Indonesian Journal of Advanced Research (IJAR)
Vol. 4, No. 7, 2025: 1751-1766

The Effect of Profitability, Liquidity and Firm Size on Firm Value with Dividend Policy as a Moderating Variable

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A R T I C L E I N F O

Keywords: Profitability, Liquidity, Firm Size, Firm Value, Dividend Policy

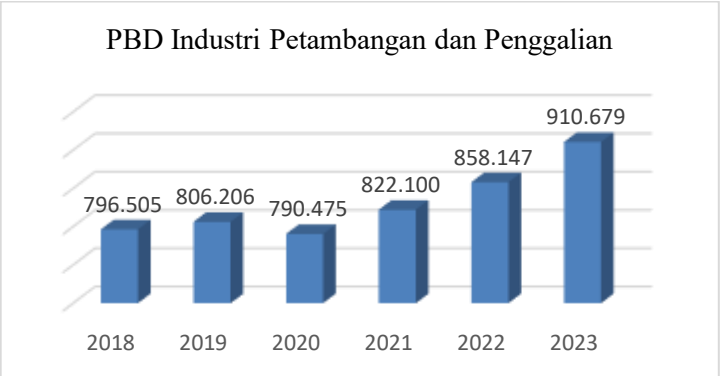
Received : 5, May
Revised : 19, June
Accepted: 20, July

A B S T R A C T

This study investigates the impact of profitability, liquidity, and firm size on firm value, with dividend policy serving as a moderating variable. The research focuses on energy sector companies listed on the Indonesia Stock Exchange (IDX) between 2018 and 2023. From a total of 83 listed firms, 17 were selected using purposive sampling for analysis. The study applies the Moderated Regression Analysis (MRA) technique and processes panel data using EViews version 13. The findings indicate that profitability significantly and positively influences firm value, whereas liquidity has a negative impact. Firm size also shows a significant positive effect on firm value. Although dividend policy does not have a significant direct effect on firm value, it does moderate the relationship between liquidity and firm value by strengthening it. However, it does not moderate the effect of profitability or firm size on firm value.

INTRODUCTION

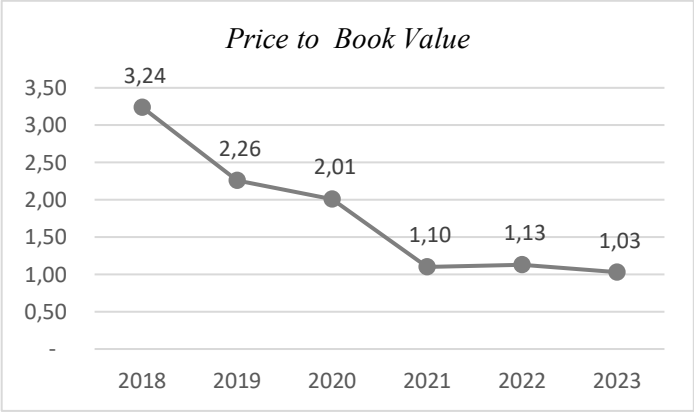
The energy sector holds a vital position in fostering national economic progress and fulfilling the energy requirements of both the public and industrial sectors. According to the Ministry of Energy and Mineral Resources, this sector covers a wide range of activities, including the exploration, extraction, refinement, distribution, and utilization of energy sources such as petroleum, natural gas, coal, and renewable alternatives. Its importance is especially evident in emerging economies like Indonesia, which are undergoing rapid industrial development.



Source: Badan Pusat Statistik (2023)

Figure 1. GDP by Business Field in the Mining and Quarrying Industry (Billion Rupiah) in Indonesia 2018-2023

As illustrated in Figure 1, Indonesia's GDP in the Mining and Quarrying sector has risen from 796,505 in 2018 to 910,679 in 2023, indicating consistent growth in the sector's contribution, measured in billions of rupiah, based on the classification of Gross Domestic Product (GDP) by business field. Despite this upward trend, the fluctuation in the market value of energy sector companies presents a noteworthy situation. Firm value signifies a company's ability to increase shareholder wealth, commonly indicated by an upward trend in its stock price. According to Indrarini (2019), firm value illustrates investor perceptions regarding how efficiently management handles the company's assets, a view that is frequently linked to the company's stock market performance.



Source: Bursa Efek Indonesia (2023)

Figure 2. Average PBV Value of Energy Sector Companies in 2018-2023

Liquidity reflects a firm's capacity to fulfill short-term liabilities, which is generally perceived as a positive indicator by the market and can potentially elevate firm value. Companies with higher liquidity are usually seen as more financially stable. This perspective is supported by studies from Kusuma & Mahroji (2024), Komalasari & Yulazri (2023), and Alifian & Susilo (2024). In contrast, findings by Nadaredo et al. (2025) and Tjiptadi (2024) revealed that liquidity had no significant impact on firm value in energy firms.

Firm size often indicates the breadth of a company's operations and its access to resources. Larger firms are commonly viewed as more stable, with stronger growth potential, which may contribute to a higher firm value. Research conducted by Nadaredo et al. (2025), Baining et al. (2024), Rusyanto et al. (2022), and Widiyati (2020) supports this notion, showing a positive and significant effect of firm size on firm value. However, conflicting results from Aeraafi & Hartono (2024) and Tjiptadi (2024) suggest that firm size may not significantly affect firm value within the energy sector.

Dividend policy is another internal aspect that could influence firm value. Brigham and Houston (2019) define it as the company's strategy in allocating profits between dividend payments and retained earnings for reinvestment. A consistent dividend policy is often viewed as a sign of financial strength and can boost investor confidence, thereby enhancing firm value. This assertion is backed by research from Marlina et al. (2022) and Hidayati & Vrianda (2025), who found a positive relationship between dividend policy and firm value. On the contrary, studies by Amaliyah & Agustin (2021) and Efpriati & Sumarni (2024) found no significant influence.

In addition to being an independent variable, dividend policy can also act as a quasi-moderator—playing a dual role by influencing firm value directly and also moderating the effects of other variables like profitability, liquidity, and firm size. When appropriately implemented, dividend policy can send a strong, positive signal to investors about the firm's financial resilience and future prospects.

Dividend policy has the potential to strengthen the effect of profitability on firm value by serving as an indicator of the company's operational soundness and future performance outlook. This moderating role has been evidenced in prior research by Darmawan et al. (2020), Dewi (2023), Kasmawati et al. (2023), and Nurmadi & Novietta (2022). On the other hand, Budiasih et al. (2023) and Effendie et al. (2024) reported that dividend policy does not significantly influence the relationship between profitability and firm value.

Likewise, dividend policy may act as a moderator in the relationship between liquidity and firm value, particularly by signaling the company's efficiency in managing cash flow and financial stability. This view is supported by findings from Zahra et al. (2025), Indrawaty & Mildawati (2018), and Shalihah (2024). However, Rahmawati et al. (2023) and Khoiroh et al. (2024) found no supporting evidence that dividend policy moderates the impact of firm size on firm value.

Additionally, dividend policy might affect how firm size relates to firm value by providing insight into the company's ability to manage earnings

retention effectively. Studies by Effendie et al. (2024), Lesnawati (2022), and Safitri (2015) confirmed this moderating function. In contrast, other researchers such as Rahmawati et al. (2023) and Gunawan & Imronudin (2025) concluded that dividend policy does not significantly influence the connection between firm size and firm value.

Given the mixed outcomes of previous studies—particularly concerning the effects of profitability and liquidity on firm value—and the scarcity of research examining dividend policy as a moderating factor in the energy industry, this study aims to address this research gap. Accordingly, the present study is entitled "The Influence of Profitability, Liquidity, and Firm Size on Firm Value with Dividend Policy as a Moderating Variable in Energy Sector Companies Listed on the Indonesia Stock Exchange for the Period 2018–2023."

In light of the background outlined previously, the following research questions are formulated for this study:

1. Does Profitability affect Firm Value?
2. Does Liquidity affect Company Value?
3. Does Company Size affect Company Value?
4. Does Dividend Policy affect Company Value?
5. Can Dividend Policy moderate the effect of Profitability on Firm Value?
6. Can Dividend Policy moderate the effect of Liquidity on Company Value?
7. Can Dividend Policy moderate the effect of Company Size on Company Value?

LITERATURE REVIEW

Signalling Theory

Signaling theory emphasizes the role of managerial decisions in communicating insights to investors regarding a company's anticipated performance. Additionally, this theory highlights the significance companies place on the dissemination of information that influences external parties when making investment decisions.. Signaling theory is an important concept in finance that explains how companies can use certain actions to communicate information to shareholders, investors, or financial markets. Signal theory distinguishes positive and negative signals, namely corporate actions that indicate company performance, and negative signals, namely dividend cuts, issuance of additional shares, sale of company assets (Safitri & Kadarningsih, 2025).

Firm Value

According to Indrarini (2019), firm value represents how investors view the effectiveness of a company's management in utilizing the assets under their control, and this perception is typically linked to the performance of the company's share price. Firm value plays a vital role in a business, as increases in value are usually accompanied by higher stock prices, signaling greater shareholder wealth. In this study, firm value is measured using the Price to Book Value (PBV) ratio, which compares the market price of a company's stock to its book value per share. This ratio serves as a common tool for determining whether

a stock is undervalued or overvalued. The calculation of the PBV ratio is shown as follows:

$$\text{Price to Book Value Ratio} = \frac{\text{Market Price Per Share}}{\text{Book Value Per Share}}$$

Profitability

The profitability ratio is utilized to gauge a firm's effectiveness in generating income relative to various financial elements such as sales, revenue, assets, or equity, based on predetermined evaluation criteria. The results of this assessment serve as a benchmark for measuring managerial effectiveness—indicating strong performance if targets are met, or revealing inefficiencies if outcomes fall short (Fitriana, 2024). In this research, profitability is measured using the Return on Assets (ROA) ratio. ROA illustrates the extent to which a company leverages its overall assets to produce post-tax earnings. As noted by Siswanto (2021), this metric provides insight into how well the company manages its asset base. The formula used to compute ROA is provided below:

$$\text{Return on Assets} = \frac{\text{Eaning After Tax}}{\text{Total Assets}}$$

Liquidity

The The liquidity ratio represents a firm's ability to meet its short-term financial commitments. Essentially, it indicates how prepared a company is to pay off its immediate debts, especially those nearing their due dates (Fitriana, 2024). According to Siswanto (2021), liquidity ratios are financial tools that measure a company's capacity to fulfill obligations that must be settled within a one-year period.

In this study, liquidity is evaluated using the Current Ratio (CR), recognized as one of the most accessible and commonly applied measures of a company's near-term financial condition. The CR determines the relationship between current assets and current liabilities, thereby providing a straightforward picture of how effectively a firm can cover its short-term obligations (Horne & Wachowicz, 2008). The formula used to determine the Current Ratio is presented below:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Firm Size

Firm size is commonly used as an indicator to determine the scale of a business, which can be assessed using several criteria such as total assets, logarithmic measurements, market value, and other financial indicators. Moreover, the size of a company can also be illustrated through values like total revenue, total asset volume, average turnover of assets, or the average total value of a firm's assets (Novari & Lestari, 2016).

In this research, the size of the company is quantified using the logarithmic approach, where the total asset value is converted into its natural

logarithm to represent the firm's overall scale (Hartono, 2016). The equation used to determine firm size is detailed as follows:

$$\text{SIZE} = \text{Ln (Total Assets)}$$

Dividend Policy

Brigham and Houston (2019) describe dividend policy as a strategic decision that determines what portion of a company's current profits will be paid out to shareholders as dividends and what portion will be retained for reinvestment. Similarly, Utami & Artini (2024) explain that dividend policy pertains to decisions about how earnings are allocated—either by distributing them to shareholders or reinvesting them within the business. Essentially, it is a managerial judgment made each fiscal year, requiring leadership to decide the amount of profit to be shared as dividends and the amount to be kept as retained earnings for supporting ongoing and future business operations.

In this study, the dividend policy is measured using the Dividend Payout Ratio (DPR), which expresses the fraction of earnings per share that is paid out to shareholders as cash dividends. This metric helps illustrate how much of the profit per share is allocated to dividends. The calculation formula for the Dividend Payout Ratio is presented as follows:

$$\text{Dividend Payout Ratio} = \frac{\text{Dividends Per Share}}{\text{Earnings Per Share}}$$

Research Model

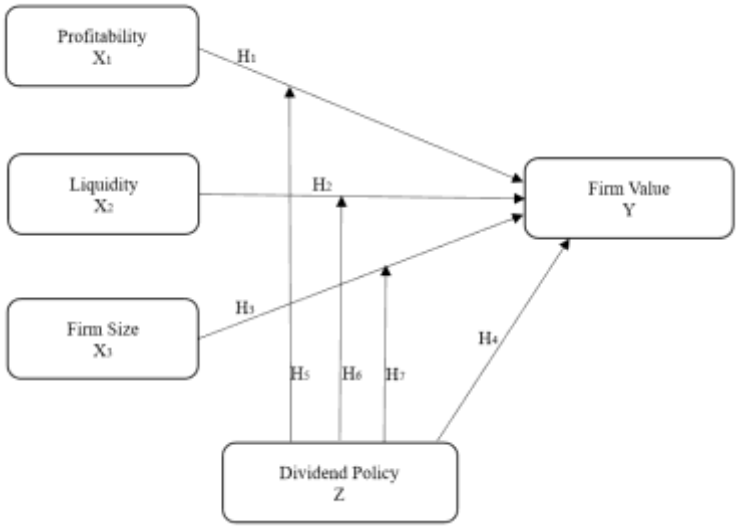


Figure 3. Research Model

Research Hypothesis

H1: Profitability has a positive effect on Firm Value
H2: Liquidity has a positive effect on Firm Value
H3: Company Size has a positive effect on Firm Value
H4: Dividend Policy has a positive effect on Firm Value
H5: Dividend Policy can moderate the effect of Profitability on Firm Value
H6: Dividend Policy can moderate the effect of Liquidity on Firm Value
H7: Dividend Policy can moderate the effect of Company Size on Firm Value

METHODOLOGY

Population and Sampel

The target population for this study comprises companies operating in the energy sector that were listed on the Indonesia Stock Exchange (IDX) from 2018 to 2023, totaling 83 entities. This research utilized a non-probability sampling technique, specifically the purposive sampling method. This approach entails selecting sample units based on particular criteria that have been established in accordance with the aims and needs of the study. The criteria for sample selection are detailed as follows:

No.	Criteria	Amount
1	Energy stock sector companies listed on the IDX until 2023	83
2	Companies that are not listed during 2018-2023	(21)
3	Companies that do not always distribute dividends to shareholders for the 2018-2023 period	(45)
	The number of energy stock sector companies sampled in this study	17
	The amount of data processed (6 years)	17 x 6 = 102

Data Collection Tools

This research adopts a documentation-based data collection technique, relying on the financial reports officially released by the sampled companies. This method is considered appropriate since the information needed is historical and can be openly accessed via the Indonesia Stock Exchange (IDX) website and the individual websites of the respective companies.

Data Analysis Tools

This study utilizes the Moderated Regression Analysis (MRA) technique to examine how profitability, liquidity, and firm size affect firm value, with dividend policy acting as a moderating factor. The research is conducted on energy sector firms listed on the Indonesia Stock Exchange (IDX) over the period from 2018 to 2023. The data analysis was performed using EViews version 13.

RESEARCH RESULTS

Descriptive Statistical Analysis

Drawing on sample data obtained from the financial reports of companies listed on the IDX between 2021 and 2024, this research offers a descriptive summary of the variables under investigation. The descriptive statistics cover key metrics such as the total number of observations, the lowest and highest values, the average (mean), and the standard deviation.

Descriptive Statistics

	X1	X2	X3	K	Z	Y
Mean	0.148868	1.970520	29.61078	28.85294	0.581387	3.904250
Median	0.089375	1.514959	29.43321	29.00000	0.501015	1.470096
Maximum	0.616346	7.875552	32.75569	54.00000	4.660845	35.90489
Minimum	0.010575	0.349123	27.62135	11.00000	0.000000	0.271859
Std. Dev.	0.148360	1.291160	1.253440	11.99373	0.539343	6.812119

Source: Data processed by researchers, 2025

Hypothesis Test

Partial Significance Test (t-Test)

Furthermore, this study employs both a t-test and Moderated Regression Analysis (MRA) to examine the effects of profitability, liquidity, and firm size on firm value, with dividend policy functioning as a moderating variable. The results of the t-test used to evaluate statistical significance are summarized in the table below.

Partial Significance Test (t-Test)

Dependent Variable: Y
Method: Panel Least Squares
Date: 07/09/25 Time: 22:14
Sample: 2018 2023
Periods included: 6
Cross-sections included: 17
Total panel (balanced) observations: 102

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-9.473709	3.569159	-2.654325	0.0093
X1	3.327345	1.294518	2.570334	0.0117
X2	-0.233077	0.116773	-1.995979	0.0489
X3	0.375214	0.125344	2.993467	0.0035
K	-0.004523	0.005750	-0.786498	0.4336
Z	8.452417	4.580702	1.845223	0.0682
X1*Z	0.829490	1.519448	0.545915	0.5864
X2*Z	0.507216	0.137996	3.675589	0.0004
X3*Z	-0.313377	0.159875	-1.960139	0.0530

Source: Data processed by researchers, 2025

Based on the results presented in the table above, the summary of the t-test significance findings is as follows:

1. The profitability variable (ROA) has a regression coefficient of 3.32734 with a positive sign. The t-statistic is 2.570, which exceeds the critical value of

1.985, and the p-value is 0.011, which is below the 0.05 threshold. Therefore, H1 is accepted, indicating that profitability (ROA) has a significant and positive effect on firm value (PBV).

2. The liquidity variable (CR) has a negative regression coefficient of -0.233077. The t-statistic value is -1.995, which is greater than the critical t-value of -1.985, and the significance level is 0.048, which is less than 0.05. Consequently, H2 is rejected, suggesting that liquidity (CR) has a negative and significant impact on firm value (PBV).
3. The firm size variable yields a positive regression coefficient of 0.375214, with a t-statistic of 2.993 that exceeds the critical value of 1.985, and a significance level of 0.003. These findings support the acceptance of H3, indicating that firm size has a positive and significant influence on firm value (PBV).
4. For the dividend policy variable (DPR), the regression coefficient is 8.452417 with a positive direction. However, the t-statistic of 1.845 is below the threshold of 1.985, and the significance level is 0.068, which is above 0.05. Thus, H4 is rejected, implying that dividend policy does not have a significant effect on firm value (PBV).
5. The interaction between profitability and dividend policy (X1Z) results in a positive regression coefficient of 0.829490, but the t-statistic of 0.545 is less than 1.985, and the p-value is 0.586, which is above 0.05. Hence, H5 is rejected, indicating that dividend policy does not moderate the relationship between profitability and firm value (PBV).
6. The interaction term between liquidity and dividend policy (X2Z) shows a positive regression coefficient of 0.507216, a t-statistic of 3.675 exceeding 1.985, and a significance level of 0.0004, which is well below 0.05. As a result, H6 is accepted, demonstrating that dividend policy strengthens the effect of liquidity on firm value (PBV).
7. Finally, the interaction between firm size and dividend policy (X3Z) produces a negative regression coefficient of -0.313377, with a t-statistic of -1.960, slightly below the critical value of -1.985, and a p-value of 0.053. Therefore, H7 is rejected, suggesting that dividend policy does not moderate the effect of firm size on firm value (PBV).

Robustness Test

A robustness test is an analytical approach employed to assess the reliability and validity of a research model, ensuring that the results are consistent and free from bias (Ferreira et al., 2017). Various techniques can be utilized to conduct such a test; in this study, the robustness test was carried out by altering the proxy used for the dependent variable—firm value—by replacing the Price to Book Value (PBV) with the Price Earnings Ratio (PER). This substitution was made because PER has been widely adopted as an alternative proxy for measuring firm value in prior research, including the works of Kurniawan et al. (2020), Kustinah (2019), and Mira Firdiyanti & Hani Fitria Rahmani (2023).

Dependent Variable: Y
Method: Panel EGLS (Cross-section random effects)
Date: 07/11/25 Time: 22:53
Sample: 2018 2023
Periods included: 6
Cross-sections included: 17
Total panel (balanced) observations: 102
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.649428	16.45469	-0.100241	0.9204
X1	-13.08198	9.978192	-1.311057	0.1931
X2	-0.602772	0.966664	-0.623559	0.5344
X3	0.250238	0.506304	0.494245	0.6223
K	0.204668	0.322084	0.635449	0.5267
Z	-21.66279	24.29642	-0.891604	0.3749
X1*Z	20.72957	7.771722	2.667308	0.0090
X2*Z	1.882679	0.746248	2.522860	0.0133
X3*Z	0.726932	0.830538	0.875255	0.3837

Source: Data processed by researchers, 2025

Based on the robustness analysis results shown in the table above, the significance of the t-test can be interpreted as follows:

1. The profitability variable (ROA) has a negative regression coefficient of -13.08198, with a t-statistic of -1.311 that does not meet the critical value of -1.985, and a p-value of 0.019, which exceeds the 0.05 significance level. These findings imply that profitability (ROA) does not have a statistically significant impact on firm value (measured by PER).
2. The liquidity variable (CR) also displays a negative coefficient of -0.602772, accompanied by a t-statistic of -0.623, which falls short of the -1.985 threshold, and a p-value of 0.532. This indicates that liquidity does not have a significant effect on firm value (PER).
3. Firm size shows a positive coefficient of 0.250238, with a t-statistic of 0.494—well below the required t-value—and a p-value of 0.635. Therefore, firm size is not found to significantly influence firm value (PER).
4. The dividend policy (DPR) presents a negative regression coefficient of -21.66279, a t-statistic of -0.981 (above the -1.985 threshold), and a significance level of 0.374. These results suggest that dividend policy has no meaningful impact on firm value (PER).
5. For the interaction between profitability and dividend policy (X1Z), the coefficient is 20.72957 with a positive sign, a t-statistic of 2.667 exceeding the threshold of 1.985, and a significance value of 0.009. It can thus be concluded that dividend policy moderates and strengthens the influence of profitability on firm value (PER).

6. Regarding the interaction between liquidity and dividend policy (X2Z), the coefficient is 1.882679 with a positive sign, a t-statistic of 2.522 surpassing the critical value, and a p-value of 0.013. This confirms that dividend policy enhances the impact of liquidity on firm value (PER).
7. Lastly, the interaction term between firm size and dividend policy (X3Z) yields a positive coefficient of 0.726932, a t-statistic of 0.804 which falls short of the 1.985 threshold, and a p-value of 0.383. These outcomes indicate that dividend policy does not moderate the relationship between firm size and firm value (PER).

DISCUSSION

Profitability has a Positive and Significant Effect on Firm Value

The results of this study indicate that profitability, measured using Return on Assets (ROA), exerts a significant and positive influence on firm value in the energy sector. This finding implies that firms with higher profitability tend to be viewed more positively by investors, leading to an increase in their market valuation. This aligns with the signaling theory, which argues that firms demonstrating solid financial performance—reflected through profitability ratios—send favorable signals to investors. The findings are consistent with previous research conducted by Putri & Sutopo (2024), Kusuma & Mahroji (2024), Arrahman & Mahardika (2023), Maharani & Murtanto (2024), and Alifian & Susilo (2024), all of which concluded that profitability positively and significantly affects firm value in energy sector firms.

However, when a robustness check was performed by replacing the proxy for firm value from Price to Book Value (PBV) to Price Earnings Ratio (PER), the effect of profitability on firm value was no longer statistically significant. This suggests that the influence of profitability on firm value is sensitive to the chosen proxy. Unlike PBV, which reflects historical financial structure, PER better captures market expectations regarding a firm's future earnings potential.

Liquidity has a Negative and Significant Effect on Firm Value

The research findings indicate that liquidity has an inverse correlation with firm value, as assessed through the Price to Book Value (PBV) metric, among energy sector companies. This suggests that higher liquidity levels may correspond to lower market valuations. Such a relationship implies that investors might not necessarily interpret elevated liquidity positively—particularly in capital-intensive sectors like energy. Although strong liquidity typically reflects a company's ability to fulfill short-term obligations, in financial markets, especially within the energy industry, excessive liquidity might be seen as a sign of underutilized capital. These conclusions are consistent with previous research by Nadaredo et al. (2025) and Tjiptadi (2024), which also reported no meaningful link between liquidity and firm value in this sector.

Additionally, when the robustness test was conducted by altering the firm value proxy from PBV to Price to Earnings Ratio (PER), the results showed that liquidity had no significant effect on firm value. This outcome implies that regardless of a company's liquidity position, the market does not place

substantial weight on short-term solvency when evaluating earning potential through the PER metric. While liquidity is generally viewed as a key indicator of financial health—representing a firm's ability to meet near-term liabilities—in the context of the energy sector and PER-based valuation, investors seem to prioritize earnings performance and operational productivity over asset-based strength.

Firm Size has a Positive and Significant Effect on Firm Value

This study reveals that firm size has a notable and positive influence on firm value within the energy sector, as evidenced by the Price to Book Value (PBV) ratio. This finding implies that larger energy firms tend to possess higher market valuations, as indicated by elevated PBV figures. In the energy industry, companies with substantial size often benefit from enhanced production capacity, well-developed infrastructure, privileged access to essential natural resources, and strategic roles in both national and global energy supply chains. Moreover, larger size generally reflects business maturity and established operational systems. These conclusions align with the findings of earlier studies by Nadaredo et al. (2025), Baining et al. (2024), Rusyanto et al. (2022), and Widiyati (2020), all of which found a significant positive relationship between firm size and firm value in this sector.

On the other hand, the robustness test—conducted by substituting PBV with the Price Earnings Ratio (PER) as the proxy for firm value—showed that firm size does not have a statistically significant effect when PER is used. This indicates that the impact of firm size on firm value may depend on the valuation metric employed. The variation in findings can be explained by the differing characteristics of PBV and PER: while PBV reflects how the market values a firm's assets relative to their book value, often influenced by asset holdings and financial structure, PER focuses on the firm's earnings potential and reflects investor sentiment regarding future profitability.

Dividend Policy Does Not Affect Firm Value (PBV)

The study reveals that dividend policy does not exert a significant effect on firm value, as indicated by the Price to Book Value (PBV) metric in energy sector companies. This outcome suggests that dividend distribution decisions are not a primary determinant of how the market assesses a company's worth in this particular industry. A possible rationale behind this finding is that investors in the energy sector are more inclined to focus on factors such as long-term growth opportunities, operational durability, and variations in energy commodity prices, rather than immediate returns in the form of dividends. These results align with previous studies by Amaliyah & Agustin (2021) and Efpriati & Sumarni (2024), which also observed that dividend policy did not have a meaningful impact on firm value. This may be because investors tend to prioritize future growth prospects and capital gains over current dividend income.

Moreover, robustness analysis employing the Price to Earnings Ratio (PER) as an alternative firm value proxy reaffirmed that dividend policy remains statistically insignificant in influencing firm performance. This finding reinforces

the notion that dividend policy is not a crucial element for investors when firm value is evaluated using earnings-based metrics like PER. Since PER captures the relationship between share price and earnings per share, it is generally more responsive to a company's short-term profit-generating capacity and operational performance than to dividend decisions.

Dividend Policy is Not Able to Moderate the Effect of Profitability on Firm Value

The research findings indicate that dividend policy does not serve as a moderating factor in the relationship between profitability and firm value among companies in the energy sector. This means that regardless of whether a firm adopts a high or low dividend payout, the influence of profitability on firm value—measured using the Price to Book Value (PBV) ratio—remains unchanged. Theoretically, this outcome stands in contrast to signaling theory, which suggests that dividend distributions provide a positive signal to investors about a company's solid financial health and promising growth prospects. However, in the context of the energy sector, dividend policy does not appear to function as a meaningful supplementary indicator of profitability.

These results are consistent with previous studies by Budiasih et al. (2023) and Effendie et al. (2024), which also reported that dividend policy fails to moderate the relationship between profitability and firm value. This consistency implies that the effectiveness of dividend policy as a moderating variable may depend heavily on industry-specific characteristics and current market conditions.

Nevertheless, when a robustness test was conducted by replacing PBV with the Price to Earnings Ratio (PER) as the measure of firm value, a different result emerged. Under the PER metric, dividend policy was shown to significantly moderate and enhance the effect of profitability on firm value. This suggests that when firm value is evaluated through an earnings-based perspective, dividend payouts more effectively convey profitability signals to investors. Since PER reflects the market's valuation of a company's earnings relative to its share price, it serves as a more responsive indicator of the signaling power embedded in dividend decisions.

Dividend Policy is Able to Strengthen the Effect of Liquidity on Firm Value

This study reveals that dividend policy acts as a moderating factor in the relationship between liquidity and firm value within energy sector companies. Specifically, the positive association between liquidity and firm value is amplified when firms adopt a consistent or high dividend distribution strategy. In this context, dividend payments play a supporting role by reinforcing the connection between a company's ability to meet short-term obligations and its perceived market value. This outcome aligns with the principles of signaling theory, which suggests that consistent dividend payouts convey a message of financial robustness and steady cash flows to investors. The findings are in agreement with prior research by Zahra et al. (2025), Indrawaty & Mildawati

(2018), and Shalihah (2024), all of which concluded that dividend policy intensifies the effect of liquidity on firm value.

Additionally, a robustness test—conducted by replacing Price to Book Value (PBV) with Price to Earnings Ratio (PER) as the measure of firm value—confirmed the consistency of these results. The analysis showed that dividend policy continues to enhance the impact of liquidity on firm value when PER is used as the valuation proxy. This suggests that companies exhibiting high liquidity along with a stable dividend policy are perceived more favorably by investors, particularly in terms of earnings potential, than those that do not distribute dividends despite having similar liquidity levels.

Dividend Policy is not Able to Moderate the Effect of Firm Size on Firm Value

The findings of this research indicate that dividend policy does not function as a moderating variable in the relationship between firm size and firm value within the energy sector, particularly when firm value is assessed using the Price to Book Value (PBV) metric. This implies that changes in dividend distributions—whether substantial or minimal—do not significantly alter the impact of firm size on firm value. In essence, dividend policy neither strengthens nor weakens this relationship. Typically, larger companies are perceived to have more stable operations, greater access to capital, and a more dominant position in the marketplace. These results align with earlier studies by Rahmawati et al. (2023) and Gunawan & Imronudin (2025), who also found no moderating effect of dividend policy in this context.

Additionally, the robustness test, which involved using the Price to Earnings Ratio (PER) as an alternative measure of firm value, reinforces these findings. The analysis revealed that dividend policy likewise does not influence the relationship between firm size and firm value when earnings-based performance is considered. This outcome suggests that even though large firms may enjoy operational scale and financial advantages, dividend policy does not enhance their perceived value from the investor's perspective when measured using PER. One possible explanation is that the energy sector's capital-intensive nature and long-term investment orientation may lead investors to place less importance on firm size as a driver of profitability in the near term.

CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis, the study concludes that profitability has a significant and positive impact on firm value, while liquidity shows a negative correlation. Firm size also contributes positively and significantly to firm value. In contrast, dividend policy does not have a direct effect on firm value. Furthermore, the findings suggest that dividend policy does not moderate the relationship between profitability and firm value, nor between firm size and firm value. However, it does enhance the influence of liquidity on firm value.

Suggestions for future research include examining other potential moderating or mediating variables that may influence the relationship between financial indicators and firm value. Researchers are also encouraged to expand the sample scope across different sectors or time periods, and consider

qualitative approaches to gain deeper insights into managerial decisions regarding profitability, liquidity, and dividend distribution.

ADVANCED RESEARCH

Future research is encouraged to incorporate external variables—such as volatility in global energy prices and relevant governmental policies—to better capture broader economic influences. Expanding the study scope to include a longer observation period or a wider range of industry sectors may also yield more comprehensive insights. Furthermore, utilizing other moderating variables, such as ownership structure or corporate governance, could provide a deeper understanding of the intricate mechanisms that shape firm value.

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