

Dividend Stability and Stock Returns of Listed Industrial Goods Firms in Nigeria

Leyoni Simeon Biobara¹, Ifeanyi Madumere² & Oyadonghan James Kereotu³
^{1,2&3}Department of Accounting, Faculty of Management Sciences, Federal University, Otuoke,
Nigeria.
simeonleyoni@gmail.com

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This study examined dividend stability and stock returns of listed industrial goods firms in Nigeria for a period of thirteen years (2012 – 2024). Dividend stability was proxied by dividend persistence, dividend payout ratio, dividend growth, and dividend volatility, while stock returns represent market-based performance. The study adopted an ex post facto research design and applied panel data techniques using firm year observations drawn from audited annual reports and the Nigerian Exchange (NGX) Group. Fixed effects and random effects estimators were employed, with the Hausman test guiding model selection, while robust standard errors were used to address heteroskedasticity and serial correlation. The findings revealed that dividend persistence, dividend growth, and dividend payout have positive and significant effects on stock returns, while dividend volatility has a significantly negative effect. The study concluded that dividend stability improves investor confidence and market valuation and therefore, recommended consistent and disciplined dividend policies in Nigeria's industrial goods sector.

Keywords: Dividend, Stability, Volatility, Persistence, Returns.

1. Introduction

Background to the Study

Capital markets operate as platforms for mobilizing savings, allocating capital efficiently, and promoting economic development. Within these markets, stock returns serve as forward looking indicators that incorporate investor expectations about risk, profitability, liquidity, and long-term sustainability. Investors rely on accounting information and observable corporate actions when forming expectations about future performance. Muhtar et al. (2026) assert that dividend remains a credible signal in the evaluation of firms. In a similar vein, Onipe (2026) maintains that dividend payments become more effective in the stabilization of stock prices during periods of uncertainty. Olowolaju and Ogunsan (2016) provide evidence that dividend per share significantly explains market value per share in Nigerian firms, while Ogbodo and Osisioma (2020) document a strong association between dividend measures and share price movements within the Nigerian manufacturing sector.

While prior research has largely concentrated on dividend magnitude, emerging literature suggests that the stability of dividend behaviour may convey more reliable signals than absolute payout levels. Khader (2025) observes that although earnings per share often dominate valuation models, dividend related measures continue to retain incremental explanatory power, particularly in emerging market settings. Mohsin (2025) reports that dividend variables significantly influence stock price behaviour, indicating that investors evaluate not only profitability but also payout patterns when assessing firm value. Nofryanti et al. (2026) maintain that investors' decisions in the evaluation of a firm are not wholly influenced by the magnitude of dividend payouts, as there are other equally important fundamental factors that are considered. Maharizy and Yuliantika (2025) find that improved earnings quality enhances firm valuation, while Ronoh et al. (2025) report that financial discipline contributes positively to market performance. When firms maintain consistent dividend payments, investors may interpret earnings as more credible because dividends represent cash backed distributions rather than accrual-based figures. This shift in empirical focus suggests that dividend stability, rather than dividend level alone, may better capture managerial commitment and financial sustainability. Stability incorporates multiple dimensions including persistence of payments, proportional distribution discipline, consistency of growth, and control of volatility. Dividend

stability therefore complements accounting quality by providing an observable and verifiable financial commitment.

Statement of the Problem

Stock markets are expected to respond efficiently to credible financial information, with stock prices and returns reflecting firm fundamentals. However, repeated global market crashes and the collapse of high-profile corporations have weakened investor confidence in reported financial information and corporate governance systems. Empirical evidence from emerging markets shows that the value relevance of accounting information is not always stable and may decline over time, particularly in environments characterized by uncertainty and institutional fragility (Khader, 2025; Olisaji & Onuora, 2024). These developments suggest that compliance with reporting standards does not automatically guarantee meaningful market reactions or sustained stock return performance. In Nigeria, the situation is further complicated by episodes of falling stock prices, weak return performance, and declining foreign direct investment relative to competing African economies.

Within the industrial goods sector, stock return behaviour has often remained volatile despite reported profitability and dividend announcements. Georgina et al. (2026) posit that dividend signals play a strategic role in shaping the perceptions of investors during economic downturns as markets exhibit stronger positive reactions to increased dividend announcements in crisis and recovery phases than in pre-crisis phase. Sapiri et al. (2025) show that investor reactions to dividend signals intensify during periods of uncertainty, implying that the quality and stability of dividend behaviour may matter more than payout magnitude alone. Yet most prior studies focus on dividend per share rather than structural dimensions such as persistence, payout discipline, growth consistency, and volatility. Consequently, there is limited empirical evidence on whether dividend stability enhances stock returns and investor confidence in Nigeria's industrial goods sector, hence the need for this study.

Research Objective

The broad objective of this study was to examine the effect of dividend stability on stock returns of listed firms in the industrial goods sector over the study period.

Specifically, the study:

Examined the effect of dividend persistence on stock returns of industrial goods firms.

Evaluated the effect of dividend payout ratio on stock returns of industrial goods firms.

Determined the effect of dividend growth on stock returns of industrial goods firms.

Assessed the effect of dividend volatility on stock returns of industrial goods firms.

Research Questions

In line with the stated objectives, the study addressed the following research questions:

What is the effect of dividend persistence on stock returns?

To what extent does a dividend payout ratio influence stock return?

How does dividend growth affect stock returns?

What is the effect of dividend volatility on stock returns?

Research Hypotheses

Consistent with the objectives and research questions, the following null hypotheses were formulated and tested:

Ho1: Dividend Persistence has no significant effect on stock returns.

Ho2: Dividend Payout Ratio has no significant effect on stock returns.

Ho3: Dividend Growth has no significant effect on stock returns.

Ho4: Dividend Volatility has no significant effect on stock returns.

2. Conceptual Review

This section provides a review of the explanatory variable (dividend stability) and its dimensions (dividend persistence, dividend payout ratio, dividend growth, and dividend volatility) in addition to the outcome variable (stock returns).

Dividend Stability

Dividend policy remains one of the most debated topics in corporate finance because it shapes

market perceptions of the prospects and stability of firms (Jabbouri, 2016, in Muhtar et al., 2026). Since the seminal proposition of Miller and Modigliani (1961), which argues that dividend policy is irrelevant to firm value under perfect market assumptions, researchers have consistently demonstrated that real-world imperfections, information asymmetry, agency conflicts, transaction costs, taxation differences, and market inefficiencies render dividend policy highly consequential. In imperfect markets, dividends serve not merely as distributions of earnings but as informational signals, governance mechanisms, and credibility indicators. Albert et al. (2026) opine that firms should maintain a consistent dividend policy so as to strengthen investor confidence and stabilize stock prices in the capital market because effective dividend policy can provide a positive signal to the market and shape stock price dynamics. Khader (2025) reports that dividend-related accounting information remains value relevant in emerging markets, though its explanatory strength may fluctuate over time. Similarly, Olisaji and Onuora (2024) demonstrate that accounting numbers, including dividend information, significantly explain share price behaviour. While traditional studies focus on dividend per share (DPS) or total dividend amounts, the stability of dividend behaviour provides deeper insight into managerial intent and firm sustainability. Dividend stability refers to the degree of consistency and predictability in dividend payments over time. It emphasizes the smoothing behaviour of firms rather than the absolute level of dividends paid in any single period. Lintner (1956) documents that firms are reluctant to adjust dividends frequently because dividend reductions are interpreted negatively by investors. Bhattacharya (1979) argues that dividends convey information about firm prospects because they are costly to finance and difficult to reverse.

In this study, dividend stability is operationalized through four complementary constructs:

- Dividend Persistence (DPERS)
- Dividend Payout Ratio (DPAYOUT)
- Dividend Growth (DGROWTH)
- Dividend Volatility (DVOL)

Each construct represents a distinct but interconnected dimension of payout behaviour. Together, they provide a multidimensional understanding of dividend policy dynamics and their capital market implications.

Dividend Persistence (DPERS)

Dividend persistence refers to the continuity of dividend payments over time. In this study, Dividend Persistence (DPERS) is defined as a dummy variable equal to one if a firm pays dividends consecutively and zero otherwise. Conceptually, dividend persistence captures payout commitment by reflecting whether a firm maintains uninterrupted dividend distributions across years. Unlike dividend magnitude, which focuses on how much dividend is paid, persistence emphasizes consistency and reliability in corporate payout behaviour. It therefore represents a structural attribute of dividend policy, highlighting stability rather than scale. Anggi et al. (2026) assert that in large firms, equity-based profitability and dividend policy are more strongly interpreted by investors as signals affecting market valuation. Sapiri et al. (2025) show that abnormal returns around dividend announcements are stronger during crisis regimes than during stable periods, indicating heightened investor sensitivity to dividend signals in uncertain environments. This suggests that persistent dividend payments during economic downturns signal financial resilience and managerial confidence.

The signalling strength of dividends is enhanced when payments are continuous, as persistence reduces ambiguity and reinforces managerial commitment. Lintner's (1956) dividend smoothing hypothesis further explains the rationale for dividend persistence. Firms are generally reluctant to reduce dividends because of the negative interpretation such actions may attract from investors. Managers prefer gradual adjustments and aim to maintain continuity once dividends are initiated. Empirical evidence supports this behavioural tendency. Regular and continuous dividend payments reduce discretionary free cash flow available to managers, thereby mitigating agency conflicts.

A firm that pays dividends every year demonstrates financial discipline, operational sustainability, and managerial confidence. In contrast, sporadic or irregular dividend payments may indicate earnings instability, liquidity challenges, or uncertainty regarding future cash flows. Evidence

from banking sector studies indicates that the positive impact of dividend policy on stock returns is conditional upon financial strength and profitability (Kaphle, 2025; Rai, 2024). However, dividend persistence is not universally beneficial. Maintaining dividends during periods of declining profitability may impose liquidity constraints and weaken financial flexibility. Thus, while persistence signals commitment and resilience, it must be supported by sustainable earnings to remain credible and value-enhancing.

Dividend Payout Ratio (DPAYOUT)

Dividend payout refers to the proportion of a firm's earnings distributed to shareholders in the form of dividends. In this study, Dividend Payout Ratio (DPAYOUT) is calculated as Dividend Paid divided by Profit After Tax. Conceptually, payout ratio captures distribution intensity and earnings allocation discipline. It indicates how much of current profitability is returned to shareholders versus retained for reinvestment and future growth. Unlike dividend persistence, which emphasizes continuity, payout ratio focuses on magnitude relative to earnings performance. Onipe (2026) reveals that dividend payout ratio (DPR) and dividend yield (DY) have significant positive effects on stock price (SP) and stock returns (SR), and this serves as a strong empirical support to both the dividend relevance theory and the signalling theory. Mohsin (2025) find that dividend-related variables significantly influence stock prices in emerging markets, suggesting that payout stability shapes investor behavior.

Persistent dividend-paying firms may therefore attract a more stable investor clientele, reducing ownership volatility and enhancing market trust. Firms that consistently distribute dividends build reputational capital over time, signalling operational sustainability and long-term viability. Studies across multiple developing economies confirm that dividend information retains incremental explanatory power for share prices even when earnings dominate valuation models (Khader, 2025; Olowolaju & Ogunsan, 2016). Empirical evidence from emerging markets consistently confirms that dividend-related information significantly influences stock prices and market value. For instance, Olowolaju and Ogunsan (2016) find that dividend per share significantly explains variations in market value per share in Nigerian banks, while Ogbodo and Osioma (2020) document a significant association between dividend measures and share prices in Nigerian manufacturing firms. Although these studies primarily focus on dividend magnitude, the credibility of such magnitude is strengthened when dividend payments are persistent rather than intermittent.

The payout ratio reflects managerial philosophy regarding profit distribution. A high payout ratio suggests that a significant portion of earnings is returned to shareholders, indicating strong distribution commitment and possibly limited reinvestment opportunities. Conversely, a low payout ratio implies earnings retention for expansion, debt reduction, or internal financing. Therefore, payout ratio embodies the strategic balance between shareholder remuneration and corporate growth objectives. Higher payout ratios reduce discretionary funds under managerial control, thereby mitigating potential agency conflicts. A stable and sustainable payout ratio enhances predictability in shareholders' returns. Investors often perceive firms with disciplined payout policies as less prone to earnings manipulation because dividend payments require actual liquidity.

Dividend Growth (DGROWTH)

Dividend growth refers to the year-to-year percentage change in dividend per share. In this study, Dividend Growth (DGROWTH) is computed as $(D_t - D_{t-1}) / D_{t-1}$, where D represents dividend per share. Conceptually, dividend growth captures the directional movement of dividends over time. While dividend persistence measures continuity and payout ratio measures distribution intensity, dividend growth reflects the trajectory of dividend policy. It indicates whether a firm is increasing, maintaining, or reducing its dividend payments across successive periods.

Research demonstrates that high-quality earnings and stronger accrual reliability enhance stock return informativeness (Maharizy & Yuliantika, 2025; Nguyen, 2024.). When dividend growth aligns with high earnings quality, investors perceive the growth as sustainable. However, if dividend increases occur alongside declining earnings quality, investors may question their sustainability. Therefore, dividend growth must be evaluated in conjunction with underlying accounting fundamentals.

Meanwhile, dividend growth may also impose financial constraints if not aligned with cash flow capacity. Artificial or unsustainable dividend increases may lead to liquidity strain or increased borrowing. Unlike accounting numbers, which may be subject to accrual adjustments, dividend increases require actual liquidity and thus carry stronger credibility. Empirical evidence from emerging markets confirms that dividend-related information significantly influences stock prices and returns (Khader, 2025; Olisaji & Onuora, 2024). Dividend growth typically follows earnings growth, and therefore, reinforces profitability signals.

Dividend growth also influences investor clientele effects. Growth-oriented investors may view increasing dividends as confirmation of expanding profitability, while income-oriented investors may prefer stable growth trajectories that enhance predictable returns. Consequently, dividend growth contributes to shareholder composition and market demand patterns. From a risk perspective, steady dividend growth reduces uncertainty about future cash distributions. Investors often prefer predictable upward trends rather than erratic fluctuations. In markets characterized by earnings volatility, stable dividend growth signals managerial prudence and effective risk management.

Dividend Volatility (DVOL)

Dividend volatility refers to the degree of fluctuation in a firm's dividend policy over time. In this study, dividend volatility (DVOL) is measured as the absolute difference in payout ratios between consecutive years, expressed as $|DPAYOUT_t - DPAYOUT_{t-1}|$. Conceptually, dividend volatility captures instability in distribution behaviour.

While dividend persistence emphasizes continuity, payout ratio measures distribution intensity, and dividend growth reflects directional movement, dividend volatility focuses on variability and unpredictability in payout decisions. Onipe (2026) maintains that dividend policy strongly reduces stock price volatility, even as market uncertainty has significant positive effect on volatility. There is empirical evidence that dividend payments become more effective in the stabilization of stock prices during periods of uncertainty. Dividend volatility represents the risk dimension of dividend policy. A low volatility level indicates smooth and stable dividend adjustments over time, consistent with predictable managerial behaviour. Conversely, high volatility suggests erratic payout decisions, which may reflect earnings instability, liquidity constraints, or reactive financial management.

From an agency theory perspective, volatile dividends may signal inconsistent financial discipline. When payout ratios fluctuate widely, investors may question managerial consistency in capital allocation. With respect to earnings quality and firm valuation, Ronoh et al. (2025) maintain that financial discipline and reporting credibility positively influence market value. Similarly, stable dividend policies complement high-quality reporting by reinforcing investor confidence (Maharizy & Yuliantika, 2025). However, dividend volatility may undermine perceived governance strength because it relates to earnings volatility and cash flow variability. Thus, dividend volatility provides insight into the stability and prudence of managerial payout strategy.

Stock Returns

Stock returns represent the total economic benefits accruing to shareholders and consist of both capital gains and dividend income. Research examining price and return models in emerging markets shows that accounting and dividend variables continue to explain share price variations significantly (Mohsin, 2025; Olisaji & Onuora, 2024). Onipe (2026) asserts that both dividend payout ratio and dividend yield have strong positive effects on stock price and stock returns, and that such evidence provides empirical support to the dividend relevance theory, bird-in-hand hypothesis, and the signalling theory. Unlike share prices, which reflect valuation levels at a point in time, stock returns capture investors' realized market reactions to firm specific information over a given period.

Return based measures are therefore more suitable for examining market response to accounting and payout signals in environments characterized by weak trading and price distortions (Uddin, Rahman & Liu, 2024). In emerging markets such as Nigeria, stock returns often exhibit weak sensitivity to earnings and book values, suggesting limitations in the value relevance of traditional accounting information (Olowolaju & Ogunsan, 2016). As a result, investors may rely more heavily on alternative signals such as dividend stability when forming return expectations.

Theoretical Framework

This study is based on the following theories:

Dividend Smoothing Theory

This study is principally predicated on the Dividend Smoothing Theory, because it explains the reason dividend stability enhances investors' confidence. The theory originated from the work of Lintner. Lintner (1956), posits that firms adjust dividends gradually rather than abruptly. Managers aim to maintain stable dividends to avoid negative investor reactions associated with dividend cuts. Firms therefore target a long term payout ratio and adjust slowly toward that target. This theory directly justifies the inclusion of dividend volatility in the framework. Low volatility reflects smoothing behaviour consistent with managerial reluctance to alter dividends sharply. Empirical evidence indicates that investors respond negatively to dividend reductions while reacting positively to stable or increasing dividends. It supports the expectation that lower dividend volatility and greater persistence strengthen positive market reactions.

Life Cycle Theory of Dividends

Life Cycle Theory of Dividends maintains that dividend policy reflects a firm's stage of development. The theory was developed by DeAngelo, DeAngelo, and Stulz in 2006. They built on the life cycle theory of the firm propounded by Muller in 1972. The life cycle theory of dividends essentially postulates that mature firms with accumulated retained earnings and limited growth opportunities tend to distribute higher dividends while growth-oriented firms prefer earnings retention to finance expansion (www.researchgate.net). This perspective explains variations in payout ratio and dividend growth across firms.

Mohsin (2025) opines that while earnings per share remain a dominant valuation driver, dividend measures retain incremental explanatory power. The life cycle theory of dividends provides contextual understanding for dividend stability. Mature firms are more likely to exhibit persistent and stable dividends. Growing firms may show lower payout ratios but could still demonstrate growth consistency. The theory therefore supports cross sectional differences in dividend stability patterns.

Review of Empirical Literature

Muhtar et al. (2026) assessed the dynamics of dividend policy and stock market responses in Indonesian banking during the COVID-19 regime using a panel of banks listed on the Indonesia Stock Exchange (IDX) from 2016-2024. They employed System GMM extensions and RLS-MM robustness, supplemented by sub-period checks (2016-2021 and 2019-2024). The results revealed that bank payout declined during the crisis while market reactions to dividend announcements nosedived and later stabilized due to internal cash capacity resulting from overall recovery.

Onipe (2026) investigated the moderating effect of market uncertainty on dividend policy and stock price volatility of listed firms in Nigeria. The study used a balanced panel of 152 firms during a period of ten years, while applying fixed-effects regression model with robust and clustered standard errors to control for firm-specific heterogeneity and econometric violations. The results provided evidence that dividend policy significantly reduces stock volatility, even as market uncertainty exerts a strong positive impact on volatility. The interaction between dividend policy and market uncertainty is negative and statistically significant, which empirically shows that dividend payments become more effective in stabilizing stock prices during periods of uncertainty.

Onipe (2026) examined the effect of dividend policy on shareholders' wealth among Nigerian Deposit Money Banks for the period 2010-2024, using an unbalanced panel dataset from 14 listed commercial banks on the Nigerian Exchange Group (NGX). The study adopted fixed effects and random effects panel regression models, with the Hausman specification test used to select the most consistent estimator. The results provided evidence that dividend payout ratio and dividend yield have statistically significant positive effects on stock price and stock returns.

Nofryanti et al. (2026) x-rayed the relationship between dividend policy and stock price movements in the consumer non-cyclicals sector in Indonesia. The study selected 26 companies listed on the Indonesia Stock Exchange, and used panel data approach with a 2-year (2023-2024) observation period. Descriptive statistical analysis was applied to capture variations in stock prices

and dividend payout ratios. The results revealed that a high dividend payout ratio does not necessarily induce an increase in stock prices.

Albert et al. (2026) examined the impact of dividend policy on PT Unilever Indonesia Tbk's Stock Price for the period 2015-2024. Data collected from the annual and quarterly financial reports of PT Unilever Indonesia Tbk, which was listed on the Indonesia Stock Exchange, (IDX), were analyzed using Structural Equation Modelling (SEM-PLS) techniques with the assistance of Smart PLS version 4 software to test the influence between the variables studied. The results indicated that stable and high dividend announcements, reflected in earnings per share (EPS) and dividend per share (DPS) values, have significant impact on the stock price of the firm.

Georgina et al. (2026) investigated strategic dividend policy adaptation and stock market reactions in state-owned enterprises (SOEs) across crises in Indonesia. System GMM was applied, and the results empirically revealed that the market exhibited stronger positive reactions in the crisis and recovery phases than in the pre-crisis phase, in response to increase in dividends by the state-owned enterprises during the COVID-19 crisis relative to pre- and post-crises periods.

Sapiri et al. (2025) examined dividend policy, market reaction, and financial resilience of listed commercial banks in Indonesia across crisis and non-crisis periods from 2016 to 2024. The study combined fixed effects panel regression, dynamic panel estimation using System GMM, and an event study approach based on abnormal returns and cumulative abnormal returns, while modelling dividend per share and dividend related market reactions alongside firm fundamentals and macroeconomic conditions including a crisis dummy and GDP growth. The evidence indicated that market reactions to dividend related information are stronger during crisis regimes, meaning investors become more sensitive to payout signals when uncertainty rises. This insight strengthens the motivation for the current study because dividend stability is fundamentally about how predictable and dependable payouts are across time.

Sambel (2025) evaluated the joint effect of dividend per share and earnings per share on stock prices among Indonesian manufacturing firms using multiple regression analysis for a 2021 sample. Stock price served as the dependent variable, while dividend per share and earnings per share were the key independent variables. The results indicate that earnings per share are significant, dividend per share is not significant individually, but both become significant jointly, implying complementarity between profitability signals and payout signals. This is important for the current study because dividend stability measures such as dividend persistence and dividend growth can be interpreted as mechanisms that strengthen the credibility of dividend signals when combined with performance, thereby improving the likelihood that dividend behaviour will be reflected in stock returns rather than being dismissed as temporary or cosmetic.

Kaphle (2025) analysed how earnings per share and dividend per share affect market price per share using evidence from two Nepalese banks over a five year window. The study used regression and correlation analysis, with market price per share as the dependent variable and earnings per share and dividend per share as the independent variables. The results show that the effect of dividend per share can vary across firms, being significant for one bank and insignificant for another, while earnings per share are generally positive. This firm heterogeneity is relevant to this study because dividend stability indicators such as dividend volatility and dividend growth capture the internal consistency of payout behaviour that may differ substantially across firms even within the same sector, helping explain why some firms attract stronger stock return responses to dividends than others.

Bhattarai (2024) examined the impact of dividend policy on market price per share in Nepalese commercial banking over the period 2013 to 2022 using descriptive statistics, correlation analysis, and regression techniques.

Market price per share was specified as the dependent variable, while earnings per share, dividend per share, dividend payout ratio, leverage, and firm size were used as predictors. The findings suggest that earnings per share and dividend per share are relevant, and that multiple internal and external factors jointly influence stock prices. For the current study, the practical lesson is that dividend payout ratio is not just a distribution choice but also a market signal, and when it is combined with continuity and growth patterns it can shape investor expectations and return behaviour,

especially in markets where dividend policy is viewed as a credibility mechanism.

Rai (2024) assessed the impact of dividend policy on shareholder wealth and bank performance in Nepal using descriptive analysis, regression, and correlation methods. The study examined market based measures alongside accounting performance, specifying dependent variables including return on assets, earnings per share, and market price per share, while using dividend per share, dividend payout ratio, dividend yield, size, and leverage as explanatory variables. The findings indicated that earnings per share are significant, while dividend related measures show relevance that is not always consistent. This pattern supports the need for the present study's approach: rather than relying only on dividend level measures, focusing on dividend stability dimensions such as persistence, payout ratio discipline, growth consistency, and volatility provides a clearer structure for explaining when and why dividend behaviour translates into stock return outcomes.

Amarasinghe and Sudarshani (2024) examined how crisis versus non crisis periods alter the value relevance of accounting information within Sri Lankan commercial banking between 2013 and 2022. Using descriptive statistics, correlation, and panel regression, the study modelled market value per share as the dependent variable and included earnings per share, return on equity, earnings yield, net asset value per share, and return on assets as explanatory variables. The findings showed that the market relies on different signals across regimes, with earnings per share becoming significant during crisis periods and net asset value per share becoming more influential during non-crisis periods. This evidence is conceptually useful for our study because it aligns with the idea that investor reliance on dividend stability signals may intensify when uncertainty increases; stable payout behaviour can become a substitute credibility signal when other valuation anchors become less trusted.

Mahatara (2024) evaluated dividend practices and shareholder wealth among Nepalese insurance firms using descriptive statistics, correlation analysis, and multiple regressions. The dependent variable was market price per share, while independent variables included earnings per share, dividend per share, dividend payout ratio, dividend yield, and price earnings ratio. The findings revealed that dividend per share and price earnings ratio are significant, earnings per share is insignificant, and dividend yield is negative and significant. The mixed signs and significance patterns reinforce the idea that the market interprets dividend related information through multiple channels, including expectations about sustainability and risk. In the context of this study, dividend volatility is especially important because it captures inconsistency in payout behaviour that can generate negative valuation responses, which aligns with the finding that dividend volatility is negatively related to stock performance.

3. Methodology

The term methodology signifies the methodical and theoretical examination of academic methods and practices. It is a plan for addressing and studying a research topic or question. The methodology captures the study's strategy and direction.

Research Design

This study adopts an ex post facto research design in examining the relationship between dividend stability and stock returns in the industrial goods sector of Nigeria for a period of thirteen years, (2012–2024). The ex post facto design was appropriate because the study relied on historical financial and market data, and the key variables investigated could not be manipulated experimentally. Dividend policy decisions are determined by corporate management, while stock returns are driven by market forces within the capital market environment.

Population and Sample of the Study

This study made use of a census population of 17 firms classified under the Industrial Goods Sector of the Nigerian Exchange (NGX) Group during the 13-year study period, (2012-2024). The sample size is therefore the same as the population of the study. The Industrial Goods Sector was selected due to its economic significance, capital-intensive nature, and exposure to cyclical earnings volatility. Firms in this sector often operate under fluctuating macroeconomic conditions, making dividend stability a potentially important signal of financial resilience and managerial confidence.

Sources of Data

The study relies exclusively on secondary data obtained from audited annual financial statements of listed industrial goods firms and official publications of the Nigerian Exchange (NGX) Group. Dividend payments, profit after tax, total assets, and total liabilities were extracted from annual reports, while share price data were obtained from NGX historical price records and market summaries. The use of audited financial statements enhances data credibility and minimizes measurement errors.

Moreover, reliance on official exchange data ensures consistency in market price information and alignment with established capital market research practice in Nigeria, (Olowolaju & Ogunsan, 2016).

Measurement of Variables

The study employs clearly defined financial ratios and constructed proxies to operationalize both dependent and independent variables. All ratios were computed consistently across firms and years to ensure comparability.

Measurement of Stock Returns

Stock return (RET) is measured as annual holding period return, computed as the percentage change in share price between consecutive years. The formula is expressed as:

$$RET_{it} = (P_{it} - P_{it-1}) / P_{it-1}$$

where P_{it} represents the closing share price at the end of year t and P_{it-1} represents the closing share price at the end of the preceding year.

This measure captures investors' realized capital gains and reflects market response to corporate financial policies, including dividend behaviour. Returns are preferred over price levels because they standardize performance across firms and eliminate scale bias.

Measurement of Dividend Stability

Dividend stability is captured using multiple proxies to reflect its multidimensional nature. Dividend persistence (DPERS) is a dummy variable equal to one if a firm pays dividends consecutively and zero otherwise. It captures the continuity of dividend payments and signals payout commitment.

Dividend payout ratio (DPAYOUT) is calculated as:

$$DPAYOUT_{it} = \text{Dividend Paid}_{it} / \text{Profit After Tax}_{it}$$

This ratio measures the proportion of earnings distributed to shareholders and reflects payout discipline.

Dividend growth (DGROWTH) is computed as:

$$DGROWTH_{it} = (D_{it} - D_{it-1}) / D_{it-1}$$

where D represents dividend per share.

This measure captures year-to-year changes in dividend levels and reflects directional consistency.

Dividend volatility (DVOL) is measured as the absolute difference in payout ratios between consecutive years:

$$DVOL_{it} = |DPAYOUT_{it} - DPAYOUT_{it-1}|$$

Lower values indicate greater stability in dividend policy. Additionally, the coefficient of variation of dividends per share is employed as a comprehensive stability measure. It is computed as the standard deviation of dividends divided by their mean over the study period. Lower values imply smoother dividend behaviour.

Measurement of Control Variables

To control for firm-specific characteristics that may influence stock returns, the study includes several control variables. Firm size (FSIZE) is measured as the natural logarithm of total assets. Larger firms typically exhibit greater stability and stronger information environments. Leverage (LEV) is computed as total liabilities divided by total assets. This ratio captures financial risk and capital structure effects. Profitability (ROA) is measured as profit after tax divided by total assets. It reflects operating efficiency and performance. Earnings volatility is proxied by the standard deviation of profitability over time, capturing income uncertainty. These controls reduce omitted

variable bias and enhance the precision of estimated dividend stability effects.

Model Specification

Given the panel structure of the dataset, the study employs panel regression models to estimate the relationship between dividend stability and stock returns. The baseline econometric model is specified as:

$$RET = (DPERS, DPAYOUT, DGROWTH, DVOL, FSIZE, LEV, ROA)$$

Where:

DPERS, represents DIVIDEND PERSISTENCE.

DPAYOUT, represents DIVIDEND PAYOUT.

DGROWTH, represents DIVIDEND GROWTH.

DVOL, represents DIVIDEND VOLATILITY.

FSIZE, represents FIRM SIZE.

LEV, represents LEVERAGE.

ROA, represents RETURN ON ASSETS.

$$RET_{it} = \alpha + \beta_1 DIVSTAB_{it} + \beta_2 X_{it} + \mu_i + \lambda_t + \varepsilon_{it}$$

where RET_{it} represents stock return for firm i in year t , $DIVSTAB_{it}$ denotes dividend stability proxy, X_{it} represents the vector of control variables, μ_i captures unobserved firm-specific effects, λ_t represents time-specific effects, and ε_{it} is the stochastic error term.

The inclusion of firm effects controls for unobservable characteristics such as managerial style, corporate governance culture, and strategic orientation that may influence both dividend policy and stock returns. Time effects capture macroeconomic shocks, inflationary pressures, regulatory changes, and market-wide movements affecting all firms simultaneously.

The coefficient β_1 measures the marginal effect of dividend stability on stock returns. A positive and significant coefficient for dividend persistence would imply that consistent dividend payers experience higher stock returns. Conversely, a negative coefficient for dividend volatility would indicate that unstable dividend patterns reduce market performance.

Estimation Technique

The study estimates three panel models: pooled ordinary least squares, fixed effects, and random effects. The pooled model serves as a baseline but assumes homogeneity across firms. The fixed effects model controls for time-invariant firm heterogeneity, while the random effects model assumes unobserved effects are uncorrelated with regressors. Model selection is guided by the Hausman specification test. The null hypothesis states that the random effects estimator is consistent and efficient. If the null hypothesis is rejected, the fixed effects model is preferred because it provides consistent estimates when firm-specific effects correlate with explanatory variables.

Given the likelihood that unobserved firm characteristics influence dividend behaviour and stock performance simultaneously, the fixed effects estimator is emphasized. Robust standard errors clustered at the firm level are employed to address heteroskedasticity and serial correlation in panel data. Diagnostic procedures include descriptive statistics, correlation analysis, variance inflation factor tests for multicollinearity, Breusch–Pagan tests for heteroskedasticity, and Wooldridge tests for autocorrelation. These procedures ensure the reliability and validity of estimated coefficients.

4. Results and Discussion of Findings

This section covers the data analysis and interpretation of each test conducted through the EViews Version 14. It also includes a discussion of the hypotheses and findings linked with the objectives of the research.

Descriptive Statistics

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
RET	0.1845	0.0723	2.9840	-0.7812	0.6128	1.9345	6.7812
DPERS	0.6817	1.0000	1.0000	0.0000	0.4671	-0.7854	1.6179
DPAYOUT	0.5342	0.4215	4.2835	-3.1460	0.9483	2.1741	9.2147

DGROWTH	0.2716	0.0543	6.8921	-2.5000	1.2037	1.8860	7.4201
DVOL	0.3128	0.1184	3.9516	0.0000	0.4879	2.0452	8.6335
FSIZE	17.9462	16.8421	22.5783	13.7432	2.1349	0.8842	3.1126
LEV	0.5236	0.4895	0.8327	0.1125	0.1826	0.4118	2.7654
ROA	0.1124	0.0847	0.3642	-0.2137	0.1016	0.6725	3.9541

Jarque-Bera (RET) 312.417 Probability 0.0000 Observations 208

This section presents the descriptive statistics of the variables employed in the study. The statistics provide preliminary insights into the distribution, central tendency, and dispersion of stock returns, dividend stability, and control variables among listed industrial goods companies in Nigeria. The observed variability in dividend stability confirms the presence of both dividend smoothing and dividend volatility across firms, reflecting heterogeneous payout policies within the sector.

Correlation Analysis

RET	DPERS	DPAYOUT	DGROWTH	DVOL	FSIZE	LEV	ROA	
RET	1.000							
DPERS	0.214** (0.0021)	1.000						
DPAYOUT	0.186** (0.0084)	0.342*** (0.0000)	1.000					
DGROWTH	0.301** (0.0000)	0.158** (0.0240)	0.412*** (0.0000)	1.000				
DVOL	-0.118* (0.0910)	-0.276*** (0.0000)	-0.433*** (0.0000)	-0.514*** (0.0000)	1.000			
FSIZE	0.447** (0.0000)	0.263*** (0.0001)	0.518*** (0.0000)	0.332*** (0.0000)	-0.301** (0.0000)	1.000		
LEV	-0.172** (0.0142)	-0.119* (0.0860)	0.041 (0.5560)	0.063 (0.3720)	0.218** (0.0017)	0.356** (0.0000)	1.000	
ROA	0.509** (0.0000)	0.226*** (0.0012)	0.472*** (0.0000)	0.401*** (0.0000)	-0.238** (0.0005)	0.588** (0.0000)	-0.312*** (0.0000)	1.000

*** Significant at 1% ** Significant at 5% * Significant at 10%

The correlation results indicate that stock returns in the Nigerian industrial goods sector are positively associated with dividend stability measures, particularly dividend persistence, dividend payout, and dividend growth, suggesting that firms with consistent and increasing dividend policies tend to experience stronger market performance. Conversely, dividend volatility shows a negative relationship with stock returns, implying that unstable or frequently adjusted dividend policies may reduce investor confidence and weaken share price performance. Among the control variables, firm size and profitability (ROA) exhibit strong positive correlations with stock returns, indicating that larger and more profitable firms are more favourably valued by the market, while leverage demonstrates a mild negative association, reflecting the potential adverse effect of financial risk on returns. Importantly, the correlations among the explanatory variables remain moderate and below the

critical threshold for multicollinearity, confirming that the variables are sufficiently independent for subsequent regression analysis. Overall, the preliminary evidence supports the view that dividend stability plays a meaningful role in explaining stock return behaviour in Nigeria's industrial goods sector.

Variance Inflation Factors

Variable	Coefficient Variance	Uncentered VIF	Centred VIF
DPERS	0.002184	3.4621	1.3874
DPAYOUT	0.004976	5.8913	1.9246
DGROWTH	0.006103	6.4728	2.1153
DVOL	0.003741	4.2389	1.7682
FSIZE	0.018447	12.9045	2.6418
LEV	0.009112	8.3617	1.8825
ROA	0.011336	10.5284	2.9736

Mean centred VIF = 2.0991

The Variance Inflation Factor results show that multicollinearity is not a problem in the model since all centred VIF values are well below the critical threshold of 10 and even below the stricter benchmark of 5. The highest VIF values are associated with profitability and firm size, which is expected given their theoretical linkage, yet the levels remain within acceptable limits. The dividend stability variables including dividend persistence, payout, growth, and volatility display relatively low VIF values, indicating that each captures a distinct aspect of dividend behaviour without excessive overlap. The mean centred VIF further confirms that the explanatory variables are sufficiently independent; suggesting that the regression estimates will be stable and reliable for subsequent panel analysis.

Fixed Effects Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DPERS	0.081542	0.031224	2.6114	0.0097
DPAYOUT	0.052183	0.018445	2.8289	0.0052
DGROWTH	0.119673	0.024337	4.9186	0.0000
DVOL	-0.063814	0.027118	-2.3531	0.0198
FSIZE	0.147526	0.041884	3.5227	0.0005
LEV	-0.089431	0.038902	-2.2984	0.0227
ROA	0.411265	0.083146	4.9473	0.0000

R-squared	0.6124
Adjusted R-squared	0.5779
F-statistic	17.8421
Prob(F-statistic)	0.0000

Hausman Test

Correlated Random Effects - Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob.
Cross-section random	14.7263	7	0.0395

The fixed and random effects results both indicate that dividend persistence, dividend payout, dividend growth, firm size, and profitability exert positive and statistically significant effects on stock returns, while dividend volatility and leverage exhibit significant negative relationships. However, the Hausman test produces a chi square statistic of 14.73 with a probability value of 0.0395, which is below the five percent significance level, leading to the rejection of the null hypothesis that the random effects estimator is consistent.

This implies that the fixed effects model is more appropriate for the study, as it accounts for

unobserved firm specific heterogeneity that may be correlated with the explanatory variables. Therefore, subsequent interpretations and policy inferences should be based on the fixed effects estimation results.

Discussion of Findings

The empirical findings of this study align substantially with prior evidence documented in the literature on dividend policy and value relevance within emerging markets. The positive and statistically significant effect of dividend persistence on stock returns is consistent with earlier studies which demonstrate that consistent dividend payments enhance market valuation (Ogbodo & Osisioma, 2020; Olowolaju & Ogunsan, 2016.). While these prior studies primarily focused on dividend magnitude, the present findings extend the literature by showing that continuity of dividend payments, captured through persistence, strengthens stock return performance. The positive and significant relationship between dividend payout ratio and stock returns is also consistent with empirical evidence from emerging markets (Mohsin, 2025; Bhattarai, 2024).

Furthermore, the positive impact of dividend growth on stock returns resonates with evidence of prior studies suggesting that investors reward firms demonstrating forward looking payout consistency (Sapiri et al., 2025; Khader, 2025). Conversely, the negative and significant effect of dividend volatility on stock performance aligns with evidence from prior studies that points to mixed and sometimes insignificant effects of dividend measures on share prices (Rai, 2024; Bankole & Ukolobi, 2020.).

In addition, the positive influence of firm size and profitability on stock returns is consistent with prior findings that financially strong firms attract favourable market valuation (Olisaji & Onuora, 2024).

5. Summary of Major Findings

Significant findings from the effect of dividend stability on stock returns of listed industrial goods firms in Nigeria over the period 2012 to 2024 include the following:

Dividend persistence exerts positive and statistically significant effects on stock returns in the industrial goods sector in Nigeria.

Dividend payout has positive and statistically significant effects on stock returns in the industrial goods sector in Nigeria.

Dividend growth has positive and statistically significant effects on stock returns in the industrial goods sector in Nigeria.

Dividend volatility shows a negative and significant relationship with stock performance in the industrial goods sector in Nigeria.

Conclusion

The study concludes that dividend stability plays a critical role in shaping stock returns within the Nigerian industrial goods sector, and this conclusion is strongly supported by prior empirical literature. The positive effects of dividend persistence, payout consistency, and dividend growth confirm that predictable and sustainable dividend policies enhance stock returns. This position is consistent with prior evidence from the literature (Moshin, 2025). This study reinforces the position that investors reward not only dividend magnitude but structured payout behaviour because dividends communicate managerial confidence in future earnings and cash flow stability. The negative impact of dividend volatility on stock performance suggests that inconsistent financial signals weaken market responses.

Recommendations

Based on the empirical findings of this study, the following recommendations are proposed to enhance stock return performance within the industrial goods sector in Nigeria:

Firms in the industrial goods sector should maintain consistent dividend payments to strengthen stock returns.

Companies should adopt sustainable payout ratios to enhance investor confidence.

Management should pursue steady dividend growth to improve market valuation.

Firms must avoid dividend volatility to reduce uncertainty and protect stock performance.

Contributions to Knowledge

Empirically, the study advances value relevance research in emerging markets by establishing dividend stability as a meaningful explanatory variable of stock return variation. This study has contributed in pushing back the frontiers of the value relevance literature with respect to dividend policy by providing panel evidence from Nigeria's industrial goods sector on the multidimensional nature of dividend stability and its impact on stock returns. Unlike traditional studies that focused solely on dividend level or payout ratio, this research integrates persistence, growth, payout behaviour, and volatility into a unified return-based framework.

References

- Albert, Y., Nurmeitha, D., & Mona, K. (2026). The impact of dividend policy on PT Unilever Indonesia Tbk's stock price: EPS and DPS analysis for the 2015-2024 period. *Jurnal Ilmu Ekonomi Manajemen dan Akuntansi MH Thamrin*, 7(1), 46-64.
- Amarasinghe, S., & Sudarshani, P. (2024). Crisis regimes and the value relevance of accounting information in Sri Lankan banking sector. *Asian Journal of Accounting Research*, 9(1), 55–72.
- Anggi, M., Faizul, M., & Prisilla, D. (2026). Profitability and dividend policy analysis with firm size as a moderating variable in determining stock prices of a company. *Jurnal Locus: Penelitian & Pengabdian*, 5(1), 498-510.
- Bankole, O., & Ukolobi, O. (2020). Value relevance of accounting information and share price behaviour of financial service firms in Nigeria. *Nigerian Journal of Management Sciences*, 8(2), 33–49.
- Bhattacharya, S. (1979). Imperfect information, dividend policy, and the bird in the hand fallacy. *Bell Journal of Economics*, 10(1), 259–270.
- Bhattarai, S. (2024). Dividend policy and market price per share in Nepalese commercial banks. *South Asian Journal of Finance and Accounting*, 6(2), 88–104.
- Georgina, M. T., Powell, G. H., Nurhafifah, A., Dewie, T. W. W., Reniati, K., Gatri, L., Marieta, A., & Lidia, W. (2026). Strategic dividend policy adaptation and stock market reactions in state-owned enterprises across crises. *Emerging Science Journal*, 10(2).
- Jajere, Z. M. (2009). Family Planning and Abortion in the Face of the Shari'ah. *Unimaid Journal of Women Studies*, 2, 85.
- Jajere, Z. M. (2026). FAITH-BASED RESOURCES AND DURABLE SOLUTIONS: ISLAMIC SOCIAL FINANCE AND THE PROTECTION OF INTERNALLY DISPLACED WOMEN AND CHILDREN IN BORNO STATE, NIGERIA. *Multi-Disciplinary Research and Development Journals Int'l*, 8(2), 1-36.
- Jajere, Z. M. (2026). Gender Inequality in Maiduguri: An Islamic Perspective. *Spanish Journal of Innovation and Integrity*, 51, 23-29.
- Jajere, Z. M., & Abdullahi, A. S. (2025). Muslim Women in Environmental Stewardship: Afforestation Initiatives and Socioeconomic Impact in Muslim-Majority Regions Sahel Region of Africa. *African Journal of Earth and Environmental Science*, 7(1).
- Jajere, Z. M., & ISHAQ, R. N. (2024). ISLAMIC VIEW ON ORPHANS, WIDOWS AND LESS PRIVILEGE IN ECONOMIC HARDSHIP. *EKERE JOURNAL OF RELIGION (EJR)*, 2(1), 71-86.
- Jajere, Z. M., & ISHAQ, R. N. ISLAMIC VIEW ON ORPHANS, WIDOWS AND LESS PRIVILEGE IN ECONOMIC HARDSHIP. *EKERE JOURNAL OF RELIGION (EJR)*, 85.
- Kaphle, R. (2025). Earnings per share, dividend per share and market price per share: Evidence from

- Nepalese banking sector. *Journal of Emerging Market Finance*, 24(1), 77–95.
- Khader, A. (2025). Declining value relevance of accounting information in emerging markets. *International Journal of Accounting and Financial Reporting*, 15(1), 1–23.
- Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes. *American Economic Review*, 46(2), 97–113.
- Maharizy, R., & Yuliantika, R. (2025). Earnings quality and firm valuation in emerging markets. *Journal of Accounting in Emerging Economies*, 15(2), 140–158.
- Mahatara, P. (2024). Dividend policy and shareholder wealth in Nepalese insurance firms. *International Journal of Financial Studies*, 12(3), 45–63.
- Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *Journal of Business*, 34(4), 411–433.
- Mohsin, M. (2025). Dividend policy and stock price behaviour in emerging markets. *Journal of International Financial Markets, Institutions and Money*, 89.
- Muhtar, S., Budi, F., & Georgina, M. T. (2026). Dynamics of dividend policy and stock market responses in Indonesian banking: Revisited across crisis phases. *Cogent Business & Management*, 13(1), 1-31.
- Nguyen, T. (2024). Accrual quality and stock return informativeness in frontier markets. *Review of Quantitative Finance and Accounting*, 62(4), 987–1012.
- Nofryanti, Wika, N. N., & Jihan, Q. S. (2026). Examining the relationship between dividend policy and stock price movements. *TOFEDU: The Future of Education Journal*, 5(1), 1078-1087.
- Ogbodo, O. C., & Osisioma, B. C. (2020). Dividend per share and market value of quoted manufacturing firms in Nigeria. *Journal of Accounting and Financial Management*, 6(1), 45–61.
- Olisaji, F., & Onuora, J. (2024). Accounting information credibility and market reaction in frontier markets. *African Journal of Accounting and Finance*, 12(2), 201–223.
- Olowolaju, P. S., & Ogunsan, K. (2016). Value relevance of accounting information and stock price behavior in Nigeria. *Journal of Economics and Sustainable Development*, 7(6), 18–29.
- Onipe, A. Y. (2026). Dividend policy and shareholders' wealth among Nigerian deposit money banks. *Journal of Economics Management and Accounting*, 28(2), 344-366.
- Onipe, A. Y. (2026). The moderating effect of market uncertainty on dividend policy and stock price volatility. *Journal of Accounting and Economics*, 16(1), 274-331.
- Rai, P. (2024). Dividend policy and shareholder wealth in Nepalese banking sector. *Journal of Finance and Development Studies*, 11(4), 92–110.
- Ronoh, S. K., Yegon, J. C., & Rono, L. (2025). Financial discipline and firm performance in developing economies. *Journal of Corporate Finance Research*, 19(2), 134–152.
- Sambel, R. (2025). Earnings, dividends, and stock price interaction in Indonesian manufacturing firms. *Indonesian Capital Market Review*, 14(1), 55–73.
- Sapiri, M., Frensidy, B., & Tinungki, G. (2025). Dividend policy, crisis regimes, and market reactions: Evidence from Indonesian banking sector. *Pacific Basin Finance Journal*, 82.
- Uddin, M. S. H., Rahman, M., & Liu, Y. (2024). Price versus return models in value relevance research: Evidence from emerging markets. *International Journal of Accounting and Information Management*, 32(1), 1–22.

www.researchgate.net. Retrieved on 26th February 2026.