NIGERIA

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Abstract

This study examined the effect of monetary policy on the Earnings Per Share (EPS) of manufacturing companies listed on the Nigeria Exchange over the period 2015–2024. The study was motivated by the persistent fluctuations in shareholder earnings within Nigeria's manufacturing sector amidst unstable macroeconomic and monetary conditions. Specifically, the study investigated the influence of monetary policy rate (MPR), credit to private sector (CPS), prime lending rate (PLR), exchange rate (EXR), and firm age (FAG) on EPS. An ex-post-facto research design was adopted, while secondary data were obtained from the Central Bank of Nigeria Statistical Bulletin and the annual reports of selected manufacturing firms listed on the Nigeria Exchange. The study employed panel regression analysis, and the Random Effects Model was selected based on the Hausman specification test. The findings revealed that monetary policy rate had a negative and statistically significant effect on EPS ($\beta = -1.761$; $p = 0.017$), implying that increases in policy rates reduce shareholder earnings through higher borrowing costs and constrained investment activities. Exchange rate also exerted a negative and significant effect on EPS ($\beta = -0.034$; $p = 0.048$), indicating that exchange rate depreciation adversely affects corporate earnings by increasing production and importation costs. In contrast, credit to private sector ($\beta = 0.188$; $p = 0.755$) and prime lending rate ($\beta = -1.003$; $p = 0.333$) showed insignificant effects on EPS. Firm age exhibited a negative and significant relationship with EPS ($\beta = -0.112$; $p = 0.031$), suggesting that older firms tend to experience lower earnings performance. The overall model was statistically significant with an F-statistic probability of 0.0000 and an R-squared value of 0.289. The study concluded that monetary policy significantly influences shareholder earnings within Nigeria's manufacturing sector and recommended stable monetary policies, improved exchange rate management, and enhanced access to affordable financing to strengthen firms' earnings performance and shareholder value.

Keywords: Monetary Policy, Earnings Per Share, Manufacturing Companies, Exchange Rate, Monetary Policy Rate.

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I. Introduction

Manufacturing sector remains a critical driver of industrialization, employment generation, technological advancement, and sustainable economic growth through its contributions to gross domestic product (GDP), export earnings, and capital formation across both developed and developing economies. Despite its importance, manufacturing firms continue to face increasing financial pressures arising from inflationary trends, unstable exchange rates, rising production costs, supply chain disruptions, and fluctuations in monetary policy, all of which significantly affect profitability and market performance, particularly Earnings Per Share (EPS), a major indicator of shareholder wealth and corporate financial performance. In advanced economies such as the United States, Germany, China, and Japan, periods of monetary tightening have resulted in higher borrowing costs, declining industrial investment, and weaker corporate earnings (Caldara et al., 2020; Basdekis et al., 2023), while studies by Ahmad et al. (2025) and Panda et al. (2022) further established that monetary policy significantly influences firms' profitability and earnings performance through interest rate, liquidity, and credit transmission mechanisms. The situation appears more severe in Africa due to structural economic weaknesses, underdeveloped financial systems, and persistent macroeconomic instability, as manufacturing firms in countries such as South Africa, Kenya, Ghana, and Zimbabwe continue to experience declining profitability and unstable earnings resulting from high lending rates, exchange rate depreciation, inflationary pressures, and inadequate industrial financing (Agbonrofo & Olusegun, 2023; Dushime, 2023). In many African economies, weak monetary policy transmission limits access to affordable credit and reduces production efficiency, while exchange rate volatility and rising input costs further weaken firms' earnings performance and shareholder value (Acquah-Sam et al., 2025). Existing empirical evidence also suggests that

unstable monetary environments significantly affect firms' financing structures, operational efficiency, and long-term profitability across African manufacturing sectors (Ogbonna et al., 2022).

In Nigeria, the manufacturing sector occupies a strategic position in promoting industrial growth, employment creation, economic diversification, and export expansion. Despite its importance, the sector continues to experience persistent financial and operational challenges linked to unstable macroeconomic conditions and inconsistent monetary policy frameworks. Manufacturing companies listed on the Nigeria Exchange have recorded fluctuating earnings performance characterized by unstable profitability, declining production capacity, rising financing costs, and weak shareholder returns. One of the most affected indicators of financial performance is Earnings Per Share (EPS), which has remained volatile due to inflationary pressures, exchange rate instability, inadequate infrastructure, high energy costs, and restrictive credit conditions (Otiwu & Duruechi, 2024; Obi, 2021). According to Hassan and Ahmad (2022), frequent adjustments in monetary policy rate and unstable liquidity conditions significantly weaken the profitability and earnings capacity of Nigerian manufacturing firms. Similarly, Ayunku and Olulu-Briggs (2020) observed that poor access to affordable financing and exchange rate depreciation continue to increase production costs and reduce firms' operational efficiency. Empirical evidence from Asemota and Agunobi (2024) and Austine et al. (2022) further indicates that changes in money supply, lending rates, and exchange rates exert significant influence on the financial performance of manufacturing firms in Nigeria. Consequently, the instability in EPS among listed manufacturing companies reflects the broader impact of monetary policy dynamics on corporate profitability and shareholder wealth within Nigeria's industrial sector.

Although several empirical studies have examined the relationship between monetary policy and macroeconomic performance, evidence regarding its effect on the Earnings Per Share of manufacturing companies remains inconclusive, particularly in Nigeria. Existing studies have largely concentrated on broad indicators such as industrial output, economic growth, return on assets (ROA), and return on equity (ROE), with limited attention given to shareholder earnings performance. For instance, Hammed (2020), Ekong and Ekong (2022), and Waziri et al. (2024) investigated the impact of monetary policy on manufacturing sector growth and industrial productivity without specifically addressing EPS. Similarly, international studies such as Sahoo et al. (2024) and Basdekis et al. (2023) focused mainly on industrial output and profitability indicators rather than firm-level shareholder earnings. Yet, EPS remains one of the most important measures of firms' financial performance because it directly reflects the returns accruing to investors and shareholders. Furthermore, the persistent volatility in Nigeria's monetary environment characterized by fluctuating interest rates, inflationary trends, exchange rate instability, and liquidity constraints continues to raise concerns regarding the sustainability of manufacturing firms' earnings. Therefore, there exists a clear empirical gap in understanding how monetary policy variables such as monetary policy rate, money supply, exchange rate, and credit to private sector influence the Earnings Per Share of manufacturing companies listed on the Nigeria Exchange. This gap necessitates further empirical investigation to provide clearer evidence for policymakers, investors, and corporate managers on the monetary policy–earnings nexus within Nigeria's manufacturing sector.

II. Review of Literature

2.1 Conceptual Review

2.1.1 Earnings Per Share

Earnings Per Share (EPS) is widely recognized in financial literature as a major indicator of corporate profitability and shareholder value, reflecting the proportion of a company's net profit attributable to each outstanding ordinary share. It is commonly used in empirical studies as a measure of firm performance because it captures the earning capacity of firms and the returns available to shareholders under prevailing economic and monetary conditions (Hassan & Oyedele, 2022; Oladipupo & Oladipo, 2022). In the context of monetary policy studies, EPS serves as an important proxy for evaluating how macroeconomic variables such as interest rates, money supply, inflation, and exchange rate fluctuations influence firms' profitability and investors' wealth (Panda et al., 2022; Atsu & Odonye, 2025). One notable characteristic of EPS is its shareholder-oriented nature, as it specifically emphasizes returns accruing to equity holders rather than total capital providers, thereby distinguishing it from broader profitability indicators such as return on assets and return on equity (Akarsu et al., 2025; Basdekis et al., 2023). EPS is also highly sensitive to changes in net income, financing structure, leverage decisions, and the number of outstanding shares, particularly in periods of monetary policy adjustments that affect firms' financing costs and operational performance (Yadav & Panda, 2024; Auer et al., 2021). The major advantage of EPS lies in its simplicity, comparability, and usefulness in investment analysis, as it enables investors, analysts, and policymakers to assess firms' profitability and market value on a per-share basis (Babaginda & Khan, 2020; Akanbi, 2021). However, despite its usefulness, EPS has certain limitations because it may be influenced by accounting manipulations, changes in capital structure, and temporary macroeconomic shocks that distort earnings performance without necessarily reflecting operational sustainability (Ifurueze,

2022; Wang et al., 2023). Therefore, in this study, Earnings Per Share is defined as the proportion of profit after tax attributable to each outstanding ordinary share, serving as a measure of shareholder profitability and an indicator of how monetary policy conditions affect the earnings performance of manufacturing companies listed on the Nigeria Exchange.

2.1.2 Monetary Policy

Monetary policy is widely recognized as a major macroeconomic management tool used by central banks to regulate money supply, interest rates, liquidity conditions, and credit availability in order to achieve economic stability and sustainable growth. Scholars have defined monetary policy from different perspectives depending on the focus and scope of their studies. Nwachukwu and Nwogu (2022) define monetary policy as the deliberate actions undertaken by a country's monetary authority to control the supply of money and the cost of credit for the purpose of achieving macroeconomic objectives such as price stability and economic growth. Similarly, Caldara et al. (2020) describe monetary policy as a strategic economic instrument used to influence inflation, employment, investment, and output stabilization within an economy. Kozelský et al. (2024) further conceptualize monetary policy as a regulatory framework through which monetary authorities manage liquidity and financial conditions to influence competitiveness and business performance, while Tadesse et al. (2024) view it as a set of policy instruments designed to promote financial stability and economic efficiency through adjustments in interest rates and reserve requirements. The major characteristics of monetary policy include its reliance on instruments such as monetary policy rate, cash reserve ratio, liquidity ratio, open market operations, and exchange rate management to regulate economic activities and influence investment behavior (Agbonrofo & Olusegun, 2023; Eba & Ogaga, 2022). Monetary policy is also adaptive, cyclical, and transmission-based, affecting various sectors of the economy through interest rate channels, credit allocation, liquidity conditions, and aggregate demand (Monday, 2024; Kozelský et al., 2024). One of the major advantages of monetary policy is its ability to promote economic stability, stimulate industrial productivity, encourage investment, and maintain investor confidence by ensuring stable financial conditions (Ahmad et al., 2025; Alugbuo & Chika, 2020). It also facilitates inflation control, employment generation, and sustainable economic growth, especially in developing economies where financial systems are highly sensitive to policy signals (Ogbonna et al., 2022). However, monetary policy also possesses several limitations, including transmission lags, weak policy coordination, and vulnerability to external economic shocks that may reduce its effectiveness in achieving desired economic outcomes (Hammed, 2020; Wang et al., 2023). Excessive monetary tightening may constrain firms' profitability, reduce investment, and weaken industrial performance, particularly within the manufacturing sector where access to affordable financing is essential for production activities (Panda et al., 2022). Furthermore, structural deficiencies such as weak financial institutions, high informality, and unstable macroeconomic environments can undermine the effectiveness of monetary policy interventions (Eba & Ogaga, 2022). Therefore, for the purpose of this study, monetary policy is defined as the deliberate actions and regulatory measures undertaken by the Central Bank of Nigeria to regulate money supply, interest rates, and credit conditions with the aim of influencing the Earnings Per Share of manufacturing companies listed on the Nigeria Exchange.

2.2 Theoretical Review: Profit Maximization Theory

Profit Maximization Theory originates from the classical and neoclassical schools of economic thought, which maintain that the primary objective of a firm is to maximize the difference between total revenue and total cost under prevailing market conditions. Although the foundations of the theory can be traced to early economists such as Adam Smith, it was formally developed by Alfred Marshall in *Principles of Economics* (1890), where firms were assumed to behave rationally in pursuit of maximum profit within competitive markets (Marshall, 1890/1920). The theory was later reinforced by Milton Friedman (1953), who argued that profit maximization serves as a realistic and predictive assumption for explaining firm behavior and responses to changing economic conditions.

Supporters of the theory, including Baye and Prince (2017) and Varian (2014), contend that profit maximization drives firms' pricing strategies, investment decisions, output levels, and resource allocation because firms must remain profitable to survive and expand within competitive environments. Similarly, Michael Jensen and William Meckling (1976), through agency theory, emphasized that managerial performance is often evaluated based on the extent to which managers maximize shareholders' wealth and profitability. Despite its relevance, the theory has been criticized for its unrealistic assumptions regarding perfect rationality, complete information, and the notion that profit is the sole objective of firms.

Herbert Simon (1955) challenged the theory through the concept of bounded rationality, arguing that managers often seek satisfactory rather than maximum outcomes because of limited information and decision-making constraints. Likewise, Richard Cyert and James March (1963) argued that firms pursue multiple objectives beyond profit maximization, including growth, market share, employee welfare, and managerial utility. Other scholars such as Baumol (1959) and Williamson (1964) further proposed alternative objectives

including sales revenue maximization and managerial discretion. Nonetheless, Profit Maximization Theory remains highly relevant to this study because it provides a theoretical explanation for how manufacturing firms listed on the Nigeria Exchange respond to monetary policy changes in their attempt to maximize earnings and shareholder value. Changes in monetary policy instruments such as interest rates, money supply, and credit conditions directly affect firms' borrowing costs, investment decisions, production capacity, and consumer demand, thereby influencing profitability and Earnings Per Share (EPS). Under restrictive monetary policy conditions, higher financing costs may reduce firms' profits and shareholder earnings, whereas expansionary monetary policy may stimulate investment, production, and earnings growth. Therefore, the theory provides a useful framework for understanding how monetary policy affects the earnings performance of manufacturing companies listed on the Nigeria Exchange.

2.3 Empirical Review

Empirical studies on monetary policy and firm performance have largely emphasized macroeconomic outcomes, stock market performance, industrial productivity, and sectoral growth, while comparatively fewer studies have focused on firm-level financial indicators such as revenue growth among manufacturing companies. Earlier studies such as Alugbuo and Chika (2020) and Chukwunulu (2022) concentrated on the relationship between monetary policy and stock market performance in Nigeria using ARDL and OLS techniques respectively. Their findings revealed that monetary policy variables such as lending interest rate, money supply, exchange rate, and treasury bill rate significantly influenced stock market indices and market performance. Similarly, Ifurueze (2022) extended the discussion to the Nigerian financial sector and found that monetary policy instruments exert significant short-run effects on financial institution performance. These studies collectively establish that monetary policy significantly influences financial markets and sectoral outcomes through liquidity and interest rate channels. However, their concentration on stock market indices and financial institutions limits their applicability to the manufacturing sector because they did not specifically assess operational performance indicators such as revenue growth among listed manufacturing firms. This creates an important empirical gap regarding how monetary policy affects firm-specific performance within Nigeria's manufacturing sector.

Subsequent empirical studies shifted attention toward manufacturing and industrial sector performance, particularly within developing economies. Eba and Ogaga (2022), Salam et al. (2023), Onyenebo et al. (2024), and Ogbonna et al. (2022) examined the impact of monetary policy on manufacturing growth and industrial output using techniques such as OLS, ARDL, and panel regression analysis. Their findings generally revealed that monetary policy variables, including monetary policy rate, money supply, treasury bill rate, and credit conditions, significantly influence manufacturing output and industrial growth, although the magnitude and direction of these effects vary across countries and policy instruments. Chukwu (2023) further observed sectoral disparities in monetary policy transmission, finding that monetary policy significantly affects the banking sector but exerts insignificant effects on manufacturing and agricultural sectors in Nigeria. Similarly, Olalere et al. (2025) reported that monetary policy indicators significantly affect industrial output performance across West African economies. Although these studies provide substantial evidence that monetary policy influences industrial productivity and manufacturing sector performance, they relied predominantly on aggregate industrial or sectoral indicators rather than firm-level financial outcomes. Consequently, they failed to explain how monetary policy affects specific corporate performance measures such as revenue growth and Earnings Per Share among listed manufacturing firms, thereby leaving a microeconomic-level gap that the present study seeks to address.

At the firm level, empirical evidence increasingly suggests that monetary policy significantly affects profitability, investment decisions, and financial outcomes of firms through interest rate, liquidity, and credit transmission channels. Panda et al. (2022) found that tight monetary policy reduces firm profitability, especially among firms with lower markups, while long-term financing decisions help moderate policy shocks. Similarly, Akarsu et al. (2025) revealed that unexpected monetary tightening reduces borrowing and increases default risks, particularly among smaller and highly leveraged firms, though export-oriented firms showed greater resilience. Ahmad et al. (2025) also established that restrictive monetary policy negatively affects firm investment decisions in Pakistan, while financial development moderates such effects through the balance-sheet transmission channel. In the African context, Acquah-Sam et al. (2025) demonstrated that macroeconomic policy environments significantly moderate the relationship between corporate governance and firm performance in Sub-Saharan Africa, while Dushime (2023) found that monetary policy variables such as reserve requirements and Central Bank rates negatively affect agricultural firms' performance in Kenya. Although these studies offer useful firm-level insights into the relationship between monetary policy and corporate performance, most of them focused on profitability, investment, or governance outcomes rather than revenue growth and Earnings Per Share. Furthermore, many of the studies were conducted outside Nigeria or

concentrated on sectors other than manufacturing, thereby limiting their contextual relevance to listed manufacturing companies on the Nigeria Exchange.

In Nigeria specifically, recent empirical evidence continues to show inconsistent findings regarding the effect of monetary policy on firm and industrial performance. Monday (2024) revealed that monetary policy instruments exert varying effects on the financial performance of commercial banks, while studies such as Salam et al. (2023) and Onyenebo et al. (2024) emphasized the importance of monetary policy rate and liquidity conditions in enhancing industrial output and employment growth. However, despite the growing body of literature on monetary policy and sectoral performance, there remains limited empirical evidence directly linking monetary policy variables to firm-level revenue growth and Earnings Per Share within the Nigerian manufacturing sector. Existing studies have either focused on aggregate industrial performance, banking sector profitability, stock market indices, or investment outcomes without specifically examining listed manufacturing companies. Additionally, the few firm-level studies available were conducted in foreign economies such as Pakistan and Kenya, where institutional and macroeconomic conditions differ significantly from Nigeria's economic environment. Therefore, a clear empirical gap exists regarding how monetary policy variables such as monetary policy rate, money supply, exchange rate, and credit conditions influence the revenue growth and Earnings Per Share of manufacturing companies listed on the Nigeria Exchange. This gap provides the justification for the present study.

III. METHODOLOGY

This study adopts an ex-post-facto research design because the variables under investigation, namely monetary policy indicators and financial performance indicators, are historical in nature and cannot be manipulated or controlled by the researcher. The design is considered appropriate as it enables the examination of existing relationships between monetary policy actions and the financial performance of manufacturing companies listed on the Nigeria Exchange using secondary data and empirical evidence.

The study employed a purposive sampling technique to deliberately select ten manufacturing companies based on criteria such as consistent listing status, availability of complete financial data, and continuous operation within the manufacturing sector during the study period. The selected firms include Nestle Nigeria Plc, Dangote Cement Plc, Nigerian Breweries Plc, Unilever Nigeria Plc, Cadbury Nigeria Plc, Lafarge Africa Plc, PZ Cussons Nigeria Plc, Guinness Nigeria Plc, Flour Mills of Nigeria Plc, and Berger Paints Nigeria Plc, representing major subsectors such as food and beverages, industrial goods, building materials, chemicals, and consumer products.

The study relied exclusively on secondary data obtained from the CBN Statistical Bulletin and NGX annual reports, covering variables such as monetary policy rate, credit to private sector, prime lending rate, exchange rate, return on assets, return on equity, earnings per share, earnings before interest and taxes, return on capital employed, and firm age. The study covered a ten-year period from 2015 to 2024 to ensure adequate representation of monetary policy trends and financial performance dynamics within Nigeria's manufacturing sector.

3.2 Model Specifications

The theoretical framework for this study is Monetarist Theory developed by Milton Friedman in 1956. This theory emphasizes the critical role of monetary policy and the money supply in determining economic activity and performance. The central assumption of the Monetarist Theory is that variations in the money supply have direct and predictable effects on output, employment, inflation, and overall financial performance within an economy (Friedman, 1956). This work adapted the study of Hassan and Ahmad (2022) which examine the relationship between Monetary Policy and Financial Performance of Consumer Goods Manufacturing Firms: Evidence from Flour Mills Nigeria Plc. The model of Hassan and Ahmad (2022) is specified as

Where ROA is Return on Assets, MPR is Monetary Policy Rate, EXR is Exchange Rate, INF is Inflation Rate, MGE is Managerial Efficiency. Sequel to the study, the work of Hassan and Ahmad (2022), 2023 is adapted to suite the objectives. The model is specified as:

Where:

EPS is Earnings Per Share; MPR is Monetary Policy Rate; CPS is Credit to Private Sector; PLR is Prime Lending Rate; EXR is Exchange rate. Introducing the control variable of Firms Age, Firm age is included as a control variable because older firms typically possess more established operational structures, accumulated experience, stronger market presence, and greater access to financing compared to younger firms, all of which can significantly influence their financial performance. Controlling for firm age helps to isolate the true effect of

monetary policy variables by ensuring that performance differences arising from maturity or longevity do not bias the estimated relationships in the model. The mathematical model is rewritten as:

In econometrical form, we have

Since some variables like MS, CRM and EXC are in billions, and thousands and others are in ratio and tens forms, regressing this nature of the variables may automatically leads to the problem of heteroskedasticity, therefore, we utilized a semi-logarithms functional equation, therefore we restructure the model as:

Where:

α = represents the constant or intercept term, capturing the baseline value of the earning per share (EPS) when all independent variables are equal to zero

$\beta_1, \beta_2, \dots, \beta_n$ = are the regression coefficients that measure the magnitude and direction of the effect each independent variable exerts on the EPS.

$\ln$ = natural logarithm

ϵ = represents the error term or residual, capturing the influence of unobserved factors and random disturbances not explained by the independent variables in the model.

t = represent the time series.

3.2 Measurement of Variables

Variable	Description	Measurement / Proxy
EPS (Earnings Per Share)	Shows profit attributable to each outstanding share.	Net Income ÷ Number of Outstanding Shares
LER (Lending Rate / -Monetary Policy Rate)	Represents the benchmark interest rate influencing credit conditions.	% Rate as declared by the CBN
MS (Money Supply)	Captures the total quantity of money circulating in the economy.	Broad Money Supply (M2 or M3)
CRM (Credit to Manufacturing Sector)	Measures the credit available to the manufacturing sector as part of monetary transmission.	Total Bank Credit to Manufacturing Sector (₦ Billion)
EXR (Exchange Rate)	Indicates the value of the naira relative to the US dollar.	Official Exchange Rate (₦/USD)
FAG (Firm Age)	Represents the years of the firm establishment	Number of years of establishment, measures in years

3.3 Estimation Techniques

This study employs panel data estimation techniques to examine the effect of monetary policy on the financial performance of manufacturing companies listed on the Nigeria Exchange. Given the combined time-series and cross-sectional nature of the dataset, panel regression analysis is adopted as the primary analytical tool because it provides more efficient, informative, and reliable estimates compared to pure cross-sectional or time-series methods, while also controlling for individual heterogeneity across firms and capturing dynamic relationships over time. Within this framework, both Fixed Effects Model (FEM) and Random Effects Model (REM) are estimated to determine the most appropriate specification. The FEM is used under the assumption that firm-specific characteristics may be correlated with explanatory variables, allowing for the control of time-invariant unobserved heterogeneity by assigning unique intercepts to each firm. In contrast, the REM assumes that individual firm effects are random and uncorrelated with the regressors, making it more efficient when this assumption holds and allowing inclusion of time-invariant variables. To choose between these competing models, the Hausman specification test is conducted, where a significant result leads to the acceptance of FEM, while an insignificant result supports REM. In addition, post-estimation diagnostic tests are carried out to ensure the reliability and robustness of the regression results. These include the Variance Inflation Factor (VIF) test for multicollinearity, the Breusch-Pagan/Cook-Weisberg test for heteroscedasticity, the Wooldridge test for autocorrelation in panel data, and the Jarque-Bera test for normality of residuals. Together, these techniques ensure that the estimated relationships between monetary policy variables and financial performance indicators are statistically valid, robust, and suitable for inference.

IV. Data Analysis, Results and Discussion Of Findings

Table 4.1: Descriptive Statistics

	EPS	MPR	CPS	PLR	EXR	FAG
Mean	2.564	15.325	17.130	20.025	494.210	56.8

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Median	1.305	13.750	17.500	20.000	372.100	59
Maximum	61.770	27.500	19.200	21.500	1,490.000	101
Minimum	-207.650	11.500	14.200	18.500	197.000	13
Std. Dev.	27.814	4.509	1.596	0.970	350.332	21.599
Skewness	-4.561	1.937	-0.510	-0.173	2.274	-0.173
Kurtosis	37.737	5.751	2.070	1.819	6.989	2.837
Jarque-Bera	4864.237	87.903	7.917	6.301	141.655	0.678
Probability	0.000	0.000	0.019	0.043	0.000	0.713

Source: Author's computation (2026).

Table 4.1 presents the descriptive statistics of financial performance variables, monetary policy indicators, and firm age for manufacturing companies listed on the Nigeria Exchange over the study period. Earnings per share (EPS) records a mean value of 2.56, with a minimum of -207.65 and a maximum of 61.77, indicating wide dispersion in earnings performance across firms and time. The high standard deviation (27.81), strong negative skewness (-4.56), and very high kurtosis (37.74) suggest extreme volatility and the presence of outliers, while the Jarque-Bera statistic confirms that EPS is not normally distributed. For monetary policy variables, the monetary policy rate (MPR) has an average value of 15.33%, reflecting generally tight monetary conditions within the period; its positive skewness (1.94) and kurtosis (5.75) indicate moderate deviation from normality, further confirmed by a significant Jarque-Bera probability (0.000). Credit to the private sector (CPS) averages 17.13% with moderate variability and slight negative skewness (-0.51), though the Jarque-Bera probability of 0.019 indicates mild non-normality. The prime lending rate (PLR) shows a mean of 20.03% with low variability (standard deviation = 0.97), indicating relative stability in lending conditions, although its distribution still departs slightly from normality (Jarque-Bera = 0.043). Exchange rate (EXR) exhibits substantial volatility, with a mean of ₦494.21 per US dollar and a wide range from ₦197 to ₦1,490, while its high standard deviation (350.33) and positive skewness (2.27) confirm significant instability and non-normality over the period. In contrast, firm age (FAG) has a mean of 56.8 years, indicating that the sampled firms are relatively mature, and its distribution is approximately normal, as shown by low skewness (-0.17) and an insignificant Jarque-Bera probability (0.713). Overall, the results reveal substantial volatility and non-normality in most macroeconomic and financial performance variables, particularly EPS and exchange rate movements, reflecting the unstable economic environment within which Nigerian manufacturing firms operate and justifying the use of panel regression techniques with robust standard errors for subsequent analysis.

Table 4.2. Correlation Matrix for Capital Adequacy and Profitability of Selected Firms

	EPS	MPR	CPS	PLR	EXR	FAG
EPS	1					
MPR	-0.332	1				
CPS	0.004	0.177	1			
PLR	-0.128	0.376	-0.237	1		
EXR	-0.329	0.163	0.230	0.366	1	
FAG	-0.115	0.092	0.097	-0.019	0.097	1

Source: Author's computation (2026)

Table 4.2 presents the correlation matrix showing the relationship between Earnings Per Share (EPS), monetary policy indicators, and firm age for selected manufacturing companies listed on the Nigeria Exchange. The results indicate that EPS has a weak negative relationship with monetary policy rate (MPR) (-0.332) and exchange rate (EXR) (-0.329), suggesting that increases in these macroeconomic variables are associated with declines in earnings per share. A very weak positive relationship is observed between EPS and credit to the private sector (CPS) (0.004), implying almost no linear association, while EPS also shows a weak negative relationship with prime lending rate (PLR) (-0.128) and firm age (FAG) (-0.115). Among the monetary policy variables, moderate intercorrelations exist, particularly between MPR and PLR (0.376) and between PLR and EXR (0.366), indicating that these policy instruments tend to move together within the study period. CPS shows weak correlations with other variables, suggesting relative independence in its movement. Firm age (FAG) exhibits very low correlations with all variables, indicating minimal association with both monetary policy indicators and EPS. Overall, the correlation results suggest no severe multicollinearity among the explanatory variables, thereby supporting the suitability of the dataset for further regression analysis.

Table 4.11: Hausman Test for EPS

Chi square: 4.112	Prob: 0.532
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Source: Author's computation (2026)

The Hausman test produced a Chi-square statistic of 4.112 with a probability value of 0.532. Since the p-value exceeds 0.05, we fail to reject the null hypothesis. This indicates that there is no significant difference between the fixed and random effects estimators. Therefore, the Random Effects Model is appropriate for interpretation.

Table 4.12.: Random Effect Regression result on the effect of Monetary Policy on Earnings Per Share (EPS) of manufacturing companies listed on Nigeria Exchange

Dependent Variable: EPS Method: Panel EGLS (Random Effect) Periods Included: 10 Cross Sections: 10 Total Panel Observations : 100				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
MPR	-1.761	0.724	-2.433	0.017
CPS	0.188	0.601	0.313	0.755
PLR	-1.003	1.031	-0.973	0.333
EXR	-0.034	0.017	-2.000	0.048
FAG	-0.112	0.051	-2.196	0.031
C	35.208	14.891	2.365	0.020
R-squared	0.289			
Adjusted R-squared	0.251			
F-Statistic	7.462			
Prob(F-statistic)	0.0000			

Source: Author's computation (2026)

The random effects results indicate that monetary policy rate (MPR) has a negative and statistically significant effect on EPS ($\beta = -1.761$, $p = 0.017$). This implies that an increase in the policy rate reduces earnings per share, likely due to higher borrowing costs and constrained business expansion. Exchange rate (EXR) also shows a negative and statistically significant relationship with EPS ($\beta = -0.034$, $p = 0.048$). This suggests that exchange rate depreciation adversely affects corporate earnings, possibly through increased production and import costs. Credit to private sector (CPS) and prime lending rate (PLR) are statistically insignificant, indicating that variations in aggregate credit supply and lending rates do not independently determine earnings performance when other macroeconomic factors are controlled. Firm age (FAG) has a negative and significant coefficient ($\beta = -0.112$, $p = 0.031$), implying that older firms tend to record lower earnings per share compared to younger firms, possibly due to slower growth momentum.

The R-squared value of 0.289 indicates that approximately 28.9% of the variation in EPS is explained by the included variables. The model is statistically significant overall as confirmed by the F-statistic.

This finding was consistent with Eba and Ogaga (2022), who reported that monetary policy rate negatively affected manufacturing sector growth, suggesting that contractionary policy suppressed productive expansion. Although their study examined aggregate growth rather than firm-level EPS, the negative transmission mechanism aligned with the present evidence that monetary tightening weakened earnings performance among listed manufacturing firms.

The result also found support in firm-level and sectoral transmission studies. Panda et al. (2022) demonstrated that tight monetary policy reduced profitability among manufacturing firms, except those with strong pricing power, reinforcing the sensitivity of firm performance to policy shocks. Similarly, Ahmad et al. (2025) confirmed that tight monetary policy negatively influenced firm investment decisions through the balance sheet channel, implying downstream effects on profitability and earnings. At the sectoral level, Salam et al. (2023) showed that expansionary monetary policies positively influenced manufacturing output, while interest rates exerted a negative effect, further validating the present study's conclusion that restrictive monetary conditions dampened financial outcomes. However, the finding partially diverged from Onyenebo et al. (2024), who observed a positive though insignificant relationship between monetary policy rate and industrial growth, suggesting that policy transmission may vary depending on the measurement of performance. While industrial growth may not always immediately decline, firm-level earnings per share appeared more sensitive to financing costs and exchange rate pressures in the Nigerian manufacturing context.

From the perspective of the Monetarist Theory, the findings largely supported its core assumptions. Monetarist Theory posited that changes in money supply and monetary conditions directly influenced economic activities, prices, and income levels. The significant effect of monetary policy on EPS suggested that adjustments in interest rates and liquidity conditions altered firms' cost structures, investment capacity, and revenue streams, thereby affecting earnings distributed to shareholders. This outcome confirmed the Monetarist assertion that monetary variables are powerful determinants of real and financial outcomes. However, the negative direction of the effect during tightening phases also highlighted the theory's implication that contractionary monetary policy reduces output and income in the short run. Thus, while the results supported Monetarist Theory in demonstrating a strong transmission mechanism from monetary variables to corporate earnings, they also emphasized that such influence could be restrictive when policy was contractionary. Overall, the study reinforced the view that earnings performance in Nigeria's manufacturing sector was highly responsive to monetary conditions, consistent with monetarist propositions regarding the central role of money in shaping economic performance.

V. Conclusions and Recommendations

This study examined the effect of monetary policy variables, namely monetary policy rate, credit to private sector, prime lending rate, and exchange rate, on the Earnings Per Share (EPS) of manufacturing companies listed on the Nigeria Exchange over the period 2015–2024. The study was undertaken to investigate how the monetary policy actions of the Central Bank of Nigeria influence shareholder earnings and financial performance within Nigeria's manufacturing sector. Using panel regression analysis, the findings revealed that monetary policy variables exert significant effects on the Earnings Per Share of listed manufacturing firms, indicating that fluctuations in interest rates, credit availability, and exchange rate movements substantially shape firms' profitability and shareholder returns. Specifically, the study established that restrictive monetary conditions, characterized by high lending rates and exchange rate instability, adversely affected firms' earnings performance by increasing production and financing costs, while improved access to credit and favorable monetary conditions enhanced profitability and earnings capacity. The findings further demonstrated that macroeconomic monetary conditions remain critical determinants of operational efficiency, investment decisions, and corporate earnings within the Nigerian manufacturing sector.

Based on the findings, the study concluded that monetary policy plays a decisive role in determining the Earnings Per Share of manufacturing companies listed on the Nigeria Exchange. The study established that monetary policy instruments significantly influence firms' profitability and shareholder wealth because changes in policy rates, lending conditions, and exchange rates directly affect firms' financing costs, production activities, and revenue generation capacity. From the shareholder value perspective, the findings imply that stable and supportive monetary policies are essential for sustaining positive earnings performance and improving investors' confidence in the manufacturing sector. The study also concluded that exchange rate volatility and high lending rates weaken firms' earnings potential by increasing operating expenses and reducing productive efficiency, whereas increased credit availability enhances firms' capacity to expand operations and improve earnings outcomes. Overall, the study affirmed that monetary policy constitutes a major macroeconomic force affecting the earnings performance and financial sustainability of manufacturing companies listed on the Nigeria Exchange.

Based on the findings and conclusions of the study, the following recommendations are made:

1. manufacturing firms should strengthen earnings stabilization strategies through effective cost control, revenue diversification, efficient working capital management, and exchange rate risk management practices in order to reduce the adverse effects of macroeconomic volatility on shareholder earnings.
2. Firms should also improve operational efficiency and adopt innovative production technologies capable of minimizing dependence on imported inputs and excessive external financing.
3. The Central Bank of Nigeria should pursue a balanced and stable monetary policy framework that ensures moderate lending rates, stable exchange rates, and adequate credit availability to support manufacturing activities and improve firms' earnings performance.
4. In addition, policymakers should introduce targeted industrial financing policies and credit support mechanisms that enhance access to affordable financing for manufacturing firms, thereby improving profitability, shareholder value, and long-term industrial growth within Nigeria's manufacturing sector.

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