



DIVIDEND POLICY ON FINANCIAL PERFORMANCE OF LISTED INDUSTRIAL GOODS FIRMS IN NIGERIA

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Abstract

Firms have faced various challenges in maintaining optimal financial performance. One of the key concerns for investors is dividend policy, which shapes the views of different stakeholders regarding a company's profitability. Ongoing debates on this topic have raised questions about how dividend policy influences the financial performance of businesses. This study explored the relationship between dividend per share, dividend payout, and financial performance in the Nigerian industrial goods sector. The research follows an ex post facto design, focusing on twelve years from 2012 to 2023. The study targets a population of 13 listed industrial goods companies, selecting a sample of 10 firms to provide a representative overview of the sector. Dividend per share and dividend payout ratios are used as proxies to measure dividend policy, while return on assets serves as the measure for financial performance, with revenue included as a control variable. The findings indicated that dividend per share and dividend payout ratio had no statistically significant effect on the return on assets of the sampled firms. The study concludes that these dividend policies do not significantly impact the financial performance of the companies studied. The study recommended raising dividend payout ratios and offering training to appropriate personnel to improve the administration and management of dividend policies.

Keywords: Dividend Per Share, Dividend Payout, Return on Asset, Revenue, Industrial Goods Firms

INTRODUCTION

The financial performance of listed industrial goods firms in Nigeria has recently faced significant challenges due to various factors impacting their operations and profitability. One of the primary concerns is increased financial risk, worsened by unstable foreign exchange rates, rising inflation, and widespread insecurity in the country (Ngwoke & Hubs, 2021). These issues have led to a sharp rise in debt levels and a mismatch between current assets and liabilities, which in turn hinders overall performance. Moreover, managing capital structure effectively is crucial, as decisions about the balance between debt and equity financing can significantly affect financial health, influence the cost of capital and potentially improve financial performance. Additionally, the industrial goods sector in Nigeria has been especially vulnerable amid global economic crises, hyperinflation, and the national economic recession, highlighting vulnerabilities that impact firm performance (Ukpong & Ukpe, 2023). These challenges underscore the importance of evaluating internal factors within firms' control that could help mitigate or take advantage of these circumstances. The Nigerian industrial goods sector is vital to the country's economic development, making substantial contributions to GDP and serving as a foundation for sustained industrial growth (Ayudia, et.al, 2024). Therefore, optimizing financial metrics such as profitability, liquidity, solvency, and efficiency is essential for navigating the sector's capital-intensive operations, exposure to global market trends, and ongoing technological advancements (Ogbuagu, 2020). Profitability, in particular, is a critical financial indicator, reflecting a firm's ability to generate returns on invested capital, and is closely linked to efficient cost management and resource utilization (Olaoye & Olaniyan, 2022). Dividend decisions are crucial for listed industrial goods companies, as they influence how profits are divided between reinvestment for growth and payouts to shareholders (Brealey, et.al, 2024). In Nigeria's

industrial goods sector, which is marked by capital intensity and ongoing technological advancements, creating effective dividend policies is essential for sound financial management. Companies need to balance the need for reinvestment with shareholder expectations for regular dividends, all while navigating economic uncertainties (Ayudia, et.al, 2024). Grasping the complex link between dividend per share, payout, and financial performance is vital for managing the global economic challenges and geopolitical factors impacting the industry (Ubesie & Emejulu, 2020).

The financial health of Nigeria's industrial goods sector is particularly important due to its reliance on foreign companies to fulfill local industrial needs. Local firms face fierce competition from these foreign entities, increasing the urgency for domestic industrial companies to attract investments and boost their financial performance (Umaru, et.al, 2022). As a result, there is a clear need to assess the factors that could enhance the financial standing of industrial goods firms in Nigeria. The effect of dividend policy on the financial performance of Nigeria's listed industrial goods companies presents significant challenges that require in-depth analysis. Key questions include understanding how dividend decisions directly influence financial outcomes, an area that remains unclear despite its importance in shaping company performance. This uncertainty complicates decision-making for stakeholders, investors, managers, and policymakers, who are left questioning whether higher dividends positively impact financial health or whether retaining earnings is more beneficial.

The importance of dividend policy has remained relevant for decades, yet recent changes in market dynamics, regulations, and investor expectations highlight the need for empirical research in this area. Stakeholders, including firms, management teams, and regulators, are essential in shaping dividend policies, and their views and actions require further investigation. Although previous research has examined dividend theories such as the Gordon Theory, empirical studies on Nigerian industrial goods companies are still limited. Gaining a better understanding of how dividend per share and payouts affect financial performance could provide valuable insights, leading to more effective dividend strategies and stronger financial health for companies. Collaboration between researchers, policymakers, and industry practitioners is crucial to developing evidence-based recommendations to optimize dividend policies in Nigeria's industrial goods sector. Ignoring these issues could result in inefficient dividend distributions, which may harm investor confidence, company valuation, and broader economic development.

Although the literature includes numerous studies exploring the relationship between dividend per share, payout, and financial performance, a closer analysis reveals several gaps that call for further investigation, particularly concerning listed industrial goods companies in Nigeria. These gaps include both temporal and geographical aspects, emphasizing the need for a thorough and current study. A key temporal gap is found in the outdated nature of many existing studies. Several studies are years old and do not account for recent economic and regulatory shifts that are relevant to the hypothesized relationships. This time gap reduces the applicability and relevance of these studies to today's market conditions, highlighting the importance of conducting up-to-date research. Examples of studies with time gaps include Olaoye and Olaniyan (2022), Umaru, Abubakar, Olumuyiwa and Olumuyiwa (2022), Alfian and Ghazali (2024), and Ukpong and Ukpe (2023).

Geographical gaps are also evident, as many studies generalize findings from other countries and apply them to Nigeria's industrial goods sector. Examples of such studies include Buti and Wiyarni (2023), Njoku and Lee (2024), Ayudia et al. (2024), Alfian and Ghazali (2024), Sari, Pratama and Wijaya (2023). However, given the unique economic, regulatory, and market conditions in Nigeria, applying findings from dissimilar countries may result in inaccurate or irrelevant conclusions. Specific studies from other countries include Sari, Pratama and Wijaya (2023) and Ayudia et al. (2024). There is a clear need for research that specifically targets the Nigerian context, taking into account the distinct characteristics of the local industrial goods sector and the broader economic landscape.

This research intends to address these gaps by offering a more detailed understanding of how dividend per share and payout influence the financial performance of listed industrial goods firms in Nigeria. By analyzing historical dividend practices, financial metrics, and market responses, the study aims to provide empirical insights into how dividend policy decisions affect financial health and shareholder value in the industrial goods sector. To fulfil the objectives of the study, the following hypothesis was formulated to be tested:

HO₁: Dividend per share ratio does not have any significant effect on the return on assets of listed industrial goods firms in Nigeria.

HO₂: Dividend payout ratio does not have any significant effect on the return on assets of listed industrial goods firms in Nigeria.

2.0 CONCEPTUAL FRAMEWORK

2.1.1 Dividend per share

Brigham and Houston (2019) define Dividend Per Share (DPS) as the total dividend payments made by a company divided by the total number of shares outstanding. Farrukh, et al. (2024) also describe DPS as the total dividends distributed by a company divided by the total number of outstanding shares. Umaru et.al, (2022) characterize DPS as the ratio of total dividends paid to common shareholders relative to the number of common shares outstanding. Brealey et.al, (2014) define DPS as the total dividends declared by a company divided by the weighted average number of shares outstanding during a specific period. All four authors use a similar approach to calculate DPS, which involves dividing the total dividends declared or paid by a company by the appropriate measure of outstanding shares. This calculation provides a per-share view of the dividends distributed, enabling investors to assess the return on their investment in more detail. A higher DPS typically indicates a larger dividend payout, while a lower DPS may suggest a more conservative dividend policy or a preference for reinvesting earnings back into the business.

Dividend per share (DPS) is a key financial metric that measures the dividend amount paid to each common shareholder (Ukpong & Ukpe, 2023). It reflects the company's profitability and financial health, as well as the return on investment for shareholders. Variations in DPS can indicate different dividend policies, earnings levels, and share quantities. In this study, DPS is measured using the dividend per share ratio.

The Dividend Per Share (DPS) ratio is a financial metric that indicates the amount of dividend paid on each share of a company's stock over a given period, usually one year (Brigham & Houston (2019). This ratio is crucial for investors seeking income, as it reveals the company's ability to pay dividends and its approach to distributing profits. It is calculated by dividing the total dividends by the number of issued shares.

2.1.2 Dividend Payout

Dividend Payout refers to the portion of a company's earnings that is distributed to shareholders as dividends (Udoka, et.al, 2022). It is typically expressed as a percentage of the company's net income and reflects the company's approach to balancing profit retention for growth and distributing profits to shareholders. Azende and Apebo (2021) define dividend payout as the amount of money a company pays its shareholders in dividends relative to its total earnings. This metric is important for investors as it signals the company's dedication to sharing profits with shareholders and offers insight into its financial strategy and stability.

The Dividend Payout represents the percentage of a company's net income that is paid out to shareholders as dividends. According to Udoka, et.al, (2022) the ratio helps investors to evaluate the sustainability of a company's dividend payments and understand how much of its earnings are reinvested into the business

versus distributed to shareholders. In this study, the dividend payout is measured using the dividend payout ratio.

The formula for calculating the dividend payout ratio involves dividing total dividends by net income. Azende and Apebo (2021) describe the Dividend Payout Ratio as the proportion of dividends paid to common shareholders relative to the net income available to common shareholders. This calculation involves dividing total dividends by the earnings available to common stockholders. Farrukh et al. (2024) define the Dividend Payout Ratio as the share of earnings distributed to shareholders in the form of dividends, representing the company's method of paying out dividends. The ratio is calculated by dividing total dividends by the firm's net income.

2.1.3 Financial Performance

Njoku and Lee (2024) describe financial performance as a subjective measure of how effectively a company utilizes its assets from its core business operations to generate revenue. Azende and Apebo (2021) describe financial performance as a comprehensive assessment of a company's overall position, covering areas such as assets, liabilities, equity, expenses, revenue, and profitability. Sari et al. (2023) view financial performance as a measure of how effectively a company generates income for its shareholders and manages its resources. Udoka, John and Orok (2022) define financial performance as the extent to which a company's actual results align with or exceed its goals. Brigham and Houston (2019) suggest that financial performance can be assessed through various financial models, including DuPont analysis, economic value added, free cash flow, and discounted cash flow, which help evaluate the underlying factors driving a company's performance and estimate its intrinsic value.

Financial performance is a broad concept that refers to how well a company uses its assets, liabilities, revenues, expenses, and equity to generate profits and create value for stakeholders (Brigham & Houston, 2019). It reflects a company's ability to achieve its financial objectives within a given period. Financial performance serves as an indicator of a company's economic health, operational efficiency, and potential for future growth and sustainability. It can be evaluated using methods such as financial statement analysis, ratio analysis, trend analysis, benchmarking, and valuation. In this study, financial performance is measured using the return on asset of the sample firms.

2.1.4 Return on Assets (ROA)

Return on Assets (ROA) is a key financial ratio that assesses a company's profitability by comparing its net income to its total assets. This ratio helps investors and analysts evaluate how effectively management is utilizing the company's assets to generate earnings (Brigham & Houston, 2021). Gitman and Zutter (2019) describe ROA as a financial metric that measures a company's ability to generate profit from its asset base. It is calculated by dividing net income by average total assets and is expressed as a percentage, providing insights into the firm's operational efficiency and profitability.

ROA is a profitability metric used to evaluate a company's ability to generate profit relative to its total assets. It is calculated by dividing net income by average total assets, with the result expressed as a percentage. This ratio indicates how well a company uses its assets to produce earnings. ROA is an important tool for assessing a firm's efficiency in generating profits from its asset investments. It is computed by dividing net income by average total assets over a specific period, offering a percentage return generated by the company on its asset base.

2.1.5 Revenue

Revenue refers to the income generated by a business or organization through its primary operations, including the sales of products or services, as well as other sources like royalties, licensing fees, or rental income from owned properties (Oladipo, Iyoha, Fakile, Asaley & Eluyela, 2019). Olaoye and Oluwatoyin (2019) define revenue as the total monetary inflow resulting from sales or other transactions

within a specific period, covering both cash and credit sales, regardless of whether payment has been received.

In this context, revenue represents the comprehensive financial result derived from the sale of a company's goods or services over a specific period. It reflects the income generated from fundamental business operations and constitutes the top-line or gross income of the company. This includes sales of products, services, and other sources such as investments, royalties, or licensing fees (Olaoye & Oluwatoyin, 2019). The revenue metric provides an all-encompassing view of a company's financial performance. For consumer goods firms, revenue is closely linked to factors like product quality, brand reputation, marketing strategies, distribution channels, pricing policies, and consumer demand. Regular tracking of revenue is essential for assessing the financial health and growth potential of these businesses.

2.2 Empirical Review

Ayudia, et.al, (2024) examined the impact of dividend policy and capital structure on the value of firms listed on the Jakarta Islamic Index. The study focused on several variables which includes dividend policy, capital structure, firm value and corporate social responsibility. These variables were measured using the dividend payout ratio, debt-to-equity ratio, Tobin's Q and corporate social responsibility index respectively. Secondary data was utilized and sourced from the Indonesia Stock Exchange and the Indonesian Capital Market Directory. The research covered companies listed on the Jakarta Islamic Index during the 2019-2021 period, and 41 companies were selected for the sample using purposive sampling, resulting in 123 observations. The study adopted a causal research design to investigate the causal relationship between the independent and dependent variables, and used panel data analysis with E-Views software. The analysis included descriptive statistics, classical assumption tests, model selection tests, hypothesis testing, and moderation analysis. The results showed that while dividend policy had a positive effect on firm value, it was statistically insignificant. The study concluded that dividend policy does not significantly influence firm value. The researchers recommended that companies consider optimizing their dividend payouts to maximize firm value and also engage in corporate social responsibility initiatives to improve their reputation and social performance. Although this study focused on a foreign sample, the current research will be based on a Nigerian population.

Alfian and Ghozali (2024) studied the effect of capital structure, dividend policy, profitability, and tax avoidance on intrinsic firm value in manufacturing companies. The paper uses four independent variables and one dependent variable. The independent variables are capital structure (proxied by debt to equity ratio), dividend policy (proxied by dividend payout ratio), profitability (proxied by return on assets), and tax avoidance (proxied by effective tax rate). The dependent variable is intrinsic firm value (proxied by Tobin's Q ratio). The paper uses secondary data from financial statements of manufacturing companies listed on the Indonesia Stock Exchange from 2014 to 2018. The population of the study is 144 manufacturing companies. The paper uses purposive sampling and selects 25 companies that meet the criteria of having positive net income, positive equity, and paying dividends during the observation period. The final sample consists of 125 firm-year observations. The paper uses a quantitative approach and a causal research design and tests the hypotheses using multiple linear regression analysis with the help of SPSS software. The paper uses descriptive statistics, classical assumption tests, hypothesis tests, and sensitivity tests to analyze the data and the results. The paper finds that dividend policy and tax avoidance have no significant effect on intrinsic firm value. The paper concludes that firm value is not influenced by dividend policy and tax avoidance. The paper suggests that a flexible dividend policy be maintained. The

study provides valuable insights into the subject matter but is limited by a short and obsolete time scope which this study intends to fill by focusing on a more current time scope.

Njoku and Lee (2024) examined the effect of dividend policy on firm performance and value in the Korean market, using a sample of 100 listed firms from 2010 to 2019. The authors use dividend payout ratio and dividend yield as proxies for dividend policy, and return on assets, return on equity, and Tobin's Q as proxies for firm performance and value. The study employs secondary data from the Korea Exchange and the Korea Information Service. The authors use panel data regression analysis and Granger causality test for analysis. The main findings of the study are that dividend policy has a positive and significant impact on firm performance and value, and that there is a bidirectional causal relationship between dividend policy and firm performance and value. The study concludes that dividend policy is an important determinant of firm performance and value in the Korean market, and recommends that managers and investors should consider the dividend policy when making decisions. The study also contributes to the literature by providing empirical evidence from an emerging market with different institutional and regulatory settings than developed markets. A research gap observed in the study is that it focuses only on Korea and as such the applicability of its findings to the Nigerian industrial goods sector is adversely affected. Therefore, this study will focus on the Nigerian industrial goods sector to fill this gap.

Ukpong and Ukpe (2023) examined the effect of dividend policy on firm performance in Nigeria for the period 2015 to 2019. The specific objectives were to analyse the effect of the form of dividend payment, the timing of dividend payment, and the earnings per share on the performance of Nigerian companies. The dependent variable of the study was firm performance, measured by return on assets (ROA). The independent variables were dividend policy indicators, measured by form of dividend payment (FDP), timing of dividend payment (TDP), and earnings per share (EPS). The study used secondary data obtained from the annual financial reports of consumer product and service firms listed on the Nigerian stock exchange. The population of the study consisted of all listed consumer and service firms on the Nigerian stock exchange. The study used purposive sampling to select 10 firms for the analysis. The study found that ROA had a positive relationship with form of dividend payment, but negative relationships with earnings per share and timing of dividend payment. The study also found that there was no significant positive effect of the form of dividend payment, timing of dividend payment, and earnings per share on the performance of Nigerian companies. The study concluded that dividend policy did not have a significant impact on firm performance in Nigeria. The study recommended that firms should invest in profitable assets that will yield higher returns in the future and attract investments. The study has a limited and out-dated time scope, which may reduce the generalizability and reliability of the findings. This study will rely on the most recent time scope to fill the observed research gap.

Sari, et.al, (2023) analyzed the effect of capital structure, profitability, and dividend policy on firm value for companies listed on the LQ45 index of the Indonesia Stock Exchange in 2017–2021. The study used panel data regression techniques to test their hypotheses. The variables used were debt to equity ratio (DER), return on equity (ROE), dividend payout ratio (DPR), and price to book value (PBV). The study used secondary data from the companies' financial reports and stock prices. The population of the study was all 45 companies in the LQ45 index, but the sample was selected using purposive sampling to obtain 13 companies that met the criteria. The study found that dividend policy had no significant effect on firm value. The paper concluded that profitability was the most important factor influencing firm value, and suggested that managers should optimize their capital structure and dividend policy to enhance shareholder value. The study also contributed to the literature by providing consistent findings on the relationship between capital structure, profitability, dividend policy, and firm value in the Indonesian context. The study used a relatively short and outdated time period, which may limit the generalizability

and robustness of the results. Therefore, the study will leverage on a longer and more recent time period to fill the research gap observed.

Olaoye and Olaniyan (2022) investigated the effect of dividend policy on firm performance of listed consumer goods companies in Nigeria exchange group. Dividend policy (dependent variable), return on assets, retained earnings, and debt on equity (independent variables) are the variables used in the study. Secondary data from the annual reports of eight consumer goods firms from 2010 to 2020 were used to represent the variables of interest. The study's population included eighteen consumer goods firms listed on the Nigerian Stock Exchange as of March 5, 2021. Eight consumer goods firms were selected as the study sample by random sampling techniques. Ex post facto quantitative research design was also employed for the study. The study covered a time scope of eleven years that span from 2010 to 2020. Descriptive statistics, granger causality test, co-integration test, unit root test, and panel data regression were all statistical tools employed by the study to carry out relevant analysis. The study found that dividend pay-out has a positive and significant relationship with return on assets and retained earnings, and a negative and significant relationship with debt on equity. The study concluded that performance has a significant impact on the dividend policy of listed consumer goods companies in Nigeria. The study recommends that consumer goods companies should increase the dividends paid to their shareholders to boost their profitability, consider the factors of profitability, retained earnings, and debt to equity ratio when deciding on dividend distribution, and focus on improving their profit margin and fundamentals. The study could be improved by addressing some limitations, such as the small sample size, the use of only one measure of dividend policy and heterogeneity issues in the panel data regression.

Umaru, et.al, (2022) investigated the influence of dividend policy on the financial performance of selected quoted firms in Nigeria. The study specifically focuses on assessing the impact of earnings per share (EPS) and dividend per share (DPS) on the financial performance, measured by return on equity (ROE), of these selected firms. Additionally, firm size, determined by the natural log of total assets, serves as a control variable. The secondary data for the study is sourced from the annual reports and financial statements of ten firms in the consumer goods, industrial goods, and conglomerate sectors listed on the Nigerian Stock Exchange as of December 31, 2020. The study employed a correlation research design, the study utilizes panel data analysis, ordinary least squares (OLS) method, Pearson correlation, and t-test statistics for data analysis, while also testing for normality, multicollinearity, and autocorrelation of the data. The findings reveal that both EPS and DPS positively and significantly impact ROE, indicating the relevance of dividend policy in influencing the financial performance of quoted selected firms in Nigeria. The study recommended that firms adopt optimal dividend policies balancing dividends and retained earnings for future growth, consider shareholder preferences, monitor earnings and dividend patterns for consistency, and enhance profitability and liquidity to attract more investors. The time scope covered by the research can no longer be considered current for research purposes due to recent developments since the completion of the study in 2022. Therefore, this study relies on more recent data from the Nigerian industrial goods sector to fill the observed research gap.

2.3 Theoretical Framework

2.3.1 Dividend Relevance Theory

The Dividend Relevance Theory, introduced by Miller and Modigliani (1961), posits that dividend policy affects stock prices and the overall value of a firm in real-world scenarios. It seeks to explain the relationship between dividend policy and a firm's financial performance. This review assesses the fundamental assumptions of the theory, along with the arguments both in support of and against it, particularly in the context of how dividend policy influences the financial performance of listed industrial goods firms in Nigeria.



The theory is based on several key assumptions. First, it assumes that investors view dividends as the primary source of income from their investments, favoring immediate income over future capital gains. Second, it presumes that there is asymmetric information between managers and shareholders, which leads to the belief that dividends act as a signal of a firm’s financial health and profitability. Lastly, the theory assumes the efficiency of capital markets, allowing investors to reinvest dividend income at a rate of return comparable to that of the firm.

Rozeff (1982) argues that dividends play a crucial role in determining a firm’s financial performance. Dividends provide a stable and predictable income stream for investors, which helps attract shareholders and stabilize stock prices. Additionally, dividends can indicate a firm's profitability and growth potential, as companies that regularly pay dividends are generally seen as financially stable. Finally, proponents suggest that maintaining a consistent dividend policy helps firms avoid inefficient investments and focus on high-return projects, which can potentially improve financial performance.

On the other hand, Ngwoke (2021) contends that dividend policy has no significant impact on a firm’s financial performance. They argue that investors prioritize a firm’s overall financial health, growth prospects, and future earnings over the timing or amount of dividend payments. Critics also point out that dividend payouts may restrict a firm’s ability to invest in lucrative opportunities, which could hinder long-term growth and profitability. Furthermore, they highlight that dividend tax penalties could discourage investors from regarding dividends as a primary source of income.

The Dividend Relevance Theory serves as the foundation for this research, aiming to explain why shareholders favor dividend payments as returns on their investments. While the theory emphasizes the role of dividends in signaling financial stability and attracting investors, opposing viewpoints suggest that other factors, such as a firm’s overall financial health and growth prospects, may hold greater significance. Considering the specific context of listed industrial goods firms in Nigeria, further empirical research is needed to examine how dividend per share and payout ratios affect their financial performance.

3.0 RESEARCH METHODOLOGY

The research adopted an ex post facto design to develop the research model. The study's population included all 13 industrial goods firms listed in Nigeria, with the sample comprising 10 of these firms. A purposive sampling method was employed to ensure the sample accurately represented Nigeria's industrial goods sector. Secondary data, which already existed, was used to explore the topic. The study used annual data from 2012 to 2023, collected from the selected firms. To analyze the data, various methods were utilized, including descriptive statistics, variance inflation factors, Hausman specification tests, correlation and panel regression analysis. E-view Statistics software was used for data analysis, with regression analysis serving as the primary tool for hypothesis testing. The analysis followed a model developed by Otwani, Namusonge and Elizabeth (2017) for the data study.

$$ROA_{it} = \beta_0 + \beta_1DPS_{it} + \beta_2DPR_{it} + \beta_3REV_{it} + e_{it} \dots\dots\dots (i)$$

Where:

ROA= Return on Assets

DPS= Dividend Per Share Ratio

DPR = Dividend Pay-out Ratio

REV = Revenue

The study's prior expectation is that a rise in dividend payout rates will result in an improvement in the financial performance of the sampled firms.

Table 1: Measurement of Variables

S/N	Proxy	Type	Measurement	Source
1	Return on Assets	Dependent	$\text{Profit before interest and tax} \div \text{total assets} \times 100$	Gitman and Zutter (2019),
2	Dividend per share Ratio	Independent	$\text{Total annual dividend declared} \div \text{total number of issued up ordinary shares}$	Umaru <i>et al.</i> (2022)
3	Dividend payout ratio	Independent	$100 * (\text{Total dividend declared} \div \text{Profit after tax})$	Ayudia <i>et al.</i> (2024)
4	Revenue	Control	Total income earned from the sale of goods	Ukpong and Ukpe (2023)

Source: Researchers Compilation (2024)

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Descriptive statistics is used to summarize and describe the main features of a dataset. They provide simple summaries about each of the individual variables in the sample and the measures, including measures of central tendency and measures of variability. The descriptive statistics helps to give an overview of the individual properties of the variables of interest.

Table 2
Descriptive Statistics

	ROA	DPS	DPR	REV
Mean	7.771333	2.517583	0.373392	113.3720
Median	7.150000	0.390000	0.117106	6.900769
Maximum	53.90000	22.60000	2.415459	2208.090
Minimum	-29.60000	0.000000	0.000000	0.077092
Std. Dev.	13.60845	4.877083	0.479517	326.2923
Skewness	0.525287	2.646474	1.288314	4.098203
Kurtosis	4.963826	9.825042	4.524404	21.53390
Jarque-Bera	24.80160	372.9825	44.81410	2053.432
Probability	0.000004	0.000000	0.000000	0.000000
Sum	932.5600	302.1100	44.80705	13604.63
Sum Sq. Dev.	22037.61	2830.527	27.36240	12669536
Observations	120	120	120	120

Source: Eviews10 (2024)

The descriptive statistics table summarizes key metrics for four variables: Return on Assets (ROA), Dividends per Share (DPS), Dividend Payout Ratio (DPR), and Revenue (REV).

Return on assets (ROA) shows Mean (7.77%) On average, the companies generate a return of 7.77% on their assets. Median (7.15%) the median is close to the mean, suggesting a fairly symmetric distribution. Max/Min (53.90% & -29.60%) there is a wide range in profitability, with some companies experiencing significant losses. Std. Dev (13.61) high variability in performance across companies. Skewness (0.53) slightly right-skewed; a few companies have very high ROA. Kurtosis (4.96) leptokurtic distribution (peaked with heavy tails). Jarque-Bera (JB) (24.80, p-value < 0.01) ROA is not normally distributed. Therefore, ROA varies widely across firms with evidence of a few firms performing exceptionally well or poorly. The data is not normally distributed, which may affect parametric statistical tests.

Dividend per share (DPS) shows mean (2.52) on average, companies pay a DPS of 2.52 units (currency). Median (0.39) the median is much lower than the mean, indicating positive skewness. max/min (22.60 & 0.00) some companies pay high dividends, while others pay none. Std. dev (4.88) high dispersion suggests inconsistent dividend policies. Skewness (2.65) highly right skewed, showing a long tail of high values. kurtosis (9.83) highly leptokurtic; many observations around the mean but some extreme values. JB (372.98), P-value (0.000) not normally distributed. Therefore, DPS shows extreme variations, likely due to a few high-paying companies. the distribution is highly skewed, which implies dividend decisions are not uniform across firms.

Dividend payout ratio (DPR) shows a mean (0.373) on average, firms pay out 37.3% of their earnings as dividends. Median (0.117) the mean is significantly higher than the median, indicating a strong positive skew. Max/Min (2.41 & 0.00) some firms pay more than their earnings (over 100%), while others pay nothing. Std. Dev. (0.48) shows considerable variation in payout policies. Skewness (1.29) moderately right skewed. Kurtosis (4.52) leptokurtic; presence of outliers. JB (44.81), p-value (0.000) not normally distributed. Therefore, a few firms have very high payout ratios, which skews the distribution. Most firms have lower payout ratios, with a significant portion paying little to no dividends.

Revenue (REV) shows a mean value of (113.37) average revenue is 113.37 units (currency). Median (6.90) huge gap between mean and median suggests extreme positive skew. Max/Min (2208.09 & 0.08) enormous range; some firms are vastly larger than others. Std. Dev. (326.29) very high variability. Skewness (4.10) extremely right-skewed. Kurtosis (21.53) extremely leptokurtic; many small firms and a few very large ones. JB (2053.43), p-value (0.000) strongly not normally distributed. This implies that revenue is highly skewed with outliers. A small number of firms generate extremely high revenues, distorting the average.

These statistics reveal the dataset's distributional characteristics, highlighting variability and skewness in the financial metrics.

4.2 Correlation Analysis

Correlation analysis measures the strength and direction of the relationship between two variables. The null hypothesis states that there is no correlation between two variables of interest. The decision rule states to reject the null hypothesis if the p-value is less than the significance level of 0.05, which shows that there is a significant correlation between the variables. If the p-value is greater than the significance level, fail to reject the null hypothesis.

Table 3: Correlation Analysis

Correlation Probability	ROA	DPS	DPR	REV
ROA	1.000000	-----		
DPS	0.195308	1.000000		
	0.0325	-----		
DPR	0.307244	0.499157	1.000000	
	0.0006	0.0000	-----	
REV	0.135041	0.819276	0.378863	1.000000
	0.1414	0.0000	0.0000	-----

Source: Eviews10 (2024)

The correlation table presents the relationships between Return on Assets (ROA) and three other variables: Dividends per Share (DPS), Dividend Payout Ratio (DPR), and Revenue (REV). The correlation coefficient between ROA and DPS is 0.195, with a probability value of 0.0325 is less than 0.05 indicating a weak positive relationship. This suggests that as ROA increases, there is a slight tendency for dividends per share to also increase, although the correlation is not strong. The correlation coefficient between ROA and DPR is stronger at 0.307, with a probability value of 0.0006 indicating a significant positive relationship. This suggests that firms with higher return on assets tend to have a higher dividend payout ratio, implying they distribute a larger portion of their earnings as dividends. Lastly, the correlation between ROA and REV is 0.135, with a probability value of 0.1414 indicating a weak positive relationship. This suggests that there is a slight tendency for firms with higher return on assets to also have higher revenues, although again the correlation is not significant.

4.3 Hausman Specification Test

The Hausman test is used to determine whether a random effects model or a fixed effects model is more appropriate for panel data. The null hypothesis states that the random effects model is appropriate (no correlation between the individual effects and the regressors). The decision rule states to reject the null hypothesis if the p-value is less than the 0.05 level of significance. If the p-value is greater than the significance level, fail to reject the null hypothesis and use the random effects model.

Ho= Random effect is more appropriate

Ho= Fixed effect is more appropriate

Table 6: Hausman Specification Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	8.933129	4	0.0628	
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
DPR	-0.098116	-0.076855	0.000877	0.4727
DPS	0.102885	0.048531	0.001085	0.0989
REV	-0.007951	0.059411	0.001018	0.0347
LROA	0.063851	0.065688	0.000009	0.5466

Source: *Eviews10 (2024)*

The observed cross section random probability value is 0.0628. Therefore, the tests null hypothesis cannot be rejected. This means that the random effect regression method is more effective for testing the research model.

4.4 Test of Research Hypothesis

The study tests its hypothesis using the random-effect regression analysis. Random effect regression is used in panel data analysis when the individual-specific effects are assumed to be uncorrelated with the independent variables. It allows for more efficient estimates compared to fixed effects models when the assumption holds. The null hypothesis states that the relationship between the independent variable and the dependent variable is not significant. The decision rule states to reject the null hypothesis if the p-value is less than 0.05. If the p-value is not less than 0.05, fail to reject the null hypothesis. This means that the relationship between the variables is significant, of the associated p-value is less than 0.05.

Table 7: Random Effect Regression

Source: *Eviews10* (2024)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DPR	-0.076855	0.052489	-1.464210	0.1480
DPS	0.048531	0.051974	0.933750	0.3539
REV	0.059411	0.036813	1.613868	0.1114
LROA	0.065688	0.005155	12.74320	0.0000
C	1.095480	0.169475	6.463950	0.0000

Effects Specification		S.D.	Rho
Cross-section random		0.289738	0.6763
Idiosyncratic random		0.200458	0.3237

Weighted Statistics			
R-squared	0.708612	Mean dependent var	0.473102
Adjusted R-squared	0.690681	S.D. dependent var	0.379402
S.E. of regression	0.207993	Sum squared resid	2.811962
F-statistic	39.51765	Durbin-Watson stat	1.461131
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.794213	Mean dependent var	2.230789
Sum squared resid	8.820597	Durbin-Watson stat	0.465801

The regression test is used to assess the relationship between two or more variables. The null hypothesis states that there is no significant relationship between the variables. The decision rule states to reject the null hypothesis if the probability values observed are less than 0.05. This means that the relationship between variables is statistically significant if the associated probability values are less than 0.05. The study coefficient is the direction of the relationship. A positive coefficient denotes a positive relationship while a negative coefficient indicates a negative relationship. The independent variables included Dividend Payout Ratio (DPR), Dividend per Share (DPS). The findings revealed that DPR had a negative coefficient of -0.076855 with a t-statistic of -1.464210 and a p-value of 0.1480, indicating a statistically insignificant effect on ROA. DPS exhibited a positive coefficient of 0.048531, with a t-statistic of 0.933750 and a p-value of 0.3539, also showing an insignificant effect. In contrast, LROA demonstrated a highly significant positive influence on ROA, with a coefficient of 0.065688, a t-statistic of 12.74320, and a p-value of 0.0000, indicating that increases in LROA are strongly associated with increases in ROA. The constant term was also significant, with a coefficient of 1.095480 and a p-value of 0.0000. The model's fit was reflected in an R-squared of 0.708612 and an Adjusted R-squared of 0.690681, explaining approximately 69% of the variability in ROA. The F-statistic of 39.51765 with a p-value of 0.000000 confirmed the overall significance of the model. However, the Durbin-Watson statistic of 1.461131 suggested some moderate positive autocorrelation in the residuals. The analysis underscores that while

LROA is a significant predictor of ROA, other variables such as DPR, DPS, and REV do not exhibit statistically significant effects in this model.

4.5 Discussion of Findings

This study focused on the effect of dividend per share and dividend payout on the financial performance of listed industrial goods firms in Nigeria.

The study found that dividend per share was not significant in affecting the financial performance of sample firms. The findings of this study were in line with the findings of Buti and Wiyarni (2023) and Sari et al. (2023).

The study also found that dividend payout was not significant in affecting the financial performance of sample firms. The findings are in line with the views of Ayudia et al. (2024) and Alfian and Ghozali (2024).

They all found that dividend policy was not significant in affecting the financial performance of sampled firms.

The findings of this study are in contrast with the findings of Ukpong and Ukpe (2023), Olaoye and Olaniyan (2022), Umaru et al. (2022), Alfian and Ghozali (2024) and Njoku and Lee (2024) who all found that dividend policy was significant in affecting probability.

5. CONCLUSION AND RECOMMENDATION

This study examines the effect of dividend per share and payout on financial performance of listed industrial goods firms in Nigeria. Arising from the results obtained from the data collected and analyzed together with the test of hypotheses, it was found that dividend per share and dividend pay-out was not statistically significant in affecting the return on asset of sample firms. The study concluded on the basis of these insignificant relationships that dividend per share and dividend pay-out was not significant in affecting the financial performance of listed industrial goods firms in Nigeria.

The study recommends following:

- a. Since Dividends per Share (DPS) and Dividend Pay- out Ratio (DPR) did not show significant effects on financial performance, firms should reassess their dividend distribution strategies. Consideration should be given to adjusting dividend pay-out ratios to ensure they do not compromise investment in growth opportunities or financial stability.
- b. There should be increased training in firms to help meet up with the optimal dividend policy.

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