DIVIDEND POLICY AS MODERATOR OF FIRM VALUE DETERMINANTS

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Abstract- This study is to analyze the influence of leverage, firm size, and profitability on firm value, with dividend policy as moderator. Secondary data were used, consisting of financial reports gathered from the Indonesia Stock Exchange (IDX). The study's population consists of 67 firms listed in the LQ45 Index between 2019-2023. By applying purposive sampling, 19 companies chosen, resulting in 95 total observations. The data analysis utilized is multiple linear regression incorporating a moderating variable (Moderated Regression Analysis/MRA), performed on panel data using EViews 13 software. The selection of the analytical model was validated through the Chow Test, the Hausman Test, and the Lagrange Multiplier Test. The findings indicate that leverage has a negative effect on firm value, while profitability has a positive effect. In contrast, firm size has no significant effect on firm value , the findings indicate that dividend policy moderates the relationship between profitability and firm value. However, dividend policy does not moderate the relationship between leverage or firm size and firm value. These findings suggest that while dividend policy can enhance the positive impact of profitability on firm value, it is insufficient to mitigate the negative effect of leverage or to strengthen the insignificant impact of firm size on firm value
Keywords: Firm Value; Leverage; Firm Size; Profitability; Dividend Policy

1. INTRODUCTION

1.1 Research Background

The rapid evolution of the global economy and heightened market volatility have pushed firms to consistently improve their firm value as a means to sustain competitiveness and operational viability. Firm value serves not only as a measure of a company's performance but also as a reflection of investor confidence regarding its future outlook. It represents the wealth of shareholders and acts as a crucial indicator for assessing corporate performance within capital markets. Generally, higher firm value signals stronger market confidence in the firm's ability to sustain long-term profitability and growth (Brigham & Houston, 2020). One widely used metric to evaluate firm value is Tobin's Q, which measures the ratio between a firm's market value and the replacement cost of its assets. A Tobin's Q greater than one suggests that the firm is valued more highly by the market than the cost of its assets, often reflecting strong future growth expectations and effective management performance (Horne & Wachowicz, 2012).

This study specifically examines companies listed in the LQ45 Index from 2019 to 2023, encompassing the pre-pandemic, pandemic, and post-pandemic economic contexts. The LQ45 index was selected due to its composition of highly liquid stocks with large market capitalizations and relatively stable financial performance, making it a representative benchmark for capturing market reactions to internal corporate factors.

Several factors influencing firm value have been extensively examined in the financial literature. Leverage, for instance, reflects the extent to which a company utilizes debt in its capital structure. According to the trade-off theory, an optimal capital structure is achieved when the tax benefits of debt financing are balanced against the risk of bankruptcy (Brealey et al., 2019). In this study, leverage is measured using the Debt to Equity Ratio (DER), which represents the proportion of total liabilities relative to shareholders' equity. Empirical findings on the effect of leverage on firm value are mixed. Studies by Halawa.et al. (2024); Panjaitan and Suprapti (2023); Akustika and Wikartika (2023); Lestari (2023); Wardani et al. (2023); Susanti et al. (2023); Damayanti and Sucipto (2022); Prakoso (2022); Wahid et al. (2022); Bon and Handoko (2022); and Margono and Gantino (2021) report a positive relationship between leverage and firm value. In contrast, other studies by Ripaluddin et al. (2023); Inrawan and Lie (2024); Diana and Munandar (2023); Wardani et al. (2023); Surasmi and Putra (2022); and Darmawan et al. (2020) find a negative effect of leverage on firm value. Meanwhile, research by Faradila and Effendi (2023); Buti and Wiyarni (2023); Tahu and Susilo (2017) concludes that leverage has no significant effect on firm value.

Furthermore, firm size, measured using the natural logarithm of total assets (Ln Total Assets), is another important variable. Larger firms typically exhibit greater business diversification, stronger reputations, and easier access to external financing sources. Firm size is also commonly associated with operational stability and growth potential. However, the relationship between firm size and firm value has produced mixed empirical findings. Studies by Lestari (2023); Diana and Munandar (2023); Wardani (2023); and Atiningsih and Izzaty (2021) report a positive relationship between firm size and firm value. In contrast, research by Wahid et al. (2022) and Susanti and Restiana (2018) finds a negative effect of firm size on firm value. Meanwhile, studies by Halawa et al. (2024); Inrawan and Lie (2024); Prakoso et al. (2022); Bon and Hartono (2022); and Margono and Gantino (2021) conclude that firm size does not have a significant effect on firm value.

Another factor influencing firm value is profitability, which in this study is measured by Return on Assets (ROA). ROA reflects the efficiency with which a company utilizes its assets to generate profits. A high ROA indicates the company's strong ability to leverage its resources to produce optimal returns. The effect of profitability on firm value has been supported by numerous studies, including Halawa et al. (2024); Inrawan and Lie (2024); Lestari (2023); Faradilla and Effendi (2023); Buti and Wiyarni (2023); Susanti et al. (2023); Diana and Munandar (2023); Surasmi and Putra (2022); Damayanti and Sucipto (2022); Prakoso et al. (2022); Bon and Hartoko (2022); Margono and Gantino (2021); Atiningsih and Izzaty (2021); Darmawan et al. (2020); and Tahu and Susilo (2017), all of which find that profitability positively affects firm value. In contrast, research by Panjaitan and Supriati (2023) suggests that profitability negatively affects firm value, while Pratiwi et el. (2023) Ripaluddin et al. (2023); Nurwulandari et al. (2021) Reschiwati et al. (2020) concludes that profitability does not significantly affect firm value.

Nevertheless, the relationships among leverage, firm size, profitability, and firm value are not always linear. One of the variables that may moderate these relationships is dividend policy, commonly measured by the Dividend Payout Ratio (DPR), representing the proportion of net income distributed to shareholders. According to signaling theory, dividends function as a positive signal from management to the market, conveying the firm’s financial stability and favorable outlook. Research conducted by Akustika and Wikartika (2023), Surasmi and Putra (2022), Halawa et al. (2024), Susanti et al. (2023); and Darmawan et al. (2020) demonstrates that dividend policy can moderate the relationship between leverage and firm value, whereas

studies by Buti and Wiyarni (2023), Diana and Munandar (2023), Wardani et al. (2023), and Damayanti and Sucipto (2022) report that dividend policy has no such moderating effect.

Moreover, the moderating role of dividend policy in the relationship between firm size and firm value also shows mixed results. Studies by Atiningsih and Izzaty (2021) found that dividend policy successfully moderates this relationship, while Halawa et al. (2024); Diana and Munandar (2023); Wardani et al. (2023); and Tahu and Susilo (2017) found no significant moderating effect. Similarly, the relationship between profitability and firm value, moderated by dividend policy, has produced inconsistent findings. Studies by Pratiwi et al. (2023), Susanti et al. (2023), Diana and Munandar (2023), Surasmi and Putra (2022); and Darmawan et al. (2020) support the moderating role of dividend policy in this context. Conversely, research by Halawa et al. (2024), Buti and Wiyarni (2023), and Damayanti and Sucipto (2022) found that dividend policy does not moderate the effect of profitability on firm value.

This study introduces a novelty by integrating dividend policy as a moderating variable in analyzing the influence of leverage, firm size, and profitability on firm value among companies listed in the LQ45 index. While previous studies have extensively examined the direct effects of financial factors on firm value, limited research has explored how dividend policy may alter these relationships, particularly in the context of emerging markets such as Indonesia. By focusing on LQ45 firms, which represent Indonesia's most liquid and high-performing companies, this research offers new empirical evidence on the conditional role of dividend policy, thereby contributing to a more nuanced understanding of firm value determinants. It is expected that this research will offer both practical and theoretical contributions. Practically, the findings may assist financial managers in formulating strategies that enhance firm value. Theoretically, this study enriches the literature on the determinants of firm value by incorporating the specific context of the Indonesian capital market. The primary objective of this study is to identify and examine the influence of leverage, firm size, and profitability on firm value, with dividend policy serving as a moderating variable. This approach aims to provide a more comprehensive understanding of strategies to enhance firm value within the Indonesian stock market environment.

1.2 Literature Review

1.2.1 Signaling Theory

Signaling theory explains that corporate management possesses superior information regarding the firm's condition and future prospects compared to external parties. Therefore, mechanisms are needed to convey this information to investors. One such mechanism is dividend policy. Companies that consistently distribute dividends send a positive signal to the market that they have healthy cash flows and stable profit prospects. According to Brigham and Houston (2020), investors positively respond to dividends as a strong financial signal, while Sudana (2015) emphasizes that dividend distribution enhances investor perception of a company's performance and stability. Hence, dividends not only function as a means of profit distribution but also serve as a communication tool that influences firm value in the capital market.

1.2.2 Trade-Off Theory

The trade-off theory posits that firms seek to achieve an optimal capital structure by balancing the benefits of debt usage—such as interest tax shields—against the financial costs incurred, including bankruptcy risk. Brigham and Houston (2020) argue that firms do not strictly avoid debt or rely solely on internal financing, but rather aim to establish an efficient combination of debt and equity. Sudana (2015) similarly notes that firms typically consider

profitability, cash flow stability, and investment needs when making capital structure decisions. Therefore, trade-off theory provides a fundamental framework for explaining how capital structure choices influence overall firm value.

1.2.3 Modigliani and Miller Theory

According to Modigliani and Miller (1961), in a perfect market without taxes or information asymmetry, dividend policy does not affect firm value, a concept known as the dividend irrelevance theory. However, in real-world markets, dividend policy may influence investor perception through signaling effects and its interaction with internal factors. Recent studies suggest that dividend policy can moderate the impact of leverage, profitability, and firm size on firm value, especially in emerging markets where information gaps are more prevalent (Brigham & Houston, 2020; Akustika & Wikartika, 2023). This study adopts the MM framework by positioning dividend policy as a moderating variable that may shape how financial fundamentals influence firm value, measured by Tobin's Q.

1.2.4 Firm Value

Firm value reflects the overall market perception of a company's worth and its ability to generate future cash flows. A higher firm value indicates stronger investor confidence and better performance prospects. One widely accepted market-based proxy to measure firm value is Tobin's Q, which compares the market value of a firm's assets to their replacement cost. A Tobin's Q greater than 1 suggests that the market values the firm more than the cost of its assets, indicating expectations of strong growth and profitability (Brigham & Houston, 2020).

1.2.5 Dividend Policy

Dividend policy is a strategic financial decision regarding the proportion of earnings distributed to shareholders versus those retained for reinvestment. Beyond its conventional role in distributing profits, dividend policy also acts as a moderating variable that can influence how internal factors, such as leverage, firm size, and profitability affect firm value. In signaling theory, consistent dividend payments signal management's confidence in future earnings, thereby strengthening investor perception. When high profitability is accompanied by stable dividends, the positive impact on firm value may be more pronounced. Empirical evidence supports this moderating effect: Akustika and Wikartika (2023) found that dividend policy moderates the effect of leverage on firm value, while Diana and Munandar (2023) and Pratiwi et al. (2023) observed that dividend policy strengthens the relationship between profitability and firm value.

1.2.6 Leverage

Leverage can enhance firm value when used optimally, as debt provides tax advantages through interest deductibility (tax shield). However, excessive leverage raises the risk of bankruptcy and increases interest burdens, potentially reducing firm value if not managed carefully (Brigham & Houston, 2020). Sudana (2015) emphasizes that the Debt to Equity Ratio (DER) is a key indicator for assessing a firm's capital structure and the management's efficiency in handling financing sources. A balanced DER reflects a healthy financial structure, while a high DER indicates a substantial debt burden that may raise concerns among investors. Thus, DER as a measure of leverage plays a vital role in evaluating a company's financial health and risk, which ultimately impacts its market value.

1.2.7 Firm Size

According to Brigham and Houston (2020), larger firms generally have broader access to funding sources, greater capacity for business diversification, and enhanced operational stability, making them appear more secure to investors and thereby increasing firm value. Large size is often associated with advantages in economies of scale, market reputation, and stronger bargaining power. Firm size measured by the natural logarithm (Ln) of total assets serves as an indicator that reflects the scale of operations and the resources owned by a company. The use of the natural logarithm aims to normalize the variable and reduce data skewness in statistical analysis. Sudana (2015) adds that firm size influences capital structure and financial policy, where large companies tend to be more flexible in managing funding and profit distribution. Therefore, Ln total assets, as a proxy for firm size, plays a crucial role in explaining performance and risk heterogeneity among firms, ultimately impacting firm value from the investor's perspective.

1.2.8 Profitability

Profitability is widely recognized as a fundamental measure of a company's financial performance, highlighting how effectively it turns operational activities into profits. Higher profitability not only indicates operational efficiency and effectiveness in asset management, but also functions as a favorable indicator for investors when assessing a company's future potential. Profitability also significantly influences decisions related to dividends and financial structuring. A common metric for evaluating profitability is Return on Assets (ROA), which measures a company's capacity to utilize its total assets to generate net income. According to Brigham and Houston (2020), ROA demonstrates managerial efficiency in asset use and directly connects to investor interest and market performance. Furthermore, Sudana (2015) asserts that sustained high profitability signals steady cash flows and a company's capability to meet obligations and distribute dividends, thereby reinforcing its market value.

1.3. Hypothesis Development

1.3.1 The Effect of Leverage on Firm Value

Leverage is a critical component of a firm's capital structure that can influence firm value, depending on how the company manages associated risks and how the market perceives its debt policies. According to trade-off theory, firms aim to balance the tax advantages of debt (tax shields) with the increased risk of financial distress. An optimal level of leverage can enhance firm value when used effectively (Brealey et al., 2019). From the perspective of agency theory, high leverage can serve as a disciplinary mechanism against managerial opportunism, as the obligation to make interest payments forces managers to use funds more prudently. Meanwhile, signaling theory suggests that high levels of leverage can be interpreted either positively or negatively depending on the firm's condition; if the firm can fulfill its debt obligations smoothly, it sends a positive signal to the market about the firm's future prospects (Ross et al., 2021). Brigham and Houston (2020) assert that leverage can increase firm value when used to finance productive projects that yield returns exceeding the cost of capital. Similarly, Sudana (2015) explains that efficiently managed leverage may positively affect firm value, whereas excessive leverage can heighten financial risk and erode investor confidence. Empirical studies such as Ripaluddin et al. (2023); Inrawan and Lie (2024); Diana and Munandar (2023); Wardani et al. (2023); Surasmi and Putra (2022); and Darmawan et al. (2020) have found that leverage has a negative effect on firm value. Based on the above theoretical and empirical insights, the following hypothesis is proposed:

H_1: Leverage has a negative effect on firm value.

1.3.2 The Effect of Firm Size on Firm Value

Firm size is an important indicator that reflects economies of scale, operational stability, and broader access to financial resources, all of which are theoretically associated with firm value. According to trade-off theory, larger firms generally face lower bankruptcy risk and enjoy easier access to external financing at a lower cost, which can enhance firm value (Brealey et al., 2019). From the perspective of agency theory, large firms often face greater managerial complexity and potential conflicts of interest; however, more established monitoring structures and greater transparency can reduce agency risks and increase investor trust. Meanwhile, signaling theory suggests that large firm size may serve as a positive signal to investors regarding market strength, earning capacity, and long-term resilience (Ross et al., 2021). Brigham and Houston (2020) assert that larger firms tend to be more liquid, more diversified, and better positioned to endure economic downturns, making them more attractive to investors and contributing to higher market value. Similarly, Sudana (2015) argues that firm size correlates positively with corporate reputation and profitability, which can strengthen positive market perceptions. Empirical studies such as Lestari (2023); Diana and Munandar (2023); Wardani (2023); and Atiningsih and Izzaty (2021) have found that firm size has a positive effect on firm value. Based on the theoretical and empirical evidence above, the following hypothesis is proposed:

H_2: Firm size has a positive effect on firm value.

1.3.3 The Effect of Profitability on Firm Value

Profitability is a key indicator of a company's efficiency and financial performance and is widely believed to have a significant impact on firm value. Within the framework of trade-off theory, highly profitable firms tend to avoid excessive use of debt, as they can finance their investment needs internally. This reduces the risk of bankruptcy and ultimately enhances firm value (Brealey et al., 2019). According to agency theory, high profitability reflects effective management of company resources, which can reduce conflicts between managers and shareholders, while simultaneously increasing market confidence in the firm's corporate governance. Meanwhile, signaling theory posits that firms capable of maintaining high profitability send a strong positive signal to investors regarding their stability and future prospects, which in turn increases the firm's market value (Ross et al., 2021). Brigham and Houston (2020) emphasize that high profitability demonstrates a company's ability to generate returns from its assets, thereby creating greater value for shareholders. In line with this, Sudana (2015) argues that consistent profitability not only reflects managerial performance but also serves as a crucial factor in attracting investor interest and enhancing firm value. Empirical findings from studies such as Halawa et al. (2024); Inrawan and Lie (2024); Lestari (2023); Faradilla and Effendi (2023); Buti and Wiyarni (2023); Susanti et al. (2023); Diana and Munandar (2023); Surasmi and Putra (2022); Damayanti and Sucipto (2022); Prakoso et al. (2022); Bon and Hartoko (2022); Margono and Gantino (2021); Atiningsih and Izzaty (2021); Darmawan et al. (2020); and Tahu and Susilo (2017) have provided consistent evidence that profitability has a positive effect on firm value. Based on this theoretical foundation, the following hypothesis is proposed:

H_3: Profitability has a positive effect on firm value.

1.3.4 The Effect of Leverage on Firm Value Moderated by Dividend Policy

Within the framework of trade-off theory, firms aim to balance the tax advantages of debt (tax shields) with the increasing risk of financial distress associated with high leverage, making optimal capital structure decisions essential for maximizing firm value (Brealey et al., 2019). However, agency theory adds that high debt levels may trigger conflicts between managers and bondholders, and in this context, dividend policy can serve as an additional disciplinary mechanism that reduces the likelihood of fund misuse. According to signaling theory, dividend policy functions as a communication tool through which management signals the company's financial stability and future prospects to investors. Firms that continue to distribute dividends despite high leverage send a positive signal that they possess strong cash flows and sound financial management. Brigham and Houston (2020) emphasize that consistent dividend payments can enhance market confidence in a firm, even when the capital structure is heavily reliant on debt. Similarly, Sudana (2015) highlights that a stable dividend policy can alleviate investor concerns regarding the risks of leverage and reinforce the company's image as a financially responsible entity. Therefore, dividend policy has the potential to moderate the relationship between leverage and firm value. Empirical studies by Akustika and Wikartika (2023), Surasmi and Putra (2022), Halawa et al. (2024), Susanti et al. (2023); and Darmawan et al. (2020) have shown that dividend policy can moderate the influence of leverage on firm value. Based on this reasoning, the following hypothesis is proposed:

H_4: Dividend policy moderates the effect of leverage on firm value.

1.3.5 The Effect of Firm Size on Firm Value Moderated by Dividend Policy

The effect of firm size on firm value may be moderated by dividend policy, as both variables play a crucial role in shaping investor perceptions. According to the trade-off theory, larger firms generally face lower bankruptcy risk and enjoy lower financing costs, enabling them to enhance firm value through economies of scale and operational efficiency (Brealey et al., 2019). From the perspective of agency theory, large firms typically have more complex organizational structures and monitoring systems, which may increase the potential for agency conflicts. However, a consistent dividend policy can help mitigate such conflicts by channeling excess cash to shareholders. In addition, signaling theory suggests that dividend policy serves as a signal of a firm's credibility and financial stability to the market. Large firms that consistently distribute dividends can reinforce their image as stable and trustworthy entities. Brigham and Houston (2020) emphasize that large firms with stable dividend policies are more likely to gain favorable market perceptions due to their strong earnings capacity and commitment to shareholders. Similarly, Sudana (2015) notes that large firms have greater capabilities in maintaining liquidity and consistently distributing dividends, which in turn can increase firm value. Therefore, dividend policy may strengthen the relationship between firm size and firm value. Studies by Atiningsih and Izzaty (2021) have empirically shown that dividend policy can moderate the effect of firm size on firm value. Based on this rationale, the following hypothesis is proposed:

H_5: Dividend policy moderates the effect of firm size on firm value.

1.3.6 The Effect of Profitability on Firm Value Moderated by Dividend Policy

The effect of profitability on firm value has the potential to be moderated by dividend policy, as both variables convey important signals regarding a firm's financial performance and future prospects. According to the trade-off theory, highly profitable firms tend to rely on internal financing to avoid debt-related costs and the risk of financial distress, which can ultimately enhance firm value (Brealey et al., 2019). In the context of agency theory, high

profitability reflects managerial efficiency in utilizing assets, but retained earnings that are not distributed may trigger agency conflicts if managers misuse excess cash. In this regard, dividend policy functions as a disciplinary mechanism by distributing profits to shareholders, thereby reducing potential conflicts. Furthermore, signaling theory emphasizes that dividend payments made by profitable firms serve as a strong signal to investors regarding the stability of earnings and the company's positive outlook. Brigham and Houston (2020) also highlight that firms maintaining high profitability while consistently distributing dividends are more likely to gain greater market trust, which positively affects firm value. This view aligns with Sudana (2015), who argues that high earnings should be complemented by appropriate dividend policies to optimally enhance firm value. Empirical studies conducted by Pratiwi et al. (2023), Susanti et al. (2023), Diana and Munandar (2023), Surasmi and Putra (2022); and Darmawan et al. (2020) have provided evidence that dividend policy can moderate the relationship between profitability and firm value. Based on the above discussion, the following hypothesis is proposed:

H_6: Dividend policy moderates the effect of profitability on firm value.

1.4 Framework

Based on the theoretical framework, previous studies, and the research problems formulated as the basis for hypothesis development, the conceptual framework of this study is presented in the following research model, as illustrated in Figure 1 below

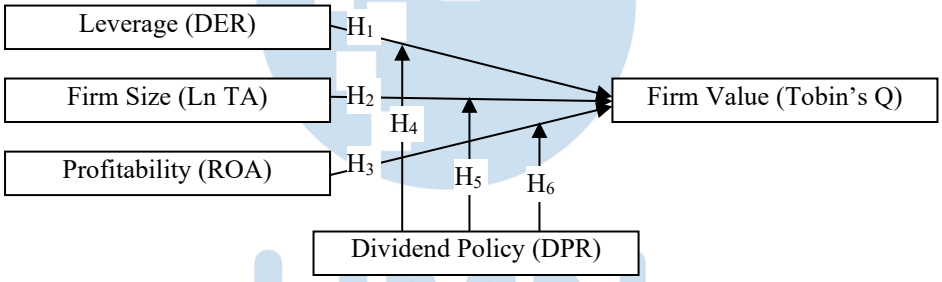

Figure 1 Conceptual Model Method
Source: Processing Data (2025)

2. RESEARCH METHODOLOGY

2.1 Methodology

This study employs a quantitative approach with an explanatory method, aiming to examine the causal relationship between leverage, firm size, profitability, dividend policy, and firm value. The data used in this research are secondary data in the form of financial statements obtained from the Indonesia Stock Exchange (IDX) and the official websites of the sampled companies. The population of this study consists of 67 companies included in the LQ45 Index on the Indonesia Stock Exchange during the 2019–2023 period.

2.2 Data Analysis Technique

The data analysis technique employed in this study is multiple linear regression with a moderating variable, using the Moderated Regression Analysis (MRA) approach. The analysis was conducted using panel data and processed with EViews 13 software. Panel data analysis was chosen because the dataset includes multiple companies (cross-sections) observed over several years (time series). This method is used to control for unobserved heterogeneity across entities and to provide more efficient and unbiased estimates compared to using either cross-

sectional or time-series data alone. Prior to regression analysis, model selection tests were conducted, including the Chow Test (to choose between the Fixed Effect Model [FEM] and Common Effect Model [CEM]), the Hausman Test (to compare FEM and Random Effect Model [REM]), and the Lagrange Multiplier Test (to compare REM and CEM).

2.3 Definition Operasional Variables

In this study, firm value is the dependent variable, while dividend policy is treated as the moderating variable. The independent variables consist of leverage, firm size, and profitability. The operational definitions of the variables are presented in Table 2 below

Table 1 Definition Operasional Variables

Variable	Definisition	Measuremen	Scala
Leverage	The large or small amount of debt used by a company that is used to finance its operational activities. (Jihadi et al., 2021)	$DER = \frac{Total\ Debt}{Total\ Equity}$ (Jihadi et al., 2021; Prakoso et al., 2022)	Ratio
Firm Size	The size of the total assets owned by the company (Jihadi et al., 2021)	Firm Size = Ln (Total Asset) (Jihadi et al., 2021)	Ratio
Profitability	The level of net profit that can be achieved by the company when running its operations. (Jihadi et al., 2021)	$ROA = \frac{Earning\ After\ Tax\ (EAT)}{Total\ Assets}$ (Jihadi et al., 2021)	Ratio
Dividend policy	DPR is a ratio calculated by comparing dividends per share with earnings per share. (Bon & Hartoko, 2022)	$DPR = \frac{Dividend\ per\ share}{Earning\ per\ share}$ (Bon & Hartoko, 2022)	Ratio
Firm Value	A standard measure used to assess firm value is Tobin's Q, which is the ratio of the company's market value of assets (market capitalization) to the replacement cost of the company's assets (Inrawan & Lie, 2024)	$TOBIN'S\ Q = \frac{MVE + DEBT}{TA}$ (Inrawan & Lie, 2024)	Ratio

Source: Processed Data (2025)

3. RESULT AND DISCUSSION

3.1 Descriptive Statistics

Based on purposive sampling, 19 companies met the criteria for this study. Given the five-year research period, a total of 95 observations were obtained. The following presents the descriptive statistics of the research sample.

Table 2 Deskriptive Statistics

	DER	SIZE	ROA	DPR	TOB_Q
Mean	1.821579	32.47259	0.094821	0.600691	2.048567
Median	0.810000	32.34696	0.066200	0.475800	1.234675
Maximum	6.630000	35.31545	0.454300	3.839400	16.26333
Minimum	0.170000	30.42479	0.003700	0.019900	0.531228
Std. Dev.	2.065803	1.491168	0.088623	0.501969	2.535644
Skewness	1.238925	0.464000	1.795651	3.407579	3.939272
Kurtosis	2.850526	1.979141	6.164786	20.66947	19.27579
Jarque-Bera	24.39158	7.534046	90.69856	1419.682	1294.267

	DER	SIZE	ROA	DPR	TOB_Q
Probability	0.000005	0.023121	0.000000	0.000000	0.000000
Sum	173.0500	3084.896	9.008000	57.06560	194.6138
Sum Sq. Dev.	401.1489	209.0168	0.738281	23.68547	604.3722
Observations	95	95	95	95	95

Source: Secondary Data (Processed, 2025)

Based on Table 3, the minimum value of Leverage (DER) is 0.170000, observed in KLBF in 2023. The maximum value is 6.630000, recorded by BBNI in 2021. The average (mean) value is 1.821579 with a standard deviation of 2.065803. Since the standard deviation exceeds the mean (2.065803 > 1.821579), this indicates that the Leverage (DER) variable exhibits a high degree of variability and the data are not homogeneous.

The minimum value of Firm Size (SIZE) is 30.42479, shown by ITMG in 2020, while the maximum value is 35.31545, observed in BMRI in 2023. The average value is 32.47259 and the standard deviation is 1.491168. As the standard deviation is smaller than the mean (1.491168 < 32.47259), this suggests that the SIZE variable is relatively homogeneous, indicating a well-distributed dataset with low variability.

The minimum value of Profitability (ROA) is 0.003700, recorded by BBNI in 2020, and the maximum is 0.454300, observed in ITMG in 2022. The mean value is 0.094821, with a standard deviation of 0.088623. Since the standard deviation is lower than the mean (0.088623 < 0.094821), the ROA variable is also considered homogeneous, with a good distribution and low variability.

The minimum value of Dividend Policy (DPR) is 0.019900, recorded by PTBA in 2023, while the maximum value is 3.839400, shown by BBCA in 2021. The average value is 0.600691 with a standard deviation of 0.501969. Because the standard deviation is less than the mean (0.501969 < 0.600691), the DPR variable shows homogeneity, indicating a good distribution and low variability in the data.

The minimum value of Firm Value (Tobin's Q) is 0.531228, found in ANTM in 2021, while the maximum value is 16.26333, recorded by UNVR in 2019. The mean is 2.048567, and the standard deviation is 2.535644. Since the standard deviation is greater than the mean (2.535644 > 2.048567), this implies that the Tobin's Q variable is not homogeneous, indicating high variability in the dataset.

3.2 Normality Test

Structure I: The Effect of Leverage, Firm Size, and Profitability on Firm Value

Table 3 Results of Normality Test Structure I

Long-run Normality Test Date: 07/08/25 Time: 21:07 Sample: 2019 2023 Included observations: 95		
	Statistic	Prob.
Skewness	0.606511	0.272088
Skewness 3/5	1.989146	0.023343
Kurtosis	1.438641	0.075126
Normality	2.957905	0.227876

Source: Secondary Data (Processed, 2025)

Based on the normality test, the probability value is 0.227876, which is greater than 0.05, indicating that the data are normally distributed.

Structure II: The Effect of Leverage, Firm Size, and Profitability on Firm Value Moderated by Dividend Policy

Table 4 Results of Normality Test Structure II

Long-run Normality Test Date: 07/08/25 Time: 21:07 Sample: 2019 2023 Included observations: 95		
	Statistic	Prob.
Skewness	0.358258	0.360075
Skewness 3/5	0.924121	0.177712
Kurtosis	1.782182	0.03736
Normality	3.139731	0.208073

Source: Secondary Data (Processed, 2025)

Based on the normality test, the probability value is 0.208073, which is greater than 0.05, indicating that the data are normally distributed.

3.3 Multicollinearity Test

Structure I: The Effect of Leverage, Firm Size, and Profitability on Firm Value

Table 5 Results of Multicollinearity Test Structure I

Variance Inflation Factors Date: 07/08/25 Time: 21:58 Sample: 1 95 Included observations: 95			
	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
C	39.28857	1416.101	NA
DER	0.015604	4.241197	2.374952
SIZE	0.037910	1443.831	3.006317
ROA	5.096850	3.079402	1.427670

Source: Secondary Data (Processed, 2025)

Based on the multicollinearity test, it is found that the Variance Inflation Factor (VIF) values for all variables in this study are less than 10 (VIF < 10). Therefore, it can be concluded that none of the variables exhibit multicollinearity.

Structure II: The Effect of Leverage, Firm Size, and Profitability on Firm Value Moderated by Dividend Policy

Table 6 Results of Multicollinearity Test Structure II

Variance Inflation Factors Date: 07/08/25 Time: 22:00 Sample: 1 95 Included observations: 95			
	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
C	40.06167	1456.998	NA
DER	0.016132	4.424094	2.477369
SIZE	0.038352	1473.859	3.068841
ROA	5.053444	3.080732	1.428287
DPR	0.115546	2.564011	1.047712

Source: Secondary Data (Processed, 2025)

Based on the multicollinearity test, it is found that the Variance Inflation Factor (VIF) values for all variables in this study are less than 10 (VIF < 10). Therefore, it can be concluded that none of the variables exhibit multicollinearity.

3.4 Model Selection Analisys

3.4.1 Structure I: The Effect of Leverage, Firm Size, and Profitability on Firm Value

1. Chow Test

Table 7 Results of Chow Test for Structure I

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	17.923260	(18,73)	0.0000
Cross-section Chi-square	160.549181	18	0.0000

Source: Secondary Data (Processed, 2025)

Based on the Chow Test, the Cross-section F value is 0.0000 (< 0.05), indicating that the appropriate model is the Fixed Effect Model.

2. Hausman Test

Table 8 Results of Hausman Test for Structure I

Correlated Random Effects - Hausman Test Equation: Untitled Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	22.284808	3	0.0001

Source: Secondary Data (Processed, 2025)

Based on the Hausman Test, the Cross-section random value is 0.0001 (< 0.05), which also supports the selection of the Fixed Effect Model.

3. Lagrange Multiplier (LM) Test

Table 9 Results of Lagrange Multiplier (LM) Test for Structure I

Lagrange Multiplier Tests for Random Effects Null hypotheses: No effects Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives			
	Test Hypothesis		
	Crosssection	Time	Both
Breusch-Pagan	80.21036	0.144666	80.35503
	(0.0000)	(0.7037)	(0.0000)

Source: Secondary Data (Processed, 2025)

Based on the Breusch-Pagan result from the Lagrange Multiplier (LM) Test is 0.0000 (< 0.05), suggesting that the Random Effect Model is preferred.

Considering the results of the Chow Test, Hausman Test, and LM Test, it can be concluded that the most appropriate model for this study is the Fixed Effect Model.

3.4.2 Structure II: The Effect of Leverage, Firm Size, and Profitability on Firm Value Moderated by Dividend Policy

1. Chow Test

Table 10 Results of Chow Test for Structure II

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	8.278029	(18,69)	0.0000
Cross-section Chi-square	109.288883	18	0.0000

Source: Secondary Data (Processed, 2025)

Based on the Chow Test, the Cross-section F value is 0.0000 (< 0.05), indicating that the appropriate model is the Fixed Effect Model.

2. Hausman Test

Table 11 Results of Hausman Test for Structure II

Correlated Random Effects - Hausman Test Equation: Untitled Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	26.054862	7	0.0005

Source: Secondary Data (Processed, 2025)

Based on the Hausman Test, the Cross-section random value is 0.0005 (< 0.05), which also supports the selection of the Fixed Effect Model.

3. Lagrange Multiplier (LM) Test

Table 12 Results of Lagrange Multiplier (LM) Test for Structure II

Lagrange Multiplier Tests for Random Effects Null hypotheses: No effects Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives			
	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	29.47789	0.316886	29.79478
	(0.0000)	(0.5735)	(0.0000)

Source: Secondary Data (Processed, 2025)

Based on the Breusch-Pagan result from the Lagrange Multiplier (LM) Test is 0.0000 (< 0.05), suggesting that the Random Effect Model is preferred.

Considering the results of the Chow Test, Hausman Test, and LM Test, it can be concluded that the most appropriate model for this study is the Fixed Effect Model.

3.5 Panel Data Regression Analysis

3.5.1 Structure I: The Effect of Leverage, Firm Size, and Profitability on Firm Value

Table 13 Panel Data Regression Results for Structure I

Dependent Variable: TOB_Q Method: Panel Least Squares Date: 07/08/25 Time: 21:46 Sample: 2019 2023 Periods included: 5 Cross-sections included: 19 Total panel (balanced) observations: 95				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	33.07461	15.31252	2.159972	0.0341
DER	-0.820012	0.339819	-2.413087	0.0183
SIZE	-0.923081	0.478194	-1.930349	0.0574
ROA	4.666914	2.032537	2.296103	0.0245
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.926772	Mean dependent var		2.048567
Adjusted R-squared	0.905706	S.D. dependent var		2.535644
S.E. of regression	0.778628	Akaike info criterion		2.537174
Sum squared resid	44.25710	Schwarz criterion		3.128598
Log likelihood	-98.51576	Hannan-Quinn criter.		2.776154
F-statistic	43.99445	Durbin-Watson stat		1.304263
Prob(F-statistic)	0.000000			

Source: Secondary Data (Processed, 2025)

Based on Table 14, the regression equation is as follows:

$$TOB\_Q = 33.07461 - 0.820012*DER - 0.\ 0.923081*SIZE + 4.666914*ROA$$

The regression coefficient for leverage (DER) is -0.820012 with a probability value of 0.0183 (< 0.05), indicating that leverage has a significantly affect firm value. Therefore, Hypothesis 1 (H1) is accepted. The regression coefficient for firm size (SIZE) is -0.923081 with a probability value of 0.0574 (> 0.05), suggesting that firm size does not have a significant effect on firm value. Thus, Hypothesis 2 (H2) is rejected. The regression coefficient for

profitability (ROA) is 4.666914 with a probability value of 0.0245 (< 0.05), indicating that profitability has a significantly influence firm value. Accordingly, Hypothesis 3 (H3) is accepted. Furthermore, the Adjusted R-squared value is 0.905706, meaning that leverage, firm size, and profitability collectively explain 90.57% of the variation in firm value, while the remaining 9.43% is attributed to other factors not included in the model.

3.5.2 Structure II: The Effect of Leverage, Firm Size, and Profitability on Firm Value Moderated by Dividend Policy

Table 14 Panel Data Regression Results for Structure II

Dependent Variable: TOB_Q Method: Panel Least Squares Date: 07/08/25 Time: 21:54 Sample: 2019 2023 Periods included: 5 Cross-sections included: 19 Total panel (balanced) observations: 95				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	39.52649	15.91216	2.484043	0.0154
DER	-0.731698	0.336530	-2.174247	0.0331
SIZE	-1.116450	0.494498	-2.257744	0.0271
ROA	-4.934260	3.200834	-1.541555	0.1278
DPR	-4.545111	12.09878	-0.375667	0.7083
DER_DPR	0.125055	0.248717	0.502802	0.6167
SIZE_DPR	0.101024	0.380411	0.265565	0.7914
ROA_DPR	19.82040	4.552649	4.353597	0.0000
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.944392	Mean dependent var		2.048567
Adjusted R-squared	0.924244	S.D. dependent var		2.535644
S.E. of regression	0.697907	Akaike info criterion		2.346136
Sum squared resid	33.60812	Schwarz criterion		3.045092
Log likelihood	-85.44148	Hannan-Quinn criter.		2.628567
F-statistic	46.87286	Durbin-Watson stat		1.846590
Prob(F-statistic)	0.000000			

Source: Secondary Data (Processed, 2025)

Based on Table 15, the regression equation is as follows:

$$TOB\_Q = 39.52649 - 0.731698*DER - 1.116450*SIZE - 4.934260*ROA - 4.545111*DPR + 0.125055*DER\_DPR + 0.101024*SIZE\_DPR + 19.82040*ROA\_DPR$$

The regression coefficient for leverage (DER) moderated by dividend policy (DER_DPR) is 0.125055 with a probability value of 0.6167 (> 0.05), indicating that dividend policy does not moderate the effect of leverage on firm value. Therefore, Hypothesis 4 (H4) is rejected. The regression coefficient for firm size (SIZE) moderated by dividend policy (SIZE_DPR) is 0.101024 with a probability value of 0.7914 (> 0.05), indicating that dividend policy does not moderate the effect of firm size on firm value. Thus, Hypothesis 5 (H5) is rejected. The regression coefficient for profitability (ROA) moderated by dividend policy (ROA_DPR) is 19.82040 with a probability value of 0.0000 (< 0.05), indicating that dividend policy significantly moderates the effect of profitability on firm value. Hence, Hypothesis 6

(H6) is accepted. Furthermore, the Adjusted R-squared value is 0.924244, which implies that leverage, firm size, and profitability collectively explain 92.42% of the variance in firm value, while the remaining 7.58% is influenced by other factors not included in the model.

3.6. Discussion

3.6.1 The Effect of Leverage on Firm Value

The results of this study indicate that leverage, as measured by the Debt to Equity Ratio (DER), has a significant negative effect on firm value. In other words, the higher the proportion of debt in the capital structure, the lower the firm's value as reflected by Tobin's Q. This finding suggests that investors perceive excessive debt as an increase in financial risk and a potential threat to future operational sustainability. Theoretically, this outcome aligns with the frameworks of trade-off theory and signaling theory.

According to trade-off theory, firms may benefit from the use of debt due to the tax shield on interest payments. However, when the DER exceeds the optimal threshold, bankruptcy costs, agency conflicts, and reduced financial flexibility begin to outweigh the benefits, ultimately lowering firm value (Brigham & Houston, 2020; Sudana, 2015). From the perspective of signaling theory, high leverage may send a negative signal to the market, particularly if the firm lacks the sustainable capacity to meet its debt obligations. In the context of Indonesia's capital market—which is characterized by a high degree of information asymmetry—investors tend to interpret large amounts of debt as an indication of financial weakness rather than strength (Brigham & Houston, 2020; Sudana, 2015).

Several recent studies support these findings. Ripaluddin et al. (2023) found that high DER significantly reduces the firm value of manufacturing companies due to increased investor risk perceptions. Inrawan and Lie (2024) similarly reported that a highly leveraged capital structure negatively affects Tobin's Q, especially when not accompanied by strong profitability. Diana and Munandar (2023) asserted that leverage limits a firm's flexibility in making strategic decisions, thus negatively impacting market perception. Wardani et al. (2023) emphasized that an aggressive capital structure—indicated by high DER—amplifies cash flow uncertainty and undermines investor confidence. Likewise, Surasmi and Putra (2022), along with Darmawan et al. (2020), concluded that excessive leverage serves as a negative signal that decreases firm value, particularly among publicly listed companies in Indonesia. Collectively, these studies conclude that as the proportion of debt relative to equity increases, investors tend to assign lower valuations to firms due to concerns over financial risk and the burden of fixed obligations, such as interest and principal repayments, which in turn reduce market expectations regarding future firm performance.

As noted by Sudana (2015), DER is a key indicator of the health of a company's capital structure. A balanced DER indicates efficient debt management, whereas an excessively high DER reduces investor confidence by signaling over-reliance on external financing.

Therefore, the results of this study provide empirical evidence that even companies listed in the LQ45 index must exercise caution in managing their debt. An overly aggressive capital structure (high DER) can erode firm value, particularly if not accompanied by sound risk management and a clear outlook for profitability.

3.6.2 The Effect of Firm Size on Firm Value

The results of this study indicate that firm size, as measured by the natural logarithm of total assets (Ln Total Assets), does not have a significant effect on firm value measured by Tobin's Q. This finding suggests that the scale of a company's operations, as proxied by total assets, does not necessarily translate into higher market valuation in the context of firms listed

in the LQ45 index. Theoretically, this outcome can be interpreted through the lenses of the signaling theory and trade-off theory.

According to signaling theory, large firm size may convey a positive signal to the market, implying stronger reputation, greater market power, and lower default risk. However, when such size is not accompanied by superior profitability, efficiency, or innovation, it may fail to generate positive investor sentiment or enhance firm value (Brigham & Houston, 2020). In markets characterized by asymmetric information, such as Indonesia, investors may be more sensitive to indicators of firm performance rather than size alone.

From the perspective of the trade-off theory, larger firms typically enjoy better access to capital markets and have a more diversified risk profile. Nevertheless, if their scale is not managed effectively, or if it results in bureaucratic inefficiencies and agency problems, the expected advantages of firm size may not materialize in increased firm value (Sudana, 2015). Additionally, large firms might also face challenges such as inflexible cost structures or difficulties in responding swiftly to market dynamics, which may erode their perceived value in the eyes of investors.

This result is consistent with the empirical findings of several recent studies. Halawa et al. (2024) found that firm size did not significantly influence firm value, particularly in capital-intensive industries. Similarly, Inrawan and Lie (2024) concluded that although larger firms possess resource advantages, these do not automatically lead to higher market valuation unless complemented by robust profitability. Prakoso et al. (2022) observed that large asset bases could sometimes be associated with declining marginal returns, especially in firms experiencing stagnant growth. Bon and Hartoko (2022) noted that in certain sectors, firm size has limited explanatory power for investor perception and stock performance. Margono and Gantino (2021) emphasized that firm size must be accompanied by strategic agility and operational efficiency to positively impact firm value.

Brigham and Houston (2020) also assert that while size can provide financial stability and economies of scale, it is the strategic deployment of those advantages—rather than size itself—that determines firm valuation. Sudana (2015) concurs, stating that firm size is a contextual variable whose impact depends on other managerial, financial, and industry-specific factors.

In summary, the absence of a significant relationship between firm size and firm value in this study underscores the importance of qualitative aspects of firm management and performance. Large size alone, without effective governance, efficiency, and profitability, may not suffice to enhance firm value in the capital markets, particularly under the scrutiny of informed investors.

3.6.3 The Effect of Profitability on Firm Value

The results of this study indicate that profitability, as measured by Return on Assets (ROA), has a significant positive effect on firm value, as reflected by Tobin’s Q. This finding reinforces the notion that the higher a firm's ability to generate profits from its total assets, the greater the market's appreciation of the firm's value. Profitability serves as a primary indicator that reflects managerial efficiency in utilizing assets and sends a positive signal to investors regarding the firm’s potential for long-term growth and stability. This result also affirms that a firm's efficiency in managing its assets to generate profits is a key determinant in building investor confidence and enhancing market attractiveness. Theoretically, this finding is consistent with both the signaling theory and the trade-off theory.

From the perspective of signaling theory, high profitability constitutes a positive signal sent by management to the market, indicating sound financial prospects, operational efficiency,

and the ability to create sustainable added value (Brigham & Houston, 2020). This signal becomes particularly important in markets characterized by high levels of information asymmetry, such as Indonesia, where investors rely heavily on financial indicators to assess a company's future potential. A high ROA suggests that the firm is capable of generating profits from its assets, thereby fostering a positive perception of its market value.

From the trade-off theory perspective, high profitability enhances a firm's internal financing capability, reducing its dependence on external debt financing, which could otherwise increase the risk of bankruptcy. This implies that profitable firms enjoy greater financial flexibility and lower financial risk, which ultimately strengthens firm value (Sudana, 2015).

These findings are supported by numerous prior studies that consistently demonstrate the positive impact of ROA on firm value. For example, Halawa et al. (2024) and Inrawan and Lie (2024) found that ROA plays a crucial role in driving the increase of Tobin's Q, particularly in the banking sector and among LQ45 companies in Indonesia. Lestari (2023) and Faradilla & Effendi (2023) reported that highly profitable companies are more trusted by investors due to their ability to generate stable and sustainable cash flows. Buti & Wiyarni (2023) and Susanti et al. (2023) emphasized that profitability is a key variable that strengthens financial structure and enhances corporate image in the eyes of the market. Diana & Munandar (2023) and Surasmi & Putra (2022) also found that ROA directly influences firm value by reflecting the effectiveness of management strategies in asset optimization. Similarly, studies by Damayanti & Sucipto (2022), Prakoso et al. (2022), Bon & Hartoko (2022), and Margono & Gantino (2021) concluded that high profitability not only boosts investor confidence but also strengthens a firm's competitiveness in capital markets. Earlier studies, such as those by Atiningsih & Izzaty (2021), Darmawan et al. (2020), and Tahu & Susilo (2017), have consistently provided evidence that ROA plays a critical role in determining market assessments of a firm's long-term performance. These collective findings generally conclude that firms with higher ROA tend to have greater market valuations, as the profits generated from asset utilization serve as a fundamental indicator of market trust.

Brigham and Houston (2020) also explain that investors evaluate firms based on their ability to generate earnings from their assets. If a firm demonstrates consistently high ROA performance, it is considered efficient in capital utilization and deserving of a premium valuation in the market. Similarly, Sudana (2015) emphasizes that profitability is the principal benchmark in assessing operational success, which is ultimately reflected in increased firm value.

Thus, the results of this study provide strong empirical evidence that, in the context of LQ45 companies in Indonesia, profitability is a key variable that significantly and positively influences market perceptions of firm value. This finding highlights the importance for companies to continually improve operational efficiency and financial performance to gain value recognition from capital market investors.

3.6.4 The Effect of Leverage on Firm Value Moderated by Dividend Policy

The results of this study indicate that dividend policy does not moderate the relationship between leverage, as measured by the Debt to Equity Ratio (DER), and firm value, as reflected by Tobin's Q. This finding suggests that a firm's decision to distribute dividends to shareholders is insufficient to alter the negative effect of high leverage on market perception of firm value. In other words, a high level of debt continues to be perceived as a financial risk by investors, despite the presence of dividend payments.

From a theoretical perspective, signaling theory posits that dividends function as a positive signal from management to the market, indicating strong financial prospects and operational stability. However, in this case, the positive signal conveyed by dividends appears inadequate to offset the negative signal associated with high leverage. Investors are likely to prioritize the financial risks posed by excessive debt—such as interest obligations and bankruptcy risk—over the optimism conveyed through dividend payments.

According to trade-off theory, leverage can enhance firm value by providing tax advantages from interest deductibility. However, when DER exceeds its optimal level, the associated bankruptcy costs, agency problems, and reduced financial flexibility outweigh these tax benefits (Brigham & Houston, 2020; Sudana, 2015). Under such conditions, dividend policy is unlikely to counterbalance the deteriorating impact of excessive leverage on firm value.

Furthermore, Modigliani and Miller (1961) assert that in a perfect market, dividend policy is irrelevant to firm value. Although this theory has been extended in the presence of market imperfections—such as asymmetric information and agency costs, particularly prevalent in emerging markets like Indonesia—this study's findings indicate that dividend policy does not play a significant moderating role. The dominating signal perceived by investors comes from leverage levels, rather than from the company's dividend payouts.

This finding is supported by several previous studies. Buti and Wiyarni (2023) concluded that dividend policy fails to mitigate the negative effect of leverage on firm value, as investors are more sensitive to debt-related risk than to short-term shareholder returns. Diana and Munandar (2023) also revealed that dividend policy does not strengthen the relationship between leverage and firm value, especially when the capital structure is unhealthy. Similarly, Wardani et al. (2023) emphasized that firms with high DER continue to experience valuation declines despite consistent dividend distribution. Damayanti and Sucipto (2022) also noted that dividend payout is insufficient to alter investor perceptions of risk arising from high leverage, particularly when not supported by strong profitability or operational efficiency.

Overall, this study provides important empirical evidence that, in the context of LQ45 companies listed on the Indonesia Stock Exchange, dividend policy does not serve as an effective buffer in mitigating the negative impact of high leverage on firm value. This underscores the managerial implication that maintaining a sound capital structure is more critical for enhancing firm value than relying solely on dividend policy to influence investor perceptions.

3.6.5 The Effect of Firm Size on Firm Value Moderated by Dividend Policy

The results of this study indicate that dividend policy, as measured by the Dividend Payout Ratio (DPR), does not moderate the relationship between firm size, proxied by the natural logarithm of total assets (Ln Total Assets), and firm value, as measured by Tobin's Q. This finding suggests that firm size alone does not necessarily determine market valuation, and that dividend distribution decisions are not strong enough to amplify or alter the influence of firm size on market perception.

Theoretically, under signaling theory, larger firms are expected to convey positive signals to the market regarding their reputation, stability, and long-term resilience. Similarly, dividend payments are interpreted as signals that a company possesses sufficient cash flows and stable future prospects (Brigham & Houston, 2020). However, if a large firm lacks managerial efficiency, adequate profitability, or a clear investment strategy, these signals may not be strong enough to influence market perception—regardless of whether dividends are distributed. This issue is exacerbated in capital markets like Indonesia, where information asymmetry remains

high, prompting investors to rely more heavily on actual performance indicators rather than formal signals such as firm size or dividend payouts.

From the perspective of trade-off theory, large firms tend to enjoy advantages in risk diversification and greater access to external financing. Nevertheless, these benefits can diminish if not accompanied by efficient strategic management. In theory, DPR should bridge investor confidence through profit distribution, but the study's findings show that such distributions are insufficient to enhance firm value when firm size is not managed productively (Sudana, 2015).

Furthermore, according to the Modigliani and Miller (1961) theory, in a perfect market, dividend policy is irrelevant to firm value. While this theory has been widely debated in the context of market imperfections, the current findings are in line with M&M's proposition, as they reveal that dividend policy does not significantly moderate the effect of firm size on firm value.

This result is supported by several prior studies. Halawa et al. (2024) found that firm size does not necessarily affect firm value, particularly in capital-intensive industries. Buti and Wiyarni (2023) emphasized that dividend policy does not automatically improve the relationship between firm size and firm value, especially in market conditions sensitive to financial risk. Damayanti and Sucipto (2022) further asserted that dividend policy only has a significant impact when combined with solid financial performance, and not solely determined by firm size.

In conclusion, this study highlights the importance for companies not to rely solely on dividend policy to enhance firm value. Instead, firms should also focus on how firm size is strategically managed in order to deliver tangible contributions toward improving investor confidence and market valuation.

3.6.6. The Effect of Profitability on Firm Value Moderated by Dividend Policy

The findings of this study indicate that dividend policy, measured by the Dividend Payout Ratio (DPR), significantly moderates the relationship between profitability, as measured by Return on Assets (ROA), and firm value, as measured by Tobin's Q. This suggests that firms with high profitability tend to experience greater enhancement in firm value when accompanied by an appropriate dividend distribution policy. In other words, the distribution of profits to shareholders serves as an additional signal that reinforces market confidence in the firm's long-term prospects.

From the perspective of signaling theory, the combination of high profitability and consistent dividend payments sends a strong positive signal to investors, indicating that the firm is not only efficient in generating profits but also financially sound enough to distribute part of its earnings (Brigham & Houston, 2020). Dividend payments by profitable firms enhance the market's perception of stability, transparency, and the management's commitment to shareholder interests. This is particularly relevant in the context of the Indonesian capital market, where information asymmetry remains high and dividend policy becomes a crucial tool in reducing investor uncertainty.

In line with trade-off theory, firms with high profitability have greater internal capacity to finance operations and investments without relying on external funding. Under such circumstances, dividend payments do not compromise financial flexibility; rather, they enhance corporate reputation and investor perception of firm value (Sudana, 2015). Thus, firms that are both profitable and committed to regular dividend distributions are generally more highly valued by the market.

According to Modigliani and Miller's (1961) dividend irrelevance theory, in a perfect market, dividend policy has no effect on firm value. However, in real-world imperfect markets such as Indonesia's, dividend policy serves as a mechanism to mitigate information asymmetry. The results of this study thus challenge the M&M proposition and reinforce the practical importance of dividend policy as a strategic tool in shaping investor perception.

Several empirical studies support these findings. Pratiwi et al. (2023) and Susanti et al. (2023) found that dividend payout significantly strengthens the effect of ROA on firm value, suggesting that investors place higher value on firms that manage earnings efficiently and share profits with shareholders. Diana and Munandar (2023), as well as Surasmi and Putra (2022), also concluded that profitability contributes more meaningfully to firm value when accompanied by healthy dividend practices. Darmawan et al. (2020) added that consistent dividend policy in profitable firms increases market trust in the firm's long-term outlook.

In conclusion, the results of this study provide empirical evidence that dividend policy plays a critical role as a moderating variable that enhances the influence of profitability on firm value. This finding underscores the importance for firms not only to improve operational efficiency but also to manage their dividend policies strategically to gain greater recognition and valuation from the capital market.

4. CONCLUSION

Based on the results of the analysis and discussion, it was found that leverage, as measured by the Debt to Equity Ratio (DER), has a negative effect on firm value, while profitability, measured by Return on Assets (ROA), has a positive effect. In contrast, firm size, measured by the natural logarithm of total assets (Ln Total Assets), has no significant effect on firm value as proxied by Tobin's Q. Furthermore, the findings indicate that dividend policy, as measured by the Dividend Payout Ratio (DPR), moderates the relationship between profitability and firm value. However, dividend policy does not moderate the relationship between leverage or firm size and firm value. These findings suggest that while dividend policy can enhance the positive impact of profitability on firm value, it is insufficient to mitigate the negative effect of leverage or to strengthen the insignificant impact of firm size on firm value.

5. IMPLICATIONS

The findings of this study have significant theoretical and practical implications for the development of financial management theories and practices in capital markets. Theoretically, the result showing that leverage, as measured by the Debt to Equity Ratio (DER), has a significant negative effect on firm value (Tobin's Q) reinforces the relevance of both trade-off and signaling theories in explaining investor behavior in emerging markets like Indonesia. This suggests that a high level of debt is perceived as increasing bankruptcy risk and reducing financial flexibility, thus leading to lower market valuations. Meanwhile, the positive effect of profitability (ROA) on firm value supports the signaling theory, in which higher returns on assets reflect managerial efficiency and the firm's ability to generate sustainable value. In contrast, the finding that firm size (measured by the natural logarithm of total assets) has no significant effect on firm value implies that a large scale of operations does not necessarily translate into strategic strength unless accompanied by operational efficiency and solid financial performance. In capital markets characterized by high information asymmetry, as in Indonesia, investors tend to prioritize fundamental indicators like profitability over formal signals such as firm size.

With respect to dividend policy, the study finds that the Dividend Payout Ratio (DPR) is able to moderate the relationship between profitability and firm value, but not between

leverage or firm size and firm value. This suggests that dividends may serve as a reinforcing signal for the impact of financial performance on market perception, yet are insufficient to counterbalance the negative implications of aggressive capital structures or inefficient scale. This finding is consistent with Modigliani and Miller's (1961) theory, which posits that in imperfect markets, the effect of dividend policy on firm value is highly contextual and depends on other variables such as firm performance and risk exposure.

Practically, the results of this study offer several recommendations for corporate financial managers. Managers should exercise greater caution in financing decisions involving debt, as an overly aggressive capital structure may erode investor confidence and reduce firm valuation. Conversely, firms should focus on improving profitability through efficient asset management, as this has been empirically proven to enhance firm value. Firm size alone should not be relied upon as an indicator of market strength, and must be combined with operational effectiveness. Moreover, dividend policy should be viewed not merely as a means of distributing earnings, but as a strategic tool to strengthen positive financial signals to the market.

Future research is encouraged to incorporate non-financial variables such as ESG (Environmental, Social, and Governance) scores, corporate governance quality, and innovation strategies to better explain variations in firm value. Studies can also be industry-specific—targeting sectors like banking, manufacturing, or technology—since financial structures and strategic priorities vary by industry. In addition, longitudinal panel data analysis or crisis-based studies could provide deeper insights into how these relationships evolve under different economic conditions. Such approaches are expected to enrich academic literature and contribute more meaningfully to strategic financial decision-making in the capital market context.

6. LIMITATION

This study has several limitations that should be acknowledged when interpreting the findings and designing future research. First, the scope of this study is limited to companies listed in the LQ45 Index on the Indonesia Stock Exchange during the 2019–2023 period. As such, the results may not be generalizable to other sectors or to non-LQ45 companies, which may possess different operational characteristics and financial structures. Second, the independent variables employed in this study namely, leverage, firm size, and profitability as well as the moderating variable, dividend policy, only represent a subset of internal factors that influence firm value. In reality, numerous external factors such as macroeconomic conditions, market volatility, political stability, and industry-specific dynamics may also have significant impacts but are not incorporated into the current research model.

Third, the analytical method used in this study is panel data analysis with a Fixed Effect Model (FEM) approach. Although this model effectively controls for individual heterogeneity, it may have limitations in capturing long-term causal relationships or potential nonlinear interactions among variables. Fourth, the study relies solely on secondary quantitative data derived from the financial statements of publicly listed companies. This data does not capture qualitative aspects such as managerial motivations in financial decision-making, investor perceptions of corporate policies, or other strategic factors that may also influence firm value. Therefore, these limitations should be taken into account when interpreting the results, and they provide a basis for more comprehensive and in-depth future research.

By considering these constraints, it is hoped that subsequent studies will encompass a broader sample scope, integrate external factors more comprehensively, and adopt mixed-

method approaches to achieve a more holistic understanding of the dynamics that shape firm value in the Indonesian capital market.

7. RECOMMENDATIONS

Based on the research findings indicating that leverage, firm size, and profitability do not have a significant effect on firm value, and that dividend policy (Dividend Payout Ratio/DPR) only moderates the relationship between profitability and firm value, several recommendations can be proposed for relevant stakeholders, both in academic discourse and capital market practice.

First, for corporate management, particularly firms listed in the LQ45 Index, it is recommended not to solely focus on scaling up operations or adjusting capital structure as primary strategies to enhance firm value. Instead, companies should strengthen their strategies for achieving sustainable profitability and, more importantly, align such efforts with a consistent and credible dividend policy. This alignment serves as a strategic communication tool to the market, helping to build investor trust.

Second, for investors and capital market analysts, the findings suggest that fundamental indicators such as DER and firm size are not necessarily the primary determinants of firm value. Therefore, investors should consider the combination of profitability and dividend distribution policies as more reliable financial signals when assessing long-term performance and company prospects.

Third, for future researchers, it is suggested to expand the scope of variables studied, including both internal and external factors such as market volatility, macroeconomic stability, institutional ownership, and corporate governance (GCG), to obtain a more comprehensive understanding of the determinants of firm value. Future research could also adopt a mixed-method approach by integrating quantitative and qualitative data to explore investor perceptions regarding corporate financial policies more deeply.

By implementing these recommendations, it is expected that the research findings will contribute meaningfully to the advancement of financial management theory as well as to practical decision-making processes in the Indonesian capital market.

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