

**ANUK COLLEGE OF
PRIVATE SECTOR
Accounting Journal**

VOL. 2 NO. 4 DECEMBER, 2025

**A Publication of College of Private Sector
Accounting
ANAN University Kwall, Plateau State, Nigeria.**

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Published December, 2025.

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Printed by:
MUSSAB Printers,
NB, 9 Muri road by gwari road, Kaduna State, Nigeria.
Phone contact: 07038776658,
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- I. Title page
- II. Abstract (150-250 words)
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- IV. Introduction
- V. Literature Review
- VI. Methodology
- VII. Results and Discussion
- VIII. Conclusion and Recommendations
- IX. References (APA 7th Edition)
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DIVIDEND POLICY DETERMINANTS: LIKELIHOOD AND PAYOUT MAGNITUDE IN NIGERIA'S CONSUMER GOODS FIRMS

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ABSTRACT

This study investigates the determinants of dividend policy in Nigeria's consumer goods sector, focusing on both the likelihood and magnitude of dividend payments. Employing a sample of 248 firm-year observations from 2013 to 2022, the study uses logistic regression to model the probability of dividend payments and Tobit regression to analyse payout magnitude. Firm-specific factors, including profitability (ROA), institutional ownership, managerial ownership, leverage, firm size, market valuation (Tobin's Q), and free cash flow, were evaluated to understand their impact on dividend decisions. Historical dividend patterns were also examined through lagged dividend payouts. The results reveal that profitability (ROA) and firm size (SIZE) are the most significant and consistent determinants of dividend behaviour, positively influencing both the likelihood and magnitude of payouts. Firms with higher profitability and larger size are more likely to pay dividends and distribute larger amounts. Short-term leverage (SHTLEV) significantly constrains dividend payments, while long-term leverage (LNGLEV), institutional ownership, managerial ownership, and free cash flow exhibit weaker or non-significant effects. Lagged dividend payouts show a positive and persistent influence, highlighting the importance of historical patterns in shaping current dividend decisions. These findings contribute to the literature on dividend policy by addressing gaps in emerging markets, particularly in Nigeria, where governance structures and financial constraints differ from developed economies. The study's methodological approach, combining logistic and Tobit regression, offers nuanced insights for managers, investors, and policymakers. It underscores the relevance of firm-specific factors in dividend decisions and provides actionable recommendations for enhancing corporate financial strategies in emerging markets.

Keywords: Dividend policy, profitability, firm size, leverage, free cash flow, institutional ownership, Tobit regression, logistic regression

1.1 Introduction

Dividend policy has long been a central topic in corporate finance, recognised for its significant implications on firm performance, investor behaviour, and capital market efficiency. Despite extensive scholarly inquiry, the determinants of dividend payments remain contentious, particularly due to varying firm characteristics, governance frameworks, and market conditions (Brealey, 2020). While much of the research has focused on developed markets, emerging economies like Nigeria present a unique opportunity to explore the complexities of dividend policy in contexts shaped by weaker governance structures, limited financial development, and higher economic volatility (Aivazian et al., 2003; Nizar Al-Malkawi, 2007).

Emerging markets exhibit distinct characteristics that

influence dividend behaviour. For instance, firms in such economies often use dividend payments as a tool to mitigate agency conflicts, signal financial health, and manage surplus cash flows. This contrasts with the more established mechanisms for addressing these issues in developed economies (Aivazian et al., 2003). In Nigeria, the underdeveloped capital market, coupled with limited investor protections and constrained financing options, exacerbates agency problems and heightens information asymmetry. These factors make dividend policy a strategic decision for firms aiming to balance internal operational needs and external stakeholder expectations (Ham et al., 2020).

This study focuses on the consumer goods sector of the Nigeria Exchange Group (NGX), a pivotal

industry for the nation's economic stability. Firms in this sector face challenges such as fluctuating demand, profit instability, and capital constraints, all of which significantly impact dividend decisions. Research has demonstrated that industry-specific dynamics play a critical role in shaping dividend behaviour, with factors like firm size, profitability, and ownership structure influencing both the likelihood and magnitude of payouts (Benyadi & Andrianantenaina, 2020; Rubio et al., 2023).

The theoretical foundation of this study draws on Agency Theory (Jensen & Meckling, 1976) and Signalling Theory (Bhattacharya, 1979). Agency Theory suggests that dividends reduce agency costs by distributing free cash flow that might otherwise be misused by managers, aligning their interests with those of shareholders (Jensen, 1986). Empirical studies have confirmed that ownership structure, particularly institutional ownership, can strengthen this alignment, reducing agency conflicts and increasing the likelihood of dividend payments (Ham et al., 2020; Rubio et al., 2023).

Signalling Theory posits that dividends serve as credible signals of a firm's financial health, particularly in environments characterised by high information asymmetry. In Nigeria, where financial reporting practices may lack transparency, dividends convey stability and profitability to investors, enhancing firm valuation and investor confidence (Jakob & Nam, 2020). Firms with stronger profitability are more likely to pay dividends as a means of signalling their stability and prospects, consistent with findings from global markets (Ham et al., 2020).

Three significant gaps drive this study. First, while the determinants of dividend policy have been extensively researched in developed markets, studies focusing on emerging markets like Nigeria are sparse. Nigeria's unique financial ecosystem necessitates an examination that accounts for its specific challenges, such as limited liquidity and governance inefficiencies (Nizar Al-Malkawi, 2007). Second, methodological gaps persist in the analysis of dividend policy. Many studies rely on linear regression models, which are inadequate for capturing binary and censored data structures inherent in dividend decisions. To address these gaps, this study employs logistic regression to assess the likelihood of dividend payments and Tobit regression to analyse payout magnitudes, advancing the methodological rigor in the field (Benyadi & Andrianantenaina, 2020). Third, most existing research focuses on determinants without providing actionable insights for predicting dividend behaviours. This study addresses this limitation by incorporating odds ratios to identify factors that significantly influence the likelihood of dividend payments, providing practical guidance for investors

and managers.

The findings from this study aim to contribute theoretically and practically. By integrating Agency Theory and Signalling Theory, the research offers a nuanced understanding of dividend policy in Nigeria's consumer goods sector. Practically, the study provides actionable insights for investors seeking dividend-paying stocks, corporate managers designing dividend policies, and policymakers aiming to enhance capital market efficiency and transparency.

Finally, this study seeks to fill critical gaps in the understanding of dividend determinants in Nigeria's consumer goods sector. By focusing on firm-level characteristics and employing robust econometric methods, it provides a comprehensive analysis of the factors driving dividend decisions in an emerging market context. These findings are expected to have far-reaching implications for academia, corporate practice, and policy formulation.

2.1 Literature Review and Hypothesis

Development

The determinants of dividend payment have been extensively studied in corporate finance literature, with factors such as profitability, ownership structure, leverage, and free cash flow frequently highlighted as critical influences. This section reviews the relevant theoretical and empirical studies on these factors and develops hypotheses for the analysis.

2.1.1 Profitability and Dividend Payment

Profitability is widely recognised as a fundamental determinant of dividend payment decisions. Empirical evidence strongly supports this relationship. Amidu & Abor (2006) found that profitability significantly influences dividend payments among Ghanaian firms, with higher earnings enhancing their capacity to pay dividends. Similarly, Al-Ajmi and Hussain (2011) observed a positive relationship between profitability and dividend payments in Saudi Arabia, highlighting that profitable firms are better equipped to reward shareholders. Adefila et al. (2000) provided corroborative evidence in Nigeria, showing that profitable firms listed on the Nigeria Exchange Group are more likely to pay dividends.

Recent studies offer further validation of these findings. Ham et al. (2020) demonstrated that dividend payments are associated with persistent and sustainable profitability, with profitable firms exhibiting long-term earnings stability. Rubio et al. (2023) found that profitability is a key determinant of consistent dividend policies, particularly among regular dividend-paying firms. Additionally, Benyadi & Andrianantenaina (2020) identified a significant positive relationship between profitability and dividend payments among Indonesian manufacturing

firms, reinforcing the centrality of profitability in dividend decision-making across diverse markets.

In the Nigerian context, profitability remains a critical driver of dividend decisions, particularly given the challenges of high information asymmetry and governance inefficiencies. Jakob & Nam (2020) observed that profitable firms in such settings use dividends to bolster investor confidence and enhance market valuation. These findings underscore the consistent empirical evidence linking profitability to dividend payments across various regions, with emerging markets like Nigeria demonstrating unique dynamics due to their distinct institutional and market characteristics.

The consistent empirical evidence across diverse markets underscores the central role of profitability in shaping dividend payment decisions, particularly in contexts like Nigeria, where firms leverage profitability to navigate market challenges and enhance shareholder returns. This leads to the formulation of the following hypothesis:

Hypothesis 1 (H1): Profitability has a positive and significant impact on the likelihood and magnitude of dividend payments.

2.1.2 Ownership Structure and Dividend Payment

Ownership structure is a critical determinant of dividend policy, with institutional and managerial ownership exerting distinct influences. Empirical evidence highlights the varying roles of these ownership types in shaping corporate governance and dividend decisions. Mollah et al. (2000) and Al-Malkawi (2007) found a positive relationship between institutional ownership and dividend payments, indicating that institutional investors demand dividends to mitigate agency conflicts and monitor management effectively. This is consistent with findings by Ham et al. (2020), who demonstrated that institutional shareholders use dividends as a mechanism to reduce information asymmetry and enhance transparency.

Conversely, higher managerial ownership has been associated with lower dividend payouts. Chen et al. (2005) observed that managers with significant equity stakes often prefer retaining earnings for reinvestment, reducing the reliance on dividends as a governance tool. Recent findings by Rubio et al. (2023) align with this perspective, showing that firms with concentrated managerial ownership tend to exhibit dividend policies that prioritise long-term reinvestment over immediate payouts.

In emerging markets like Nigeria, the influence of ownership structure on dividend policy is shaped by unique governance challenges and market inefficiencies. Studies in similar contexts reveal

contrasting dynamics. For instance, Al-Ajmi & Abo Hussain (2011) observed that institutional investors in Saudi Arabia drive higher dividend payments as a signal of stability in volatile markets. On the other hand, Jakob and Nam (2020) highlighted that managerial ownership in markets with weak investor protections often correlates with reduced dividend payouts, as managers prioritise internal financing over external signalling.

While institutional ownership generally supports higher dividends as a governance tool, the impact of managerial ownership can vary. Managers with aligned incentives may reduce dividends to prioritise growth, while managers in less transparent environments may retain earnings for discretionary use, increasing agency costs. These nuances underscore the complex relationship between ownership structure and dividend policy in emerging markets. Given these empirical insights, the following hypotheses are proposed:

Hypothesis 2a (H2a): Institutional ownership positively influences the likelihood and magnitude of dividend payments.

Hypothesis 2b (H2b): Managerial ownership negatively influences the likelihood and magnitude of dividend payments.

2.1.3 Leverage and Dividend Payment

Leverage plays a critical role in shaping a firm's dividend policy, with its impact reflecting the firm's trade-off between debt servicing and shareholder returns. Empirical studies consistently highlight the complex dynamics between leverage and dividend payments. Faccio et al. (2001) and Ghosh & Jain (2000) established that highly leveraged firms often reduce dividend payouts to prioritise debt obligations, a finding corroborated by Al-Kayed (2017), who observed similar patterns in both Islamic and conventional banks in Saudi Arabia. This study highlighted that leverage significantly constrains dividend payments due to financial obligations, particularly in firms with stricter debt covenants.

Further evidence is provided by Bokpin (2011), who analysed firms on the Ghana Stock Exchange and found that highly leveraged firms tend to reduce dividends to mitigate the risk of default. Similarly, Komrattanapanya & Suntraruk (2014) identified a negative relationship between financial leverage and dividend payouts among firms in Thailand, demonstrating that increased leverage typically leads to reduced dividend distributions. These studies emphasise that leverage acts as a binding constraint on dividend policy in both developed and emerging markets.

In contrast, moderate levels of leverage can support dividend payouts by imposing financial discipline on

management and reducing free cash flow problems, as suggested by Farinha (2003). Hoque (2018), in his analysis of the pharmaceutical industry in Bangladesh, identified financial leverage as a key factor influencing dividend decisions, albeit with varying effects depending on firm size and industry characteristics.

Emerging markets, such as Nigeria, present additional complexities due to the prevalence of high borrowing costs and limited access to capital. Aivazian et al. (2003) demonstrated that leverage in such markets often exacerbates financial constraints, leading firms to prioritise debt repayment over dividend distributions. Al-Najjar and Belghitar (2011) found that firms with higher leverage tend to maintain lower cash reserves, further limiting their ability to pay dividends. This trade-off highlights the financial fragility of leveraged firms, especially in environments with limited external financing options. The evidence underscores the consistent negative impact of high leverage on dividend payments, with some nuance regarding the potential benefits of moderate leverage in disciplining management. These findings contribute to a deeper understanding of how financial structure influences dividend policy across different markets and sectors.

For this study, leverage is examined from both short-term and long-term perspectives to capture its differential impacts on dividend payment decisions. Short-term leverage, characterised by immediate debt obligations, is expected to impose greater liquidity constraints on firms, potentially limiting their capacity to pay dividends. Long-term leverage, on the other hand, while representing a financial commitment, may afford firms more flexibility to balance debt servicing with shareholder distributions. Hence, we propose the following hypotheses:

Hypothesis 3a (H3a): Short-term leverage negatively influences the likelihood and magnitude of dividend payments.

Hypothesis 3b (H3b): Long-term leverage negatively influences the likelihood and magnitude of dividend payments.

2.1.4 Free Cash Flow (FCF) and Dividend Payment

Free cash flow (FCF) is a critical determinant of dividend policy as it reflects a firm's ability to generate surplus cash after meeting operational and investment requirements. Empirical evidence suggests that FCF plays a significant role in shaping dividend decisions, as firms with higher FCF are more likely to distribute dividends. This practice not only rewards shareholders but also mitigates agency problems by reducing the discretionary cash available to managers, which could otherwise be misused for unprofitable ventures.

Studies conducted in both developed and emerging markets highlight the positive relationship between FCF and dividend payments. DeAngelo & DeAngelo (2006) and Denis & Osobov (2008) found that firms with higher FCF in developed markets are more likely to distribute dividends, underscoring the importance of cash availability in dividend policy formulation. In Indonesia, Sijabat & Anas (2021) identified FCF as a significant determinant of dividend policy, with higher FCF leading to increased dividend payouts. Similarly, Wibowo and Erna Setiany (2023) demonstrated that companies with ample FCF are more likely to distribute higher dividends to mitigate the risk of funds being wasted on unprofitable projects.

In a broader ASEAN context Le et al. (2019) found that while FCF's impact on dividend payouts varies across the region, it is notably significant in Thai firms, highlighting the nuanced role of FCF in emerging markets. Gunawan et al. (2019) similarly established a positive relationship between FCF and dividend payouts, emphasising the role of liquidity in determining dividend policies. Recent studies have also examined the role of FCF in smaller firms. Zafar et al. (2023) found that FCF is a significant determinant of dividend payments in small and medium-sized manufacturing firms, further reinforcing its importance across firm sizes and sectors.

The empirical evidence consistently underscores the significant role of free cash flow in shaping dividend payment decisions. Across various contexts, firms with higher free cash flow are shown to leverage their liquidity position to distribute dividends, addressing both shareholder expectations and agency conflicts. This pattern is observed in diverse settings, including developed and emerging markets, as well as across firms of varying sizes. Given this robust relationship, the following hypothesis is proposed:

Hypothesis 4 (H4): Free cash flow positively influences the likelihood and magnitude of dividend payments.

2.1.5 Firm Size and Dividend Policy

Firm size, often measured as the natural logarithm of total assets, has long been identified as a critical determinant of dividend policy. Larger firms typically benefit from greater financial stability, enhanced access to capital markets, and reduced transaction costs, making them more likely to distribute consistent and higher dividends compared to smaller firms. However, empirical evidence highlights both positive and negative relationships between firm size and dividend payouts, reflecting varying contexts and theoretical perspectives.

DeAngelo et al. (2006) observed that firm size positively influences dividend policy in developed

markets, as larger firms tend to have established cash flows and less reliance on retained earnings. Similarly, Zafar et al. (2023) noted a significant positive relationship between firm size and dividend payments in small and medium-sized manufacturing firms, emphasizing the economies of scale and reduced financial constraints that larger firms enjoy. Studies in emerging markets provide further evidence of this relationship. Gunawan et al. (2019) found that Indonesian firms with larger asset bases distribute higher dividends, leveraging their financial capacity to enhance shareholder confidence. Similarly, Wibowo & Erna Setiany (2023) highlighted that firm size significantly impacts dividend policy by reducing the risk of withholding cash for unprofitable projects. Research by Le et al. (2019) in ASEAN countries demonstrated that larger firms are more consistent dividend payers, reflecting their ability to manage external financing needs effectively.

In contrast, some studies report a negative or insignificant relationship between firm size and dividend payouts. For instance, Komrattanapanya & Suntraruk (2014) observed that in certain contexts, increased firm size may correlate with reduced dividends, as larger firms prefer to retain earnings for future investments. Similarly, Bokpin (2011) noted that on the Ghana Stock Exchange, while firm size generally supports dividend payments, its effect can be offset by other factors like leverage and profitability. Specific findings from Sub-Saharan Africa, as discussed by Zafar et al. (2023) and Aivazian et al. (2003), reveal that the positive impact of firm size on dividend payments is often moderated by unique governance and financial market characteristics. For example, firms in Nigeria's consumer goods sector use dividends not only as a payout mechanism but also as a signal of stability in a volatile economic environment. Overall, while larger firms are generally better positioned to pay dividends due to their financial advantages, the relationship between firm size and dividend policy is influenced by contextual factors such as governance practices, market conditions, and industry characteristics.

Hypothesis 5 (H5): Firm size (log of assets) positively influences the likelihood and magnitude of dividend payments.

2.1.6 Dividend Lag and Dividend Policy

Dividend lag refers to the tendency of dividends to trail behind changes in earnings, driven by managerial caution in altering payouts, especially when reductions are necessary (Lintner, 1956). Additionally, firms are reluctant to cut dividends due to the potential negative signals it could send to the market, which aligns with signalling theory (Brealey, 2020). Numerous studies have explored the impact of dividend lag on corporate dividend strategies. For instance, Al-Kayed (2017) investigated firms in Saudi

Arabia and found that lagged dividends substantially influence current dividend policies. However, their effect is moderated by factors such as managerial ownership and the firm's investment opportunity set. Similarly, Komrattanapanya and Suntraruk (2014) highlighted the critical role of lagged dividends in ensuring the stability of dividend payouts across various industries. Bokpin (2011) argues that firms with strong governance frameworks are more inclined to adopt stable dividend policies, with lagged dividends functioning as an essential tool to align managerial actions with shareholder interests. This finding resonates with Le et al. (2019), who observed that in emerging markets like Vietnam, firms heavily rely on historical dividend patterns to determine future payouts, thereby fostering investor confidence.

Further insights from Hoque (2018) and Sijabat and Anas (2021) reveal that firms operating in industries with volatile earnings frequently use lagged dividends to stabilise payout levels, signalling financial resilience and consistency. Likewise, Wibowo and Setiany (2023) illustrate the enduring relevance of lagged dividends in Malaysia. Even after the enactment of the Malaysian Code on Corporate Governance (MCCG) in 2012, lagged dividends remained a crucial determinant of dividend strategies, underscoring their strategic role in maintaining financial stability and investor trust. Based on the reviewed literature and empirical findings, the following hypothesis is formulated to capture the relationship between dividend lag and dividend policy:

Hypothesis 6 (H6): Dividend lag positively influence likelihood and stability of dividend payments.

3.0 Methodology

This study adopted a quantitative research design with an ex-post facto approach to examine the determinants of dividend payments in Nigeria's consumer goods sector. The ex-post facto design was suitable as it utilised historical financial data to explore the relationships between firm-specific characteristics and dividend payment decisions. This approach was appropriate since the events under investigation dividend payments had already occurred, allowing the study to assess how variables such as profitability (ROA), institutional ownership (INSTOWN), managerial ownership (MOWN), short-term and long-term leverage (SHTLEV and LNGLEV), firm size (SIZE), free cash flow (FCF), and lagged dividend payout (DPR_lag) influenced the likelihood and magnitude of dividend payouts. The primary analytical method employed was panel logistic regression, selected because the dependent variable, DPR_binary, is binary, representing whether firms paid dividends (1) or not (0). Panel logistic regression was ideal for modelling the probability of a binary outcome while accounting for unobserved heterogeneity across firms over time. This approach



provided a better fit than linear regression for binary outcomes and allowed the results to be interpreted in terms of odds ratios, offering actionable insights into how the predictors affected the likelihood of dividend payments.

To ensure robustness, panel Tobit regression was used as a complementary method. Tobit regression accounts for the censored nature of the dividend payout ratio (DPR) for firms that did not pay dividends, addressing the limitations of linear models when dealing with censored data. By incorporating panel data, the Tobit model also controlled for firm-specific effects over time, providing additional insights into the magnitude of dividend payments among firms that distributed dividends.

The study's population comprised all firms listed on the Nigeria Exchange Group (NGX) between 2013 and 2022. The NGX was selected due to its comprehensive representation of firms across various sectors, including consumer goods. The sample was narrowed to firms within the consumer goods sector to provide sector-specific insights, reflecting the unique dynamics and challenges of this vital industry. Using purposive sampling, 180 firms were selected based on the availability of complete and reliable financial data, including annual reports and dividend payout

information. This ensured that the dataset was robust and suitable for the econometric analyses conducted. Data for the study were obtained from secondary sources, including firm annual reports and financial databases such as Bloomberg and Thomson Reuters Eikon. These sources provided detailed information on key financial variables such as ROA, INSTOWN, MOWN, SHTLEV, LNGLEV, TOBINSQ, SIZE, FCF, and DPR_lag. The annual reports also contained data on dividend payments, while market valuation data required for calculating Tobin's Q were extracted from Bloomberg. The variables were derived from balance sheets, income statements, and cash flow statements.

3.1 Variables and Measurements

The study includes two dependent variables and multiple independent variables. The dependent variables are DPR_binary, a binary indicator of whether a firm paid dividends (1) or not (0), and DPR, the continuous dividend payout ratio. The independent variables encompass a range of firm-specific factors measured and defined based on theoretical and empirical evidence. Table 1 summarises the variables, their types, measurements, sources, and a priori expectations, providing a comprehensive framework for the analysis

Table 1: Variables, Measurements, Sources, and A Priori Expectations:

Variable Name	Type	Description	Measurement	Source	A Priori Expectation
DPR_binary	Dependent	Indicates whether a firm paid dividends.	Binary variable: 1 if dividends were paid, 0 otherwise.	Brealey, Myers, & Allen (2019)	Firms with higher profitability or FCF are more likely to pay dividends.
DPR	Dependent	Dividend payout ratio.	Continuous variable: Dividends paid divided by net income.	Fama & French (2001)	Higher profitability, size, and FCF positively influence DPR.
ROA (Profitability)	Independent	Reflects a firm's efficiency in generating profits from its assets.	Net income divided by total assets.	Amidu & Abor (2006); Sucuahi & Cambarihan (2016)	Positive: More profitable firms are expected to pay higher dividends.
INSTOWN	Independent	Percentage of shares held by institutional investors.	Institutional ownership as a percentage of total shares.	Shleifer & Vishny (1997); Mollah et al. (2007)	Positive: Institutional investors demand higher dividends for monitoring.



MOWN	Independent	Percentage of shares owned by the firm's management.	Managerial ownership as a percentage of total shares.	Jensen & Meckling (1976); Denis & Osobov (2008)	Mixed: High MOWN aligns interests but may reduce the need for dividends.
SHTLEV	Independent	Represents the firm's short-term financial obligations.	Short-term debt divided by total assets.	Aivazian et al. (2003); Kale et al. (2002)	Negative: Higher short-term debt reduces dividend flexibility.
LNGLEV	Independent	Represents the firm's long-term	Long-term debt divided by total assets.	Farinha (2003); Komrattanapan ya & Suntraruk (2014)	Negative: Higher long-term leverage
Tobin's Q	Independent	Proxy for firm valuation.	Market value of a firm's assets divided by the replacement cost of those assets.	Meutia et al. (2021); Salim & Susilowati (2020)	Positive: Firms with higher valuations may distribute higher dividends.
SIZE	Independent	Captures the scale and resources available to the firm.	Natural logarithm of total assets.	Bokpin (2011); Zafar (2023)	Positive: Larger firms are more likely to pay and sustain dividends.
FCF	Independent	Cash available for discretionary use.	Operating cash flow minus capital expenditures.	Gunawan et al. (2019); Jensen (1986)	Positive: Higher FCF allows firms to pay higher dividends.
DPR_lag	Independent	Previous year's dividend payout ratio, included to account for persistence in dividend decisions.	Dividend payout ratio of the prior year.	Lintner (1956); Jakob & Nam (2016)	Positive: Lagged dividends reflect stability and predictability.

Source: Author

The variables included in this study are grounded in theoretical predictions and empirical findings from prior research, which provide a baseline for interpreting the relationships between them. For instance, Amidu and Abor (2006) demonstrated a positive relationship between profitability (ROA) and dividend payments in Ghanaian firms, highlighting profitability as a key determinant of dividend policy. Similarly, Shleifer and Vishny (1997) emphasised the role of institutional ownership (INSTOWN) in demanding dividends as a mechanism for monitoring management. Additionally, Lintner (1956) introduced the concept of dividend smoothing, illustrating how lagged dividends (DPR_lag) influence the persistence

of dividend policies over time. These empirical findings ensure that the variables and their measurements are not only relevant but also aligned with established theoretical expectations.

3.2 Model Specification

The logistic regression model was specified as follows:

$$\text{logit}(P(\text{DPR_binary}=1)) = \beta_0 + \beta_1 \text{ROA} + \beta_2 \text{INSTOWN} + \beta_3 \text{MOWN} + \beta_4 \text{SHTLEV} + \beta_5 \text{LNGLEV} + \beta_6 \text{SIZE} + \beta_7 \text{FCF} + \beta_8 \text{DPR_lag} + \epsilon$$

Where:

DPR_binary: Binary dependent variable (1 =



dividend-paying firm, 0 = non-dividend-paying firm).
 β_0 : Intercept.

β_1 to β_8 : Coefficients of the independent variables.
 ϵ : Error term.

For the robustness check using Tobit regression, the model was specified as:

$$DPR = \beta_0 + \beta_1 ROA + \beta_2 INSTOWN + \beta_3 MOWN + \beta_4 SHTLEV + \beta_5 LNGLEV + \beta_6 SIZE + \beta_7 FCF + \beta_8 DPR_lag + \epsilon$$

The logistic regression model was estimated using maximum likelihood estimation (MLE), a standard method for binary outcome models. Robust standard errors were employed to account for potential heteroscedasticity. Odds ratios were computed for each variable, providing insights into how a one-unit change in the independent variable affected the odds of paying dividends. The Tobit regression was estimated to analyse the continuous dividend payout ratio while addressing its censored nature for non-dividend-paying firms. To evaluate the logistic regression model, the pseudo R-squared, log-likelihood ratio test, and Hosmer-Lemeshow goodness-of-fit test were employed. The pseudo R-

squared measured the explanatory power of the model, while the log-likelihood ratio test assessed the significance of the predictors. The Hosmer-Lemeshow test confirmed the model's goodness-of-fit across different groups of firms. For the Tobit model, goodness-of-fit was assessed using log-likelihood values and overall model significance.

4.0 Results and Discussion

Table 2 presents the descriptive statistics for the variables included in the analysis. The dependent variable, Dividend Payout Ratio (DPR), has a mean value of 34.21, indicating that, on average, firms in the sample distribute approximately 34% of their earnings as dividends. The standard deviation of 70.94 highlights significant variation in dividend payouts among firms, with a minimum value of -155.37 (indicating potential losses or adjustments) and a maximum of 695.96. For the binary representation of dividend payments (DPR_binary), the mean value of 0.578 implies that approximately 57.8% of the firms paid dividends during the study period, while 42.2% did not.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
DPR	282	34.207	70.936	-155.372	695.957
DPR binary	282	.578	.495	0	1
ROA	282	2.851	20.428	-235.991	85.446
INSTOWN	282	60.159	22.055	0	98
MOWN	282	11.569	20.175	0	99.062
SHTLEV	282	72.19	205.594	0	1698.911
LNGLEV	282	95.087	253.432	0	2375.038
TOBINSQ	282	3.83	14.159	-.046	159.142
SIZE	280	17.017	1.943	10.956	20.318
DPR lag	250	35.564	71.914	-155.372	695.957

Source: Authors computation

The profitability variable, Return on Assets (ROA), has a mean of 2.85, suggesting that the average firm generates modest returns relative to its total assets. The high standard deviation of 20.43 and the minimum value of -235.99 indicate significant variation in profitability, including firms with considerable losses. The maximum ROA value of 85.45 reflects the most profitable firms in the sector. Ownership structure variables reveal distinct patterns. Institutional Ownership (INSTOWN) has a mean of 60.16%, indicating that institutional investors hold a majority stake in most firms. The variability in institutional ownership is moderate, with a standard deviation of 22.06. On the other hand, Managerial Ownership (MOWN) has a lower mean of 11.57%, suggesting limited direct equity control by firm managers. The standard deviation of 20.17 indicates substantial variation in managerial ownership across firms, ranging from 0% to a maximum of 99.06%.

Leverage variables also display notable dispersion.

Short-Term Leverage (SHTLEV) has a mean of 72.19 and a high standard deviation of 205.59, indicating that some firms rely heavily on short-term debt while others have minimal short-term financial obligations. Similarly, Long-Term Leverage (LNGLEV) has a mean of 95.09 and a standard deviation of 253.43, with some firms having no long-term debt while others are heavily leveraged, as shown by the maximum value of 2375.04. The market valuation variable, Tobin's Q, has a mean of 3.83, suggesting that, on average, firms in the sample are valued at approximately 3.83 times the replacement cost of their assets. The standard deviation of 14.16 reflects considerable variation, with some firms having very low market valuations (minimum -0.05) and others achieving high valuations (maximum 159.14).

The firm size variable, SIZE, measured as the natural logarithm of total assets, has a mean of 17.02 and a relatively low standard deviation of 1.94, indicating



moderate variability in firm size across the sample. The range of values, from a minimum of 10.96 to a maximum of 20.32, reflects the diversity in the scale of operations within the consumer goods sector.

Finally, the lagged dividend payout ratio (DPR_lag) has a mean of 35.56, closely aligned with the mean of the current dividend payout ratio. The standard deviation of 71.91 and the range from -155.37 to 695.96 suggest a consistent pattern of variability over time, underscoring the persistence of dividend behaviours among firms.

4.2 Correlation Matrix

Table 3 presents the pairwise correlation coefficients among the variables used in the study, providing insights into their relationships and potential

multicollinearity concerns. The correlation between the dividend payout ratio (DPR) and its binary counterpart (DPR_binary) is moderately positive (0.498), indicating consistency between the continuous measure of dividend payments and the binary categorisation of whether a firm pays dividends. DPR also shows weak positive correlations with ROA (0.115), Institutional Ownership (INSTOWN) (0.144), and SIZE (0.291). These suggest that firms with higher profitability, greater institutional ownership, and larger firm size are more likely to have higher dividend payouts. Additionally, the correlation between DPR and its lagged value (DPR_lag, 0.341) highlights some persistence in dividend behaviour over time.

Table 3: Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) DPR	1.000										
(2) DPR_binary	0.498	1.000									
(3) ROA	0.115	0.353	1.000								
(4) INSTOWN	0.144	0.182	0.081	1.000							
(5) MOWN	0.051	-0.248	-0.180	-0.256	1.000						
(6) SHTLEV	-0.074	-0.188	-0.439	-0.031	0.347	1.000					
(7) LNGLEV	-0.081	-0.163	-0.052	-0.041	0.043	-0.066	1.000				
(9) SIZE	0.291	0.546	0.324	0.335	-0.337	-0.473	0.030	-0.389	1.000		
(10) FCF	0.151	0.356	0.568	0.110	-0.157	-0.345	-0.119	-0.413	0.300	1.000	
(11) DPR_lag	0.341	0.367	0.096	0.164	0.051	-0.073	-0.065	-0.056	0.320	0.159	1.000

Source: Authors computation

The binary variable for dividend payments, DPR_binary, exhibits a moderate positive correlation with ROA (0.353), indicating that more profitable firms are more likely to pay dividends. A stronger positive correlation exists between DPR_binary and SIZE (0.546), suggesting that larger firms have a higher likelihood of distributing dividends. Additionally, DPR_binary has weak positive associations with INSTOWN (0.182) and DPR_lag (0.367), implying that institutional ownership and past dividend decisions are positively linked to the probability of dividend payments.

Profitability, measured by ROA, demonstrates a strong negative correlation with Short-Term Leverage (SHTLEV) (-0.439), suggesting that more profitable firms tend to rely less on short-term debt financing. A notable negative correlation is also observed between ROA and Tobin's Q (-0.545), indicating that higher profitability firms often have lower market valuation ratios. However, the correlations between ROA and both INSTOWN (0.081) and SIZE (0.324) are weak, suggesting that profitability is not strongly influenced by these factors within the sample.

The ownership structure variables reveal interesting dynamics. INSTOWN is negatively correlated with

Managerial Ownership (MOWN) (-0.256), suggesting that firms with higher institutional ownership tend to have lower managerial ownership. INSTOWN also shows weak positive correlations with DPR (0.144) and SIZE (0.335), indicating that institutional ownership slightly favours dividend payouts and larger firm size. Conversely, MOWN has a weak negative correlation with DPR_binary (-0.248), implying that firms with significant managerial ownership are less likely to pay dividends. MOWN also negatively correlates with SIZE (-0.337), highlighting that managerial ownership is typically lower in larger firms.

Leverage variables show distinct patterns. SHTLEV has a strong positive correlation with Tobin's Q (0.857), suggesting that firms with higher short-term debt often exhibit higher market valuation ratios. Both SHTLEV and Long-Term Leverage (LNGLEV) display weak negative correlations with DPR (-0.074 and -0.081, respectively), indicating that higher leverage slightly reduces dividend payouts. These findings align with the notion that firms with high debt obligations may prioritise debt servicing over dividend distributions.

The market valuation variable, Tobin's Q,



demonstrates a strong positive correlation with SHTLEV (0.857), reinforcing the connection between short-term leverage and market valuation. However, Tobin's Q has a moderate negative correlation with SIZE (-0.389), suggesting that larger firms tend to have lower market valuation ratios. Tobin's Q also shows weak correlations with DPR (0.037) and DPR_binary (-0.114), indicating limited direct influence on dividend behaviour.

Firm size, represented by SIZE, exhibits a moderate positive correlation with DPR (0.291) and a stronger correlation with DPR_binary (0.546), highlighting that larger firms are more likely to pay dividends and in greater amounts. SIZE also has negative correlations with MOWN (-0.337) and SHTLEV (-0.473), suggesting that larger firms tend to have lower managerial ownership and less reliance on short-term debt. Finally, the lagged dividend payout ratio, DPR_lag, is moderately correlated with DPR (0.341) and DPR_binary (0.367), reflecting persistence in dividend payment patterns. However, its weak correlations with other variables suggest that while it captures temporal consistency, it does not strongly relate to profitability, size, or ownership structure.

4.3 Logistic Regression Result

Table 4 presents the results of the Logistic and Tobit regression analyses conducted to examine the determinants of dividend policy in the context of Nigerian consumer goods firms. The Logit model estimates the likelihood of paying dividends (DPR_binary), while the Tobit model evaluates the magnitude of dividend payouts (DPR), accounting for censoring at zero for firms that did not pay dividends. The odds ratios derived from the Logit model are also included in the table, offering insights into the relative likelihood of dividend payments associated with each predictor.

Key variables, such as profitability (ROA), ownership structure (INSTOWN, MOWN), leverage (SHTLEV, LNGLEV), firm size (SIZE), free cash flow (FCF), and lagged dividend payout (DPR_lag), are evaluated across both models. Statistical significance levels are indicated, with asterisks denoting the p-values. This table provides a comprehensive overview of how these variables influence both the probability of paying dividends and the magnitude of dividend payouts, contributing to a deeper understanding of dividend policy determinants in emerging markets.

Table 4: Logistic Regression and Tobit Model Results

Variable	Logit	Logit OR	Tobit R
ROA	0.297 *** (0.058)	1.346 *** (0.078)	1.254 (0.801)
INSTOWN	-0.016 (0.014)	0.984 (0.014)	0.019 (0.373)
MOWN	-0.014 (0.013)	0.986 (0.013)	0.327 (0.819)
SHTLEV	-0.013 ** (0.005)	0.987 ** (0.005)	-0.083 (0.054)
LNGLEV	-0.002 (0.003)	0.998 (0.003)	-0.096 *** (0.032)
FCF	0.865 (1.119)	2.375 (2.657)	46.425 (28.699)
SIZE	0.926 *** (0.210)	2.523 *** (0.529)	23.022 *** (6.499)
DPR_lag	0.011 ** (0.005)	1.011 ** (0.005)	0.374 *** (0.140)
Intercept	-14.817 *** (3.451)	0.000 *** (0.000)	-417.130 *** (134.813)
Insig2u	-0.194 (0.886)	-0.194 (0.886)	
var(e.DPR)			8188.157 (3249.284)
sigma_u	0.908 (0.402)	0.908 (0.402)	
rho	0.200 (0.142)	0.200 (0.142)	
Number of Observations	250	250	250

Source: Authors computation (***p < 0.01, *p < 0.05, p < 0.1)

4.4 Discussion of Findings

The findings of this study offer valuable insights into the determinants of dividend policy, specifically examining the likelihood and magnitude of dividend payments. These results are aligned with established theoretical frameworks such as Signalling Theory, Agency Theory, and Lintner's Dividend Smoothing Theory, while also providing nuanced contributions to the literature on dividend behaviour, particularly in emerging markets like Nigeria.

Profitability, measured by return on assets (ROA), significantly influences the likelihood of paying dividends but does not substantially affect the magnitude of payouts. This finding supports Signalling Theory (Miller & Rock, 1985), which posits that profitable firms use dividend payments to convey financial stability and growth prospects to investors. The significant positive relationship in the Logit model suggests that more profitable firms are better positioned to commit to dividend payments. However, the lack of significance in the Tobit model for payout magnitude aligns with studies highlighting that dividend amounts may depend on factors beyond profitability, such as cash flow availability or leverage (Amidu & Abor, 2006; Ajanthan, 2013).

INSTOWN was not found to significantly influence either the likelihood or magnitude of dividend payments. This result contrasts with the expectations of Agency Theory (Shleifer & Vishny, 1997), which suggests that institutional investors, as sophisticated shareholders, demand higher dividends to mitigate agency conflicts. The lack of significance may reflect weaker governance oversight by institutional investors in emerging markets like Nigeria or a preference for reinvestment over dividend distribution (Le et al., 2019). Similarly, MOWN was also not significant in either model. While Agency Theory (Jensen & Meckling, 1976) predicts that higher managerial ownership reduces the need for dividends by aligning managerial and shareholder interests, this finding suggests that managerial equity stakes in the sample firms may not significantly impact dividend decisions.

Leverage was examined through both short-term and long-term leverage, revealing nuanced effects. Short-term leverage negatively influenced the likelihood of paying dividends, as shown in the Logit model, but did not affect payout magnitude in the Tobit model. This result underscores the constraining role of short-term debt obligations on free cash flow available for dividends. Conversely, long-term leverage significantly reduced the magnitude of payouts, reflecting the burden of long-term financial commitments on dividend policy. These findings align with Agency Theory, which suggests that debt reduces free cash flow available for managerial discretion (Jensen, 1986), but they also highlight differences in

how short-term and long-term obligations affect dividend decisions.

FCF was not a significant determinant of either the likelihood or magnitude of dividend payments. This result contrasts with the expectations of Free Cash Flow Theory (Jensen, 1986), which posits that surplus cash should be distributed to mitigate agency costs. The insignificance of FCF in this study suggests that firms may prioritise other uses for available cash, such as reinvestment or debt reduction, particularly in an emerging market context. This aligns with studies like Zafar (2023), which highlighted mixed results for FCF's impact on dividends in smaller firms versus larger, more stable entities.

SIZE, measured as the natural logarithm of total assets, was a consistently significant determinant of both the likelihood and magnitude of dividend payments. Larger firms are more likely to pay dividends and distribute higher amounts, reflecting their financial stability, resource availability, and reduced information asymmetry. These findings are in line with Signalling Theory and empirical works by Amidu & Abor (2006) and Jakob & Nam (2016), which emphasise the critical role of firm size in shaping dividend policy. Larger firms are better positioned to manage dividend payments, even in challenging economic conditions, making size a reliable predictor of dividend behaviour.

DPR_lag were significant in both the Logit and Tobit models, demonstrating persistence in dividend policy. This finding supports Lintner's Dividend Smoothing Theory (1956), which posits that firms aim to maintain stable dividend policies to manage investor expectations and avoid negative market reactions. The significance of lagged dividends across models highlights the importance of past payout patterns in shaping current dividend decisions, aligning with studies such as Denis & Osobov (2008) and Wibowo & Setiany (2023), which emphasise the role of historical consistency in dividend behaviour.

4.5 Implications of Findings

The findings of this study hold significant theoretical and practical implications for corporate managers, investors, policymakers, and academic researchers. They provide a nuanced understanding of the factors driving dividend decisions in Nigeria's consumer goods sector and offer insights into broader dividend policy dynamics in emerging markets.

Implications for Corporate Managers

- i. **Profitability as a Key Driver:** The positive relationship between profitability (ROA) and dividend payments underscores the need for managers to prioritise sustainable profitability. Firms that consistently generate higher profits are better positioned to pay dividends, which can

enhance shareholder confidence and attract long-term investors. Managers should focus on operational efficiency and strategic cost management to maintain robust profitability levels.

- ii. **Importance of Firm Size:** The strong impact of firm size on dividend likelihood and magnitude suggests that larger firms have a comparative advantage in paying dividends due to their financial stability and access to resources. Managers of smaller firms seeking to attract dividend-seeking investors should consider strategies to grow their asset base and revenue streams over time, potentially through mergers, acquisitions, or strategic partnerships.
- iii. **Managing Leverage:** The negative influence of short-term leverage on dividend payments highlights the need for prudent debt management. Managers must strike a balance between leveraging debt for growth and maintaining sufficient liquidity for dividend distribution. High short-term debt obligations can constrain a firm's ability to pay dividends, potentially eroding investor confidence.
- iv. **Dividend Policy Persistence:** The significance of lagged dividend payouts (DPR_lag) suggests that managers should carefully consider historical dividend patterns when designing future dividend policies. Abrupt changes or inconsistencies in dividend payments can signal instability to investors, potentially affecting firm valuation. Establishing a predictable and stable dividend policy can enhance investor trust and attract long-term capital.

Implications for Investors

1. **Profitability and Size as Investment Signals:** For dividend-seeking investors, the findings indicate that firms with higher profitability and larger sizes are more likely to pay dividends. These attributes can serve as reliable signals when evaluating investment opportunities, particularly in emerging markets where governance challenges and market volatility may complicate decision-making.
2. **Short-Term Leverage as a Risk Indicator:** Investors should closely examine a firm's leverage profile, particularly short-term debt, as high leverage levels may limit the firm's capacity to sustain dividend payments. This is especially critical in industries with cyclical revenue patterns, where short-term financial pressures can significantly impact dividend policies.
3. **Historical Dividend Payments:** The persistence of dividend behaviour suggests that investors can use a firm's dividend history as a benchmark for future expectations. Firms with a consistent track record of paying dividends are likely to continue

doing so, providing a measure of predictability in returns.

Implications for Policymakers

- i. **Corporate Governance Enhancement:** The weak influence of ownership structure on dividend decisions highlights potential governance inefficiencies in the Nigerian consumer goods sector. Policymakers should consider implementing regulations that strengthen the role of institutional investors in corporate oversight, as seen in developed markets where institutional ownership significantly influences dividend policies.
- ii. **Debt Market Regulation:** The negative impact of short-term leverage on dividend behaviour suggests that policymakers should focus on creating a balanced debt market that allows firms to manage short-term obligations effectively. Regulatory frameworks that promote access to affordable long-term financing could alleviate the pressure on firms to divert funds from dividends to debt servicing.
- iii. **Incentives for Dividend Stability:** Policymakers could introduce measures that encourage firms to adopt stable dividend policies. Tax incentives for consistent dividend-paying firms, for example, could motivate companies to prioritise shareholder returns while maintaining fiscal discipline.

Implications for Academic Research

- i. **Theoretical Contributions:** The findings enrich the literature on dividend policy by validating the relevance of profitability and firm size as primary determinants in an emerging market context. The study also underscores the limited role of ownership structure and free cash flow in dividend decisions, challenging assumptions derived from developed market studies.
- ii. **Methodological Advancements:** By employing logistic and Tobit regression models, this study addresses methodological gaps in the literature, providing robust tools for analysing both the likelihood and magnitude of dividend payments. Future research can build on these approaches to explore other factors influencing dividend policies in emerging markets.
- iii. **Emerging Market Dynamics:** The results highlight the unique financial and governance conditions in emerging markets like Nigeria, offering a foundation for comparative studies across different economies. Researchers are encouraged to examine how cultural, regulatory, and macroeconomic factors interact with firm-specific characteristics to shape dividend policies.

Broader Implications for Emerging Markets

The findings reflect the broader realities of dividend

policy in emerging markets, characterised by financial constraints, evolving governance structures, and market volatility. They emphasise the need for tailored strategies that account for these unique challenges while leveraging the potential of emerging markets to offer attractive returns to investors. By addressing these dynamics, firms, investors, and policymakers can collectively contribute to the development of robust and transparent financial systems that support sustainable growth and equitable wealth distribution.

5. Conclusion and Recommendations

This study investigates the determinants of dividend policy in Nigeria's consumer goods sector, focusing on the likelihood and magnitude of dividend payments. By employing logistic regression (fixed and random effects), Tobit regression, and odds ratio analysis, the findings reveal profitability (ROA) and firm size (SIZE) as the most consistent and significant predictors of dividend behaviour. Profitability and firm size positively influence dividend payments, highlighting their importance in enhancing shareholder returns. Short-term leverage (SHTLEV) negatively impacts dividend behaviour, underscoring the need for firms to balance debt obligations with their capacity to pay dividends. Historical patterns of dividend payouts (DPR_lag) demonstrate the persistence of dividend policies, reflecting the tendency of firms to maintain consistency in their financial practices.

Conversely, institutional ownership (INSTOWN), managerial ownership (MOWN), free cash flow (FCF), and long-term leverage (LNGLEV) exhibit weak or non-significant effects on dividend behaviour. The mixed results for Tobin's Q suggest that market valuation influences the magnitude of dividend payouts but has limited impact on the likelihood of dividend payments. These findings provide valuable insights into dividend decision-making in an emerging market context, addressing theoretical and methodological gaps in the literature and offering practical implications for stakeholders.

The findings offer several actionable recommendations for corporate managers, investors, and policymakers. Corporate managers should prioritise profitability and growth by ensuring operational efficiency and adopting strategies that sustain long-term profitability. Firms with higher profitability are better positioned to maintain consistent dividend payouts, which enhance investor confidence. Managers should also aim to strengthen financial stability by growing firm size through strategic mergers, acquisitions, or partnerships. Larger firms benefit from economies of scale and greater financial resources, making them more likely

to pay dividends. Furthermore, managers should adopt prudent debt management practices to minimise the constraints imposed by short-term leverage, ensuring sufficient liquidity for shareholder returns.

For investors, the study highlights the importance of focusing on firms with strong profitability, larger size, and a history of consistent dividend payments. These factors reliably predict a firm's capacity to pay dividends and should guide investment decisions in dividend-seeking portfolios. Additionally, investors should carefully evaluate a firm's debt structure, particularly its short-term leverage, as higher debt obligations may limit the likelihood of dividend payments.

Policymakers should consider strengthening corporate governance frameworks to enhance the role of institutional investors in monitoring and influencing dividend policies. In emerging markets like Nigeria, where governance structures may be less developed, institutional ownership can play a critical role in aligning managerial decisions with shareholder interests. Policymakers should also promote access to long-term financing through regulatory measures, reducing firms' reliance on short-term debt and creating more opportunities for dividend distribution. Additionally, introducing incentives for firms with stable dividend histories could encourage consistency in dividend policies, fostering investor confidence and enhancing capital market stability.

5.1 Limitations and Suggestion for Future Research

Despite its contributions, the study has several limitations. First, it focuses exclusively on the consumer goods sector, which may limit the generalisability of the findings to other industries with distinct financial and operational characteristics. Second, the analysis spans the period from 2013 to 2022, potentially overlooking longer-term trends or the impact of major economic disruptions. Third, the measures of institutional and managerial ownership may not fully capture complexities such as cross-holdings, foreign ownership, or the influence of activist shareholders. Additionally, the study does not account for macroeconomic factors, such as inflation or monetary policy, which can significantly influence dividend decisions. Finally, while logistic and Tobit regressions are robust tools, they may not fully capture non-linear relationships or interactive effects among variables.

Future research should expand the scope of analysis to include other sectors and regions, enabling a more comprehensive understanding of dividend policy determinants. Comparative studies between Nigeria and other emerging markets, such as South Africa or Kenya, could uncover regional differences in

corporate financial behaviour. Incorporating macroeconomic variables such as GDP growth, interest rates, and inflation would provide a broader perspective on how external factors influence dividend decisions. Employing advanced methodologies, such as dynamic panel models or machine learning techniques, could uncover complex relationships and improve the robustness of future analyses. Additionally, exploring the role of Environmental, Social, and Governance (ESG) factors in dividend policies would address the growing importance of sustainability in corporate finance. Lastly, analysing dividend policies during economic crises, such as the COVID-19 pandemic, could provide valuable insights into corporate resilience and adaptive financial strategies.

This study contributes to the growing body of research on dividend policy in emerging markets by identifying key determinants and addressing gaps in the literature. The findings emphasise the importance of firm-specific characteristics, such as profitability and size, in shaping dividend decisions, while also highlighting the constraints imposed by leverage. Policymakers, investors, and corporate managers can draw actionable insights from this research to make informed decisions that align with shareholder value creation and market stability. Future research directions offer opportunities to deepen and broaden the understanding of dividend policy, further enriching the discourse on corporate finance in emerging markets.

REFERENCES

- Adefila, J. J., Oladipo, J. A., & Adoeti, J. O. (2000). The Effect of Dividend Policy on the Market Price of Shares in Nigeria: Case Study of Fifteen Quoted Companies. *Journal of Accounting and Finance*, 1961.
- Aivazian, V., Booth, L., & Cleary, S. (2003). Do emerging market firms follow different dividend policies from U.S. firms? *Journal of Financial Research*, 26(3). <https://doi.org/10.1111/1475-6803.00064>
- Al-Ajmi, J., & Abo Hussain, H. (2011). Corporate dividends decisions: evidence from Saudi Arabia. *The Journal of Risk Finance*, 12(1), 4 – 6. <https://doi.org/10.1108/15265941111100067>
- Al-Kayed, L. T. (2017). Dividend payout policy of Islamic vs conventional banks: case of Saudi Arabia. *International Journal of Islamic and Middle Eastern Finance and Management*, 10(1). <https://doi.org/10.1108/IMEFM-09-2015-0102>
- Al-Najjar, B., & Belghitar, Y. (2011). Corporate cash holdings and dividend payments: Evidence from simultaneous analysis. *Managerial and Decision Economics*, 32(4). <https://doi.org/10.1002/mde.1529>
- Amidu, M., & Abor, J. (2006). Determinants of dividend payout ratios in Ghana. *Journal of Risk Finance*, 7(2), 136–145. <https://doi.org/10.1108/15265940610648580>
- Benyadi, F. C., & Andrianantenaina, H. (2020). Profitability, Liquidity, Leverage and Firm Size on Dividend Payment. *Perspektif Akuntansi*, 3(2), 155–166.
- Bhattacharya, S. (1979). Imperfect information, dividend policy, and "the bird in the hand" fallacy. *The Bell Journal of Economics*, 259–270.
- Bokpin, G. A. (2011). Ownership structure, corporate governance and dividend performance on the Ghana Stock Exchange. *Journal of Applied Accounting Research*, 12(1). <https://doi.org/10.1108/09675421111130612>
- Brealey, R. A., M. S. C., & A. F. (2020). *Principles of corporate finance*. (13th ed.). McGraw Hill.
- Chen, Z., Cheung, Y. L., Stouraitis, A., & Wong, A. W. S. (2005). Ownership concentration, firm performance, and dividend policy in Hong Kong. *Pacific Basin Finance Journal*, 13(4), 431 – 449. <https://doi.org/10.1016/j.pacfin.2004.12.001>
- DeAngelo, H., & DeAngelo, L. (2006). The irrelevance of the MM dividend irrelevance theorem. *Journal of Financial Economics*, 79(2). <https://doi.org/10.1016/j.jfineco.2005.03.003>
- DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: a test of the life-cycle theory. *Journal of Financial Economics*, 81(2). <https://doi.org/10.1016/j.jfineco.2005.07.005>
- Denis, D. J., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial Economics*, 89(1). <https://doi.org/10.1016/j.jfineco.2007.06.006>
- Faccio, M., Lang, L. H. P., & Young, L. (2001). Dividends and expropriation. *American Economic Review*, 91(1), 54–78.
- Farinha, J. (2003). Dividend policy, corporate governance and the managerial entrenchment hypothesis: An empirical analysis. *Journal of Business Finance and Accounting*, 30(9–10). <https://doi.org/10.1111/j.0306-686X.2003.05624.x>
- Ghosh, A., & Jain, P. C. (2000). Financial leverage changes associated with corporate mergers. *Journal of Corporate Finance*, 6(4). [https://doi.org/10.1016/S0929-1199\(00\)00007-9](https://doi.org/10.1016/S0929-1199(00)00007-9)
- Gunawan, K. E., R. Murhadi, W., & Herlambang, A.

- (2019). *The effect of good corporate governance on dividend policy*. <https://doi.org/10.2991/insyma-19.2019.15>
- Ham, C. G., Kaplan, Z. R., & Leary, M. T. (2020). Do dividends convey information about future earnings? *Journal of Financial Economics*, 136(2), 547–570. <https://doi.org/10.1016/j.jfineco.2019.10.006>
- Hoque, M. A. (2018). Impulse of dividend payment decision: Evidence from pharmaceutical industry in Bangladesh. *International Journal of Financial Research*, 9(1). <https://doi.org/10.5430/ijfr.v9n1p219>
- Jakob, K., & Nam, Y. (2020). Heaping on Dividends: The Role of Dividend Size and Information Uncertainty. *Journal of Behavioral Finance*, 21(1), 14–26. <https://doi.org/10.1080/15427560.2019.1587763>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Komrattanapanya, P., & Suntraruk, P. (2014). Factors Influencing Dividend Payout in Thailand: A Tobit Regression Analysis. *International Journal of Accounting and Financial Reporting*, 3(2), 255. <https://doi.org/10.5296/ijaf.v3i2.4443>
- Le, T. T. H., Nguyễn, X. H., & Tran, M. D. (2019). Determinants of Dividend Payout Policy in Emerging Markets: Evidence From the ASEAN Region. *Asian Economic and Financial Review*, 9(4), 531–546. <https://doi.org/10.18488/journal.aefr.2019.94.531.546>
- Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes. *The American Economic Review*, 46(2), 97–113.
- Michael C. Jensen. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323–329.
- Mollah, A. S., Keasey, K., & Short, H. (2000). The Influence of Agency Costs on Dividend Policy in an Emerging Market: Evidence from the Dhaka Stock Exchange. *The Financial Review*, 1(1).
- Nizar Al-Malkawi, H. A. (2007). Determinants of Corporate Dividend Policy in Jordan: An Application of the Tobit Model. In *Journal of Economic and Administrative Sciences* (Vol. 23, Issue 2). <https://doi.org/10.1108/10264116200700007>
- Rubio, G., Jakob, K., Castillo, A., & Niño, J. (2023). Why do firms heap dividends? New evidence on the key role of firm characteristics. *Journal of Corporate Accounting and Finance*, 34(3), 80–95. <https://doi.org/10.1002/jcaf.22612>
- Sijabat, J., & Anas, E. P. (2021). *Determinants of Dividend Policy of Indonesian Companies: A Panel Data Analysis*. <https://doi.org/10.4108/eai.22-7-2020.2307873>
- Wibowo, A., & Erna Setiany. (2023). The Importance of Traits of Board of Commissioners, company Size, Profitability and Free Cash Flow in Affecting the Dividend Policy. *Journal of Accounting and Finance Management*, 3(6). <https://doi.org/10.38035/jafm.v3i6.168>
- Zafar, S., Khan, N. M., & Waqas, M. (2023). Dividend Payout Determinants in Small and Medium-Sized Manufacturing Firms: An Empirical Analysis. *Contemporary Issues in Social Sciences and Management Practices*, 4(4). <https://doi.org/10.61503/cissmp.v2i4.95>