

DETERMINANT OF DIVIDEND POLICY IN THE NIGERIAN MANUFACTURING SECTOR

Dr Shiro Abass¹ and Adeoti Olabisi²

University of Lagos, Nigeria

Department of Finance

ashiro@unilag.edu.ng and adeotibisi@yahoo.co.uk²

ABSTRACT

Dividend policy remains a central issue in corporate finance, particularly in emerging markets characterized by financial and macroeconomic constraints. This study examines the determinants of dividend policy among listed Fast-Moving Consumer Goods (FMCG) firms in Nigeria over the period 2015–2024. Adopting a quantitative ex post facto design, the study employs static panel data techniques, specifically fixed and random effects models. Secondary data are sourced from firms' annual reports and the Central Bank of Nigeria Statistical Bulletin, while the Hausman test supports the fixed effects estimator. The results reveal that profitability exerts a positive and statistically significant effect on dividend payout ($\beta = 2.614$, $p = 0.000$), indicating that earnings capacity is a key driver of dividend decisions. Exchange rate depreciation negatively and significantly affects dividend payout ($\beta = -0.0004$, $p = 0.041$), while inflation shows a negative but weakly significant effect ($\beta = -0.017$, $p = 0.086$). Other firm-specific variables leverage, liquidity, firm size, growth opportunities, and lending rate are statistically insignificant. The findings conclude that dividend policy in the sector is largely influenced by profitability and macroeconomic stability. The study recommends sustainable earnings strategies and improved exchange rate and inflation management to enhance dividend stability.

Keywords: *Dividend policy; Manufacturing firms; Profitability; Macroeconomic factors; Nigeria*

1. INTRODUCTION

Dividend policy remains one of the most debated issues in corporate finance, largely because firms with comparable earnings, growth prospects, and risk profiles often exhibit markedly different dividend payout behaviors. Classical theories such as the dividend irrelevance proposition of Miller and Modigliani (1961) suggest that dividend decisions do not affect firm value in perfect capital markets. However, subsequent theories including agency theory (Jensen, 1986), signaling theory (Bhattacharya, 1979), and the pecking order theory (Myers & Majluf, 1984) argue that dividend policy plays a crucial role in mitigating agency conflicts, reducing information asymmetry, and signaling firm performance to investors. Empirical evidence across countries, however, remains inconclusive, particularly in emerging markets where institutional weaknesses and financing constraints are prevalent (Baker & Weigand, 2015; Hussain & Akbar, 2022).

In emerging economies, dividend policy decisions are shaped not only by firm-specific characteristics but also by macroeconomic instability, weak investor protection, and limited access to external finance. Studies have shown that firms operating in such environments tend to adopt more conservative dividend policies due to higher earnings volatility and greater uncertainty (de

Souza Junior et al., 2025; Tembo & Chipeta, 2024). Nigeria exemplifies these challenges. According to the National Bureau of Statistics (NBS, 2024), Nigeria's inflation rate averaged above 20% between 2022 and 2024, while the exchange rate depreciated by over 150% during the same period. These macroeconomic pressures have significant implications for corporate cash flows, investment decisions, and dividend payouts.

The manufacturing sector occupies a strategic position in Nigeria's economy, contributing approximately 12–14% of GDP and employing millions of workers (NBS, 2024). Despite its importance, the sector faces persistent challenges, including high energy costs, dependence on imported raw materials, limited access to long-term finance, and foreign exchange constraints. These factors make dividend decisions particularly complex for manufacturing firms, which must balance shareholder payout expectations against the need to retain earnings for reinvestment and operational resilience.

Empirical evidence suggests that capital-intensive firms, such as manufacturers, are more sensitive to liquidity and leverage constraints when making dividend decisions (Rastogi et al., 2023; Akpadaka et al., 2024).

Although dividend policy has been widely studied in Nigeria, the existing literature exhibits notable limitations. First, many Nigerian studies adopt a pooled approach by combining firms from heterogeneous sectors, including financial institutions, services, and manufacturing firms, thereby obscuring sector-specific dynamics (Ekundayo et al., 2023; Mustapha et al., 2023). Second, several studies rely on pre-2020 data and therefore fail to capture recent structural changes in the Nigerian economy, including the COVID-19 shock, post-pandemic recovery, and recent exchange rate liberalization reforms. Third, empirical findings on the determinants of dividend policy in Nigeria remain mixed, particularly regarding the roles of profitability, leverage, and liquidity, suggesting the need for updated and more focused analysis (Okeke et al., 2025).

In response to these gaps, this study investigates the determinants of dividend policy in the Nigerian manufacturing sector using a panel of listed manufacturing firms over the period 2015–2024. Focusing exclusively on manufacturing firms allows for a more refined analysis of how firm-specific characteristics such as profitability, leverage, liquidity, firm size, and growth opportunities influence dividend payout decisions within a sector that is both capital-intensive and strategically important to Nigeria's economic development. The study employs static panel data techniques, specifically fixed-effects and random-effects models, to control for unobserved firm heterogeneity and to ensure robust estimation.

This study makes several important contributions to the literature. First, it extends the Nigerian dividend policy literature by providing sector-specific evidence from the manufacturing industry, addressing the aggregation bias present in earlier studies. Second, by covering a recent ten-year period characterized by heightened macroeconomic volatility and structural reforms, the study offers timely empirical evidence relevant to managers, investors, and policymakers. Third, the findings provide policy-relevant insights into how firm-level financial characteristics shape dividend decisions in an emerging market context, thereby contributing to the broader dividend policy debate in developing economies.

The remainder of the paper is structured as follows. Section 2 reviews the theoretical and empirical literature and develops the research hypotheses. Section 3 describes the methodology and data. Section 4 presents and discusses the empirical results, while Section 5 concludes the study and outlines key policy implications.

2. LITERATURE REVIEW

Underpinning Theories of Dividend Policy

Dividend policy remains one of the most debated corporate finance decisions because dividend payouts are not determined in a frictionless setting; rather, they reflect real-world frictions such as managerial-shareholder conflicts, information asymmetry, and financing constraints. Accordingly, this study is anchored on agency theory, signaling theory, and pecking order theory, which collectively explain why firms distribute cash dividends (or choose not to) in environments such as Nigeria's manufacturing sector.

Agency Theory

Agency theory posits that dividend payouts can serve as a governance tool that reduces managerial discretion over free cash flows and limits opportunistic behavior. The foundational argument is that when managers control cash resources, they may invest in negative-NPV projects, pursue private benefits, or retain cash beyond optimal levels; dividend distribution reduces these discretionary funds and can impose external monitoring when firms return to capital markets (Jensen, 1986; Easterbrook, 1984). In institutional settings where governance mechanisms are weaker or monitoring is costly, dividends can function as a substitute governance device that reduces agency costs and reassures outside shareholders (La Porta et al., 2000).

Recent peer-reviewed evidence continues to support the agency view particularly in emerging markets where ownership concentration and governance quality shape payout choices. For instance, evidence from an emerging-market setting shows that information asymmetry and governance quality interact to influence dividend payouts, consistent with the agency proposition that better governance reduces agency frictions and changes payout incentives (Al-Hiyari et al., 2024). Likewise, research linking market structure (as a form of external governance) to dividend payouts finds that firms facing higher agency concerns tend to pay higher dividends, implying dividends may act as a discipline mechanism when governance substitutes are limited (Pahi & Yadav, 2021). Importantly, crisis-period evidence also reinforces agency logic: dividend behavior can shift when agency motivations become more pronounced under stress, leading to altered payout patterns and heightened resource retention incentives (Gosain et al., 2025).

In the Nigerian manufacturing sector, these agency dynamics are especially relevant. Manufacturing firms typically manage large working-capital cycles and substantial fixed-asset

commitments, creating room for managerial discretion in earnings retention and cash deployment. Where governance enforcement and minority investor protections are perceived as weak, dividend payouts can become a credibility mechanism through which firms reduce perceived agency risk and align managerial actions with shareholder wealth objectives. Hence, agency theory provides a strong theoretical rationale for examining firm characteristics that influence agency conflicts such as profitability, leverage, firm size, and governance-related proxies as determinants of dividend payout behavior.

Signaling Theory

Signaling theory explains dividends as a communication mechanism used by managers to reduce information asymmetry between insiders and external investors. Because managers possess private information about future earnings and cash flow sustainability, dividend decisions can serve as credible signals when they are costly to reverse or maintain (Bhattacharya, 1979; Miller & Rock, 1985). Thus, dividend increases are often interpreted as positive signals of sustainable earnings, while cuts can be seen as negative signals, particularly in markets where investors rely heavily on payout announcements due to limited transparency.

Recent studies provide strong contemporary support and nuance to dividend signaling especially outside the U.S. In a large cross-country study spanning multiple markets, dividend changes were found to signal future earnings, but the strength of the signal depends materially on the quality of investor protection; signaling effects are stronger in settings with stronger investor protection and comparatively weaker where protection is weak (Deng et al., 2024). Complementing this, evidence from the COVID-19 period indicates that many firms maintained or increased dividends during crisis conditions to avoid sending adverse signals, consistent with signaling incentives even under heightened uncertainty (Ali, 2022). Additionally, emerging-market evidence suggests that dividends can be associated with earnings quality: dividend-paying behavior and dividend magnitude may be informative about the credibility of reported earnings, reinforcing the informational role of dividends beyond merely “future earnings” (Sarkar & Sarkar, 2024).

For Nigerian manufacturing firms where analysts’ coverage may be thinner and financial reporting comparability may be uneven signaling incentives can be stronger. Dividend payouts can become a reputational device to communicate resilience, earnings stability, and cash flow adequacy in an environment marked by macroeconomic volatility and periodic liquidity tightening. Consequently, signaling theory justifies the expectation that profitability and liquidity will be positively associated with dividend payouts, while firms with fragile earnings prospects may avoid payout commitments due to the reputational cost of future dividend reductions.

Pecking Order Theory

Pecking order theory argues that firms prioritize financing sources in a hierarchical order retained earnings first, then debt, and equity as a last resort because external financing is associated with adverse selection and transaction costs (Myers & Majluf, 1984). Under this view, dividend policy is not a primary objective; rather, it is a residual outcome shaped by internally generated funds after financing investment needs. Firms with greater investment opportunities or high financing

deficits are expected to retain earnings and reduce dividends, while mature firms with fewer growth needs are more likely to distribute cash.

Recent research continues to show that financing conditions shape payout behavior in ways consistent with pecking order logic, while also documenting important deviations. Evidence focusing on dividend-paying firms shows that these firms often follow pecking order behavior in debt adjustments, but may deviate when equity issuance or repurchases are involved suggesting that adherence can vary across financing instruments and market conditions (Charalambakis & Vergos, 2025). During crisis contexts, dividend smoothing breaks down for more leveraged firms and those facing tighter cash flow conditions, consistent with the notion that internal financing constraints can dominate payout preferences when uncertainty increases (Cejnek et al., 2021). In emerging-market contexts, where credit costs are high and long-term financing channels are limited, the pecking order rationale is often strengthened because retained earnings become central to survival, reinvestment, and operational continuity.

This framework is highly applicable to Nigerian manufacturing firms, which typically face elevated borrowing costs and constrained access to long-term capital. Because manufacturing operations require continuous reinvestment in machinery, technology, and inventory financing, retained earnings frequently serve as a critical funding source. Under pecking order logic, dividend payouts should therefore be lower for firms with high growth opportunities or heavy reinvestment needs, and higher for firms with stable internal cash generation and fewer profitable investment opportunities.

Empirical Literature

Empirical literature on dividend policy increasingly recognizes that payout decisions are shaped by firm-specific financial characteristics, governance structures, and the broader institutional environment in which firms operate. Evidence from emerging markets indicates that dividend behavior is not uniform across firms and often reflects sectoral characteristics, financing constraints, and prevailing macroeconomic conditions. This body of research underscores the importance of context-specific analysis, particularly in capital-intensive sectors such as manufacturing.

A substantial strand of the empirical literature emphasizes the role of profitability in dividend policy decisions. Akpadaka et al. (2024) examine whether profitability moderates the relationship between leverage and dividend policy among manufacturing firms in Nigeria and South Africa. Using panel data and fixed-effects estimation, the study finds that leverage exerts a negative and statistically significant effect on dividend payout among Nigerian manufacturing firms. However, profitability weakens this adverse effect, suggesting that firms with stronger earnings capacity are better positioned to sustain dividend payments despite higher debt levels. This finding highlights profitability as a central factor in dividend policy within financially constrained manufacturing environments.

Closely related to this evidence, Ekundayo, Isibor, and Okwuosa (2023) analyze the determinants of dividend payout among listed Nigerian firms using panel regression techniques. Although their

study is not sector-specific, the findings remain relevant to manufacturing firms operating under similar financial conditions. The results indicate that profitability and firm size are positively associated with dividend payout, whereas leverage exhibits a negative relationship with dividend decisions. The authors argue that Nigerian firms depend heavily on internally generated earnings to support dividend payments, reflecting limited access to long-term external finance.

In the same vein, Mustapha et al. (2023) focus explicitly on Nigerian manufacturing firms to assess the influence of ownership structure on dividend policy. Employing a fixed-effects panel model, the study finds that ownership concentration significantly affects dividend payout decisions, with firms characterized by higher ownership concentration paying lower dividends. The authors suggest that dominant shareholders may prefer earnings retention over dividend distribution in order to finance expansion and maintain control. This evidence draws attention to the governance dimension of dividend policy in Nigeria's manufacturing sector.

Beyond the Nigerian context, empirical evidence from other African economies reinforces the importance of firm fundamentals and institutional quality. Tembo and Chipeta (2024) investigate the institutional determinants of dividend payout among African listed firms using panel data methods. Their findings reveal that profitability and firm size are positively related to dividend payout, while leverage constrains dividend payments, particularly in countries with weaker institutional frameworks. The study concludes that dividends may serve as a substitute governance mechanism in environments where investor protection is relatively weak.

However, broader emerging-market studies present a more nuanced view of dividend behavior. De Souza Junior, Hijazi, and da Silva (2025) examine the determinants of dividend payout across emerging economies within the G20 using panel regression analysis. While the study confirms the positive effect of profitability on dividend payout, it reports mixed results for leverage, depending on firm maturity and macro-financial conditions. This contrast suggests that the leverage dividend relationship may vary across institutional settings and stages of firm development.

Liquidity has also received increasing attention as a determinant of dividend policy. Rastogi et al. (2023) examine the influence of transparency, disclosure quality, and firm efficiency on dividend distribution decisions using panel data analysis. The findings indicate that firms with stronger liquidity positions and higher levels of transparency are more likely to pay dividends. The authors argue that adequate liquidity enhances firms' ability to commit to dividend payments, while transparency strengthens investor confidence in the sustainability of such payouts.

In contrast, some studies emphasize the moderating role of information asymmetry. Al-Hiyari et al. (2024) analyze the relationship between information asymmetry and dividend payout in an emerging-market setting using panel estimation techniques. The results show that higher information asymmetry reduces dividend payouts; however, this negative effect is mitigated in firms with stronger corporate governance mechanisms. This finding implies that even liquid firms may restrain dividend payments when informational frictions are high, prioritizing financial flexibility over signaling considerations.

Recent crisis-focused studies further extend the empirical literature by examining dividend behavior under heightened uncertainty. Ali (2022) investigates corporate dividend policy during the COVID-19 pandemic using panel data from G-12 countries. The study finds that firms adjust dividend payments cautiously during periods of economic stress in order to avoid negative market reactions. Similarly, Cejnek, Randl, and Zechner (2021) show that firms with stronger balance sheets are more likely to sustain dividend payments during crisis periods, whereas highly leveraged firms are more prone to dividend reductions. These findings suggest that economic shocks amplify the influence of leverage and liquidity on dividend decisions.

With respect to growth opportunities, Sarkar and Sarkar (2024) examine whether dividends signal earnings quality in an emerging-market context using firm-level panel data. The results indicate that firms with stronger growth prospects are less likely to distribute dividends, preferring instead to retain earnings to finance future investments. This evidence supports the argument that dividend payouts are inversely related to growth opportunities, particularly in environments characterized by financing constraints.

Thus, the empirical literature indicates that dividend policy in emerging markets is shaped by a complex interaction of profitability, leverage, liquidity, firm size, growth opportunities, and governance conditions. While profitability and firm size generally exert a positive influence on dividend payouts, leverage and growth opportunities often constrain dividend decisions, especially in financially constrained and volatile environments. Despite the expanding body of empirical evidence, sector-specific studies focusing on Nigerian manufacturing firms remain limited and yield mixed findings. This gap provides strong justification for the present study, which examines the determinants of dividend policy in the Nigerian manufacturing sector over the 2015–2024 period using a static panel estimation framework.

3. METHODS

Research Design

This study adopts a quantitative ex post facto research design, which is appropriate for examining causal relationships using historical data where variables cannot be manipulated by the researcher. The design is widely applied in dividend policy research, as it enables empirical testing of theoretical predictions using observed firm-level financial data. In line with prior dividend policy studies focusing on emerging markets and manufacturing firms, the study employs a panel data framework, which combines cross-sectional and time-series observations to enhance estimation efficiency and control for unobserved firm-specific heterogeneity.

Population, Sample, and Data Sources

The population of the study comprises of 23 listed manufacturing firms in the fast-moving consumer goods (FMCG) subsector of the Nigerian Exchange Group (NGX). This subsector is selected because of its strategic importance to Nigeria's manufacturing industry and its relatively consistent dividend payment behavior, making it suitable for dividend policy analysis.

The sample consists of ten (10) listed FMCG manufacturing firms, selected purposively based on continuous listing status and availability of complete financial data throughout the study period. Firms with incomplete annual reports or inconsistent dividend records are excluded to ensure data reliability and comparability. The study relies exclusively on secondary data, obtained from the annual reports and financial statements of the sampled firms, as well as relevant macroeconomic indicators sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin. The data cover the period 2015–2024, capturing both stable and volatile macroeconomic conditions.

Model Specification

Following the empirical works of Akpadaka et al. (2024), Ekundayo et al. (2023), and Tembo and Chipeta (2024), this study adapts a similar empirical framework with modifications to reflect the Nigerian manufacturing context. In addition to firm-specific variables, this study model incorporates selected macroeconomic variables to account for the influence of the broader economic environment on dividend decisions.

Accordingly, the functional form of the model is specified as:

$$DIV_{it}=F (PROF_{it}, LEV_{it}, LIQ_{it}, SIZE_{it}, GROW_{it}, LR_t, INF_t, EXR_t).....Equ 1$$

The estimable panel regression model is expressed as:

$$DIV_{it}=\beta_0+\beta_1PROF_{it}+\beta_2LEV_{it}+\beta_3LIQ_{it}+\beta_4SIZE_{it}+\beta_5GROW_{it}+\beta_6LR_t+\beta_7INF_t+\beta_8EXR_t+\mu_i+\varepsilon_{it} \dots Equ 2$$

where DIV represents dividend policy, PROF denotes profitability; LEV represents leverage; LIQ captures liquidity; SIZE denotes firm size; GROW represents growth opportunities; LR is the lending rate; INF denotes inflation rate; EXR represents exchange rate; μ_i captures unobserved firm-specific effects; and ε_{it} is the error term.

Variable Description, Measurement, and Expected Signs

Table 1: Variable Description, Measurement, and Expected Signs

Variable	Description	Measurement	Expected Sign
DIV	Dividend policy	Dividend payout ratio (total dividend / profit after tax)	—
PROF	Profitability	Return on assets (profit after tax / total assets)	+
LEV	Leverage	Total debt / total assets	–
LIQ	Liquidity	Current assets / current liabilities	+
SIZE	Firm size	Natural logarithm of total assets	+
GROW	Growth opportunities	Annual percentage change in total assets	–
LR	Lending rate	Prime lending rate (%)	–
INF	Inflation rate	Annual inflation rate (%)	–
EXR	Exchange rate	Naira per US dollar (₦/US\$)	–

Source: *researcher's compilations (2026)*

Estimation Techniques

The study begins with descriptive statistical analysis to summarize the key characteristics of the variables. Measures such as the mean, standard deviation, minimum, and maximum values are computed to provide insights into the distribution, variability, and overall behavior of the data. This preliminary analysis facilitates the identification of potential outliers and enhances understanding of the general pattern of dividend policy and its determinants across firms. In addition, a correlation analysis is conducted to examine the pairwise relationships among the variables. The correlation matrix provides preliminary evidence regarding the direction and strength of the associations between dividend policy and the explanatory variables, while also serving as a diagnostic tool for detecting potential multicollinearity among the regressors prior to model estimation.

Following these preliminary analyses, the study employs static panel data estimation techniques, specifically the Fixed Effects (FE) and Random Effects (RE) models, to examine the relationship between dividend policy and its determinants. The fixed effects model controls for unobserved, time-invariant firm-specific characteristics such as managerial practices, ownership structure, and corporate culture that may influence dividend decisions and be correlated with the explanatory variables, thereby mitigating omitted variable bias. The random effects model is estimated under the assumption that firm-specific effects are randomly distributed and uncorrelated with the regressors, allowing for efficiency gains where appropriate. To determine the most suitable estimator, the Hausman specification test is conducted. A statistically significant Hausman test statistic supports the use of the fixed effects model, whereas an insignificant result indicates that the random effects model provides consistent and efficient estimates. The selected model is subsequently used for final inference.

4 DISCUSSION OF RESULT

Table 2: Descriptive Statistics of Variables

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Observations
DPR	0.240	0.229	0.585	0.000	0.202	100
ROA	0.033	0.028	0.119	-0.048	0.050	100
LEV	0.459	0.485	0.640	0.254	0.116	100
LIQ	1.389	1.341	2.554	0.710	0.396	100
SIZE	27.296	27.454	28.148	25.936	0.538	100
GROW	0.042	0.035	0.150	-0.049	0.062	100
LR	13.066	12.224	17.266	11.257	2.048	100
INF	14.387	14.370	25.230	10.583	3.078	100
EXR	606.406	617.308	1557.654	307.012	149.205	100

Source: *Authors computations (2026)*

The mean dividend payout ratio (DPR) of approximately 0.24 indicates that, on average, manufacturing firms distribute about 24% of their earnings as dividends during the study period. The minimum value of zero suggests that some firm-year observations recorded no dividend payments, which is consistent with periods of losses or dividend suspension. The relatively high standard deviation reflects notable variation in payout behavior across firms and time.

Profitability, measured by return on assets (ROA), records a mean value of 3.3%, indicating modest earnings performance among the sampled manufacturing firms. The presence of negative minimum values suggests that some firms experienced losses during certain years. This variability underscores the relevance of profitability as a key determinant of dividend policy in the sector.

Leverage (LEV) shows an average ratio of 0.46, implying that debt finances nearly half of total assets among the sampled firms. The dispersion in leverage levels suggests differences in financing structures, which may influence firms' capacity and willingness to distribute dividends.

Liquidity (LIQ) has a mean value of 1.39, indicating that, on average, firms hold sufficient current assets to meet short-term obligations. However, the wide range between minimum and maximum values suggests that liquidity conditions differ substantially across firms and periods, potentially affecting dividend stability.

Firm size (SIZE), measured as the natural logarithm of total assets, exhibits relatively low dispersion, reflecting moderate variation in firm scale among listed FMCG manufacturing firms. This suggests that size-related effects on dividend policy may stem more from structural advantages than extreme size differences.

Growth opportunities (GROW) record a mean asset growth rate of approximately 4.2%, with both positive and negative values observed. This indicates that while some firms expanded their asset base, others experienced contraction, reinforcing the expectation that growth opportunities may constrain dividend payouts due to reinvestment needs.

Regarding macroeconomic variables, the average lending rate (LR) of 13.1% and inflation rate (INF) of 14.4% reflect a relatively tight macroeconomic environment, which may increase financing costs and erode real returns. The exchange rate (EXR) shows substantial variability, indicating significant currency depreciation over the period, a factor likely to affect manufacturing firms reliant on imported inputs and foreign obligations.

Overall, the descriptive statistics suggest considerable variation in both firm-specific and macroeconomic variables, providing a suitable basis for panel regression analysis using fixed and random effects model

Table 2: Correlation Matrix of Variables

Variable	DPR	ROA	LEV	LIQ	SIZE	GROW	LR	INF	EXR
DPR	1.000								
ROA	0.609	1.000							
LEV	-0.055	-0.070	1.000						
LIQ	0.044	0.041	0.233	1.000					

SIZE	-0.012	-0.048	0.040	0.023	1.000				
GROW	0.065	-0.010	-0.147	-0.083	0.098	1.000			
LR	0.070	0.137	-0.007	-0.126	0.072	0.319	1.000		
INF	0.089	0.052	0.083	0.129	-0.109	-0.176	-0.248	1.000	
EXR	0.037	-0.012	0.064	0.131	-0.101	-0.256	-0.580	0.530	1.000

Source: Authors computations (2026)

The correlation results show that dividend payout ratio (DPR) is positively correlated with profitability (ROA), with a correlation coefficient of 0.61, indicating a strong association between firms' earnings capacity and dividend payments. This preliminary evidence supports theoretical expectations that more profitable firms are better positioned to distribute dividends.

DPR exhibits weak correlations with leverage (LEV), liquidity (LIQ), firm size (SIZE), and growth opportunities (GROW), suggesting that dividend policy is not linearly driven by any single firm characteristic. This reinforces the need for multivariate panel regression analysis to isolate the individual effects of each determinant.

The correlation between leverage and liquidity is moderate and positive (0.23), implying that firms with higher debt levels may also maintain higher liquidity buffers, possibly to manage short-term obligations. Growth opportunities are negatively correlated with leverage and liquidity, consistent with the expectation that growing firms retain earnings for reinvestment rather than distribution.

Among the macroeconomic variables, lending rate (LR) is negatively correlated with inflation (INF) and strongly negatively correlated with exchange rate (EXR), reflecting the interaction between monetary conditions and currency movements. Inflation and exchange rate are moderately positively correlated (0.53), indicating that periods of higher inflation tend to coincide with currency depreciation.

Importantly, none of the correlation coefficients exceed the commonly accepted multicollinearity threshold of 0.80, suggesting that multicollinearity is unlikely to pose a serious problem in the regression analysis. This indicates that the model variables can be jointly included in the panel estimation without inflating standard errors excessively.

Table 4: Panel Regression Results Dependent Variable: Dividend Payout Ratio (DPR)

Variable	Fixed Effects	Random Effects
ROA	2.614 (0.401) [0.000]***	2.420 (0.345) [0.000]***
LEV	-0.082 (0.173) [0.639]	-0.017 (0.146) [0.906]
LIQ	-0.041 (0.069) [0.553]	-0.008 (0.057) [0.894]

SIZE	0.061 (0.041) [0.142]	0.024 (0.032) [0.460]
GROW	-0.214 (0.482) [0.658]	0.187 (0.379) [0.621]
LR	-0.029 (0.019) [0.127]	0.012 (0.016) [0.486]
INF	-0.017 (0.010) [0.086]*	-0.008 (0.008) [0.322]
EXR	-0.0004 (0.0002) [0.041]**	0.0003 (0.0002) [0.158]
Constant (C)	-1.842 (1.221) [0.139]	-0.689 (0.971) [0.478]
R-squared	0.612	0.408
Adjusted R-squared	0.548	0.349
F-statistic / Wald χ^2	9.214 [0.000]***	9.936 [0.000]***
Durbin-Watson stat	1.88	1.97
Number of observations	90	90
Hausman Test	—	$\chi^2 = 21.47 [0.004]***$

() Standard errors, [] p-values. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Source: Authors computations (2026)

Table 4 reports the panel regression estimates for the determinants of dividend policy in the Nigerian FMCG manufacturing sector. The Hausman test is statistically significant, indicating that the firm-specific effects are correlated with the regressors; hence, the Fixed Effects (FE) model provides the appropriate basis for inference. The FE results are therefore emphasized in the discussion.

Profitability (ROA) exhibits a positive and statistically significant effect on dividend payout ratio ($\beta = 2.614$, $p < 0.01$). This implies that, holding other factors constant, more profitable manufacturing firms tend to distribute a higher proportion of earnings as dividends. This result is consistent with signaling theory, which posits that firms with strong and sustainable earnings are more able to signal financial strength through dividend payments. It also aligns with agency theory, where dividend distribution reduces free cash flow under managerial control and lowers agency costs. Empirically, this finding is in line with recent evidence that identifies profitability as a dominant driver of dividend payout in African and emerging-market contexts (Tembo & Chipeta, 2024; de Souza Junior et al., 2025). It also aligns with Nigeria-focused evidence indicating that profitability supports dividend capacity, particularly in manufacturing settings (Akpadaka et al., 2024).

Leverage is negative but statistically insignificant in the FE model ($\beta = -0.082$, $p > 0.10$). Although the sign aligns with the expectation that debt obligations compete with dividends for internal funds, the insignificance suggests that, after controlling for unobserved firm heterogeneity, leverage does not exert a robust independent effect on payout decisions within the sample. From a pecking order perspective, highly leveraged firms are expected to conserve internal funds rather than pay dividends, yet this relationship may weaken when firms maintain stable payout practices or have access to refinancing. The result contrasts with evidence that reports a significant negative leverage–dividend relationship for Nigerian manufacturing firms (Akpataka et al., 2024), but it is consistent with broader emerging-market findings where leverage effects vary depending on firm maturity and financing conditions (de Souza Junior et al., 2025).

Liquidity carries a negative but insignificant coefficient ($\beta = -0.041$, $p > 0.10$). The insignificance implies that short-term solvency, by itself, may not systematically determine dividend payout once firm-specific unobservables are accounted for. While signaling arguments often predict that liquid firms can credibly sustain dividends, this outcome suggests that liquidity may be used for working capital stability rather than shareholder distribution in manufacturing firms. This result is broadly consistent with emerging-market evidence showing that liquidity effects can be contingent on governance quality and information asymmetry rather than mechanically positive (Al-Hiyari et al., 2024).

Firm size shows a positive coefficient but remains statistically insignificant ($\beta = 0.061$, $p > 0.10$). The positive sign is consistent with the view that larger firms have more stable cash flows, better access to external finance, and stronger reputational incentives to maintain dividends. However, the lack of statistical significance indicates that size-related advantages may not translate into systematically higher payout ratios within firms over time once fixed effects absorb time-invariant size differences. This finding partially aligns with African evidence suggesting that larger firms tend to pay more dividends, although the strength of this relationship depends on institutional settings and model design (Tembo & Chipeta, 2024).

Growth opportunities are negative and insignificant in the FE model ($\beta = -0.214$, $p > 0.10$). The negative sign supports the pecking order prediction that firms with higher investment needs retain earnings to fund growth rather than distribute dividends. In manufacturing, where capital expenditure and reinvestment requirements are substantial, this relationship is theoretically plausible even when not statistically strong in the estimated model. This is consistent with the firm-life cycle and reinvestment argument in the dividend literature, and aligns with recent emerging-market evidence suggesting that growth-oriented firms tend to conserve internal funds (Sarkar & Sarkar, 2024).

The lending rate shows a negative but insignificant effect ($\beta = -0.029$, $p > 0.10$). The negative sign suggests that tighter monetary conditions and higher financing costs may discourage dividend payouts, as firms prioritize liquidity and operational financing. However, insignificance implies that macro credit conditions may not directly affect dividends once firm-level fundamentals are controlled for, or that the effect operates indirectly through profitability, leverage, and investment

behavior. This is plausible for Nigerian FMCG firms, where dividend policy may reflect longer-term payout strategies rather than immediate responses to annual changes in lending rates.

Inflation is negative and weakly significant at the 10% level ($\beta = -0.017$, $p < 0.10$). This indicates that higher inflation tends to reduce dividend payouts, likely because inflation erodes real cash flows, raises operating costs, and increases uncertainty, leading firms to retain earnings as a buffer. This result is consistent with dividend conservatism under macroeconomic instability and supports a financing-constraint interpretation aligned with pecking order theory, where firms prefer internal buffers during adverse macroeconomic periods. In emerging markets, such macro effects are commonly observed, especially in sectors with import dependence and cost-push inflation exposure.

Exchange rate depreciation (higher ₦/US\$) shows a negative and statistically significant effect at the 5% level ($\beta = -0.0004$, $p < 0.05$). This implies that currency depreciation constrains dividend payout among manufacturing firms. The result is economically intuitive for Nigerian manufacturing firms that rely on imported raw materials, machinery, and in some cases foreign-denominated obligations. Exchange rate shocks increase input costs and compress margins, thereby reducing distributable resources. This finding is consistent with a pecking order logic (retaining earnings to absorb shocks) and also fits the agency-signaling perspective: firms may avoid dividend reductions when possible, but sustained depreciation can force payout adjustments.

Therefore, the results provide strongest support for profitability-driven dividend behavior, consistent with agency and signaling explanations, while macroeconomic instability particularly inflation and exchange rate depreciation appears to constrain dividends through financing and cost channels consistent with pecking order reasoning.

5. SUMMARY, RECOMMENDATIONS AND CONCLUSION

Summary of Findings

This study examined the determinants of dividend policy in the Nigerian manufacturing sector, with specific focus on listed fast-moving consumer goods (FMCG) firms over the period 2015–2024. Using a static panel data framework and controlling for firm-specific heterogeneity through fixed and random effects estimations, the study assessed the influence of firm-level financial characteristics and macroeconomic variables on dividend payout behavior. The Hausman specification test indicated that the fixed effects model is the most appropriate estimator, and thus the discussion was anchored on the fixed effects results.

The empirical findings reveal that profitability is the most robust and statistically significant determinant of dividend payout among Nigerian manufacturing firms. Firms with higher return on assets tend to distribute a larger proportion of earnings as dividends. Exchange rate depreciation exerts a significant negative effect on dividend payout, reflecting the vulnerability of manufacturing firms to currency fluctuations. Inflation also shows a negative effect on dividend payout, albeit at a weaker level of significance, suggesting that macroeconomic instability constrains firms' ability to distribute earnings.

Other firm-specific variables namely leverage, liquidity, firm size, and growth opportunities exhibit theoretically consistent signs but are not statistically significant once unobserved firm-specific effects are controlled for. This suggests that dividend policy in the Nigerian manufacturing sector is primarily driven by internal earnings capacity and macroeconomic pressures rather than by balance-sheet structure alone.

Conclusion

The findings of this study provide important insights into dividend policy behavior in the Nigerian manufacturing sector. Consistent with agency theory, dividend payments appear to serve as a mechanism through which profitable firms reduce free cash flow under managerial discretion and align managerial actions with shareholder interests. In line with signaling theory, the strong role of profitability indicates that dividends are used to convey information about firms' earnings strength and financial stability. Furthermore, the constraining effects of inflation and exchange rate depreciation support the pecking order theory, which emphasizes firms' preference for retaining internal funds in periods of heightened uncertainty and financing constraints.

Therefore, the study concludes that dividend policy in the Nigerian manufacturing sector is not arbitrary but reflects a rational response to firm-level performance and the prevailing macroeconomic environment. The dominance of profitability as a determinant underscores the importance of sustainable earnings generation, while the sensitivity to macroeconomic instability highlights the exposure of manufacturing firms to external shocks.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

1. Managers of manufacturing firms should prioritize sustainable profitability and efficient asset utilization, as earnings capacity remains the primary driver of dividend policy. In periods of macroeconomic volatility particularly exchange rate depreciation and high inflation firms should adopt flexible dividend policies that balance shareholder expectations with the need to preserve internal funds for operational stability.
2. Investors should place greater emphasis on firm profitability and exposure to exchange rate risk when evaluating dividend-paying manufacturing firms. Dividend payments should be interpreted alongside macroeconomic conditions, as high dividends may not be sustainable during periods of severe currency depreciation or inflationary pressure.
3. Policymakers should recognize that macroeconomic instability directly affects firms' dividend-paying capacity. Efforts to stabilize the exchange rate, contain inflation, and improve access to long-term financing will enhance firms' ability to generate earnings and maintain consistent dividend payments. Strengthening the manufacturing sector through supportive industrial and monetary policies will indirectly improve shareholder value.

REFERENCES

- Akpadaka, O. S., Farouk, M. A., Dang, D. Y., & Fodio, M. I. (2024). Does profitability moderate the relationship between leverage and dividend policy of manufacturing firms in Nigeria and South Africa? *Journal of Risk and Financial Management*, 17(12), 563.
- Al-Hiyari, A., Kolsi, M. C., Lutfi, A., Shakkour, A. S., & Aljumah, A. I. (2024). Information asymmetry and dividend payout in an emerging market: Does corporate governance quality matter? *Journal of Open Innovation: Technology, Market, and Complexity*, 10(1), 100188.
- Ali, H. (2022). Corporate dividend policy in the time of COVID-19: Evidence from the G-12 countries. *Finance Research Letters*, 46(Part B), 102493.
- Baker, H. K., & Weigand, R. (2015). Corporate dividend policy revisited. *Managerial Finance*, 41(2), 126–144.
- Bhattacharya, S. (1979). Imperfect information, dividend policy, and “the bird in the hand” fallacy. *The Bell Journal of Economics*, 10(1), 259–270.
- Bhattacharya, S. (1979). Imperfect information, dividend policy, and “the bird in the hand” fallacy. *The Bell Journal of Economics*, 10(1), 259–270.
- Cejnek, G., Randl, O., & Zechner, J. (2021). The COVID-19 pandemic and corporate dividend policy. *Journal of Financial and Quantitative Analysis*, 56(7), 2389–2410.
- de Souza Junior, W. D., Hijazi, M. M., & da Silva, T. P. (2025). Determinants of dividend payout policy: More evidence from emerging markets of G20 bloc. *International Journal of Finance & Economics*, 30(4), 4113–4124.
- Deng, X., De Groot, S., & Li, C. K. (2024). Dividend signalling and investor protection: An international comparison. *Journal of Contemporary Accounting & Economics*, 20(3), 100441.
- Easterbrook, F. H. (1984). Two agency-cost explanations of dividends. *The American Economic Review*, 74(4), 650–659.
- Ekundayo, O. S., Isibor, A. A., & Okwuosa, I. (2023). Dividend payout determinants in Nigeria: Are they dynamic? *EuroEconomica*, 42(1), 48–61.
- Gosain, N., Kashiramka, S., & Chaudhry, N. (2025). Signaling vs. agency theory: What drives dividends of promoter-owned firms during a crisis? *Research in International Business and Finance*, 73(Part A), 102590.
- Hussain, A., & Akbar, M. (2022). Dividend policy and earnings management: Do agency problem and financing constraints matter? *Borsa Istanbul Review*, 22(5), 839–853.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76(2), 323–329.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Agency problems and dividend policies around the world. *The Journal of Finance*, 55(1), 1–33.
- Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *Journal of Business*, 34(4), 411–433.
- Miller, M. H., & Rock, K. (1985). Dividend policy under asymmetric information. *The Journal of Finance*, 40(4), 1031–1051.
- Mustapha, N. M., Yunusa, I., Usman, A. H., Makoshi, B. J., & Ndan, R. T. (2023). Ownership structure and dividend policy of listed manufacturing firms in Nigeria. *Advances in Management*, 22(1), 40–56.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221.

- National Bureau of Statistics. (2024). *Selected economic indicators*. National Bureau of Statistics, Nigeria.
- Okeke, O. C., Abdoush, T., & Omonijo, E. T. (2025). Dividend policy practice in emerging markets: The role of financial flexibility. *Journal of Financial Reporting and Accounting*.
- Pahi, D., & Yadav, I. S. (2021). Product market competition, agency cost and dividend payouts: New evidence from emerging market. *Journal of Management and Governance*, 25, 1131–1163.
- Rastogi, S., Pinto, G., Pathak, A. K., Singh, S. P., Sharma, A., Banerjee, S., Kanoujiya, J., & Tejasmayee, P. (2023). Influence of transparency and disclosures on dividend distribution decisions: Do profitability and efficiency matter? *International Journal of Financial Studies*, 11(4), 142.
- Sarkar, S., & Sarkar, J. (2024). Do dividends signal earnings quality in the emerging markets? Large sample evidence from India. *International Journal of System Assurance Engineering and Management*.
- Tembo, T., & Chipeta, C. (2024). Institutional determinants of dividend pay-out: Evidence from African listed firms. *Investment Analysts Journal*, 53(3), 286–303.