

# Testing the Mediating Role of Dividend Policy in the Relationship between Profitability and Firm Value in the Mining Sector Listed on the Indonesia Stock Exchange (2020–2023)

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This study examines the effect of profitability on firm value, both directly and through dividend policy as an intervening variable, in mining companies listed on the Indonesia Stock Exchange (IDX) during 2020–2023. The study employs a quantitative approach using secondary data. Data analysis is conducted using multiple linear regression and mediation testing through path analysis, processed with SPSS version 25. The sample is selected using purposive sampling; from a population of 80 firms, 13 companies meet the criteria and are included in the analysis. Profitability (ROE) serves as the independent variable, firm value (Tobin's Q) as the dependent variable, and dividend policy (DPR) as the intervening variable. The results indicate that profitability has a positive and significant effect on firm value, profitability has a positive but insignificant effect on dividend policy, dividend policy has a negative and insignificant effect on firm value, and dividend policy does not mediate the relationship between profitability and firm value. These findings suggest that improvements in profitability contribute to firm value primarily through a direct pathway rather than through dividend policy as an intervening mechanism.

**Keywords:** Profitability; Firm value; Dividend policy; Intervening variable; Mining sector; Indonesia Stock Exchange (IDX).

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## 1. Introduction

The Republic of Indonesia (NKRI) is endowed with abundant natural resources, making the mining sector strategically important to the national economy (IDXChannel, 2025). Under Law No. 3 of 2020 on mineral and coal mining, the management and supervision of the mining industry fall under the authority of the Central Government through the Ministry of Energy and Mineral Resources (ESDM), emphasizing sustainability, efficiency, and environmental responsibility to maximize public welfare (BPK RI, 2020). In practice, the mining sector's contribution is reflected not only in exports and employment absorption, but also in state revenue through taxes and non-tax state revenue (PNBP), including dividends and royalties (jadibumn.id, 2024).

Based on ESDM data, mining-sector PNBPN in 2023 reached Rp173 trillion (approximately 58% of total ESDM-sector PNBPN), increasing from Rp127.90 trillion in 2022; during the COVID-19 pandemic phase, revenues were lower, amounting to Rp75.48 trillion (2021) and Rp34.6 trillion (2020). This pattern indicates that mining-sector performance is sensitive to global economic dynamics and commodity prices, and it underscores the urgency of studies linking corporate financial performance to firm value within the context of industry cycles (Kementerian ESDM, 2024).

For firms that have conducted an initial public offering (IPO), financial statements serve as instruments of accountability and key information sources for stakeholders in assessing performance and prospects. Transparent reporting is expected to strengthen public trust and provide a basis for managerial and investment decision-making [1]. Conceptually, a firm's long-term objective is to maximize firm value, reflected in investor perceptions and market prices; therefore, factors such as profitability and dividend policy constitute relevant determinants for analysis [2]. In this study, firm value is proxied by Tobin's Q because it is considered more comprehensive in reflecting market valuation relative to corporate assets [3].

Profitability represents a firm's ability to generate earnings at certain levels of assets and capital and serves as an important signal to investors regarding business continuity and corporate prospects [2]. In this research, profitability is measured using return on equity (ROE). Meanwhile, one form of return received by investors is dividends; accordingly, dividend policy is understood as the decision on allocating earnings between distribution to shareholders and retention for future investment, which may influence market perceptions and firm value [4]. Dividend policy in this study is proxied by the dividend payout ratio (DPR).

According to data from the Indonesia Stock Exchange (2025), dividends in the mining sector fluctuated during 2020–2023. In 2020, dividends were the lowest at Rp11.79 trillion, in line with weakened profits due to the pandemic and declining commodity demand. Dividends increased in 2021 to Rp46.64 trillion and peaked in 2022 at Rp82.90 trillion, consistent with the commodity boom phase and rising prices of commodities such as coal and nickel. In 2023, dividends declined again to Rp49.19 trillion, which the literature associates with the normalization of the commodity cycle and adjustments in global energy policy directions toward renewable energy [5].

The theoretical framework of this study is grounded in agency theory, which explains the contractual relationship between principals (shareholders) and agents (management) and the potential for conflicts of interest that generate agency costs. In this context, profitability and dividend policy may be understood as disciplining mechanisms that constrain managerial opportunism by limiting free cash flow, and thus are conceptually expected to strengthen firm value [6], [7].

Based on data from the Indonesia Stock Exchange (2025), the average Tobin's Q for mining firms during 2020–2023 was 1.99, indicating that market valuation tended to exceed the book value of assets. In terms of profitability, the average ROE was 33.03%, below the 40% industry benchmark [8], although several issuers such as BYAN (71.99%), GEMS (85.94%), and BSSR (77.36%) exhibited high equity management effectiveness. Furthermore, the average DPR for the mining sector was 71.25%, which can be categorized as high compared with the benchmark range of 30–60% [8], suggesting that firms tended to distribute a large portion of earnings as dividends while still displaying heterogeneity in corporate strategies.

Prior empirical studies report mixed findings regarding the relationships among profitability, dividend policy, and firm value. Atmikasari et al [9] report a positive effect of profitability on dividend policy and firm value and support the mediating role of dividend policy; similar evidence is also provided by Safiah and Kuddy [10]. In contrast, Dharmawan et al [11] find that profitability has a negative effect on firm value, while Agustin et al [12] show that the directions of the effects of profitability and dividend policy on firm value tend to be negative and inconsistent. The strengths of earlier studies lie in providing empirical evidence on inter-variable relationships and employing operational financial proxies; however, limitations include a focus on non-mining sectors or periods that do not capture the three critical phases of 2020–2023 (pandemic, the 2021–2022 commodity boom, and 2023 normalization), as well as differences in firm-value proxies that may affect comparability. Building on this state of the art, this study aims to empirically test the effect of profitability (ROE) on firm value (Tobin's Q) with dividend policy (DPR) as an intervening variable in mining companies listed on the Indonesia Stock Exchange during 2020–2023. The novelty of this study lies in (i) its mining-sector focus under a highly volatile commodity cycle, (ii) the explicit testing of dividend policy as a mediating mechanism in the profitability–firm value relationship, and (iii) the use of Tobin's Q to capture market expectations regarding firm growth prospects.

## 2. Literature Review

### Firm Value

Firm value reflects market confidence formed through the accumulation of a company's operational and financial performance and business strategy, with the objective of maximizing shareholder wealth; in capital markets it is reflected in investor perceptions through stock price movements [2], [13], [14]. Conceptually, firm value can be viewed in terms of book value, market value, and intrinsic value, and it is influenced by factors such as firm size and growth, profitability, dividend policy, capital structure, exchange-rate fluctuations, and capital market conditions [2]. Firm value can be measured using PBV, PER, EPS, or Tobin's Q. This study employs Tobin's Q because it captures market assessment more comprehensively through the comparison of market value (plus debt) to total assets, thereby reflecting asset management effectiveness and growth prospects; Tobin's  $Q \geq 1$  indicates better investment opportunities and prospects (*overvalued*), whereas Tobin's  $Q \leq 1$  suggests the firm tends to be perceived less favorably (*undervalued*) [3], [15].

### Profitability

Profitability is a firm's ability to generate profit within a certain period, reflecting the effectiveness of managerial policies and decisions, and it is an important indicator for investors because it relates to return expectations in the form of yield and capital gains that can strengthen market perceptions and increase firm value [8], [16], [17]. Profitability is influenced by factors such as firm type and age, capital structure, business scale, production costs, business environment, and product characteristics, and it can be measured using GPM, OPM, NPM, ROA, or ROE [2], [18]. This study uses ROE because it measures net income after tax relative to equity, thereby indicating managerial efficiency in generating profits from shareholders' capital and serving as a relevant proxy to examine the potential effects of profitability on dividend policy and firm value; higher ROE indicates a stronger shareholder position, while lower ROE indicates weakened efficiency in equity management [19].

### Dividend Policy

Dividend policy refers to managerial financial decisions regarding the proportion of earnings distributed as dividends or retained to finance investment and expansion, determined through the General Meeting of Shareholders (RUPS). Firms must therefore balance current dividends and future growth to maximize stock prices and firm value [17], [20], [21]. Higher dividend payouts can strengthen investor perceptions but reduce internal funds, creating a trade-off between earnings distribution and financing needs; this is reflected in the dividend payout ratio, where a higher ratio implies lower retained earnings and more limited internal financing capacity, while greater earnings retention strengthens expansion capacity but reduces short-term dividends [22], [23]. Dividend policy also functions as a signal of corporate prospects and financial stability that influences market confidence [24], and it is affected by factors such as liquidity, debt policy, free cash flow, and firm growth [25]. In this study, dividend policy is measured using DPR (cash dividends relative to net income); DPR is chosen because it reflects earnings distribution decisions that influence investor interest, stock prices, and firm value, and it potentially serves as a channel linking profitability to firm value through dividend distribution [9], [18].

### Agency Theory

Agency theory refers to Jensen and Meckling [6], who describe the contractual relationship between shareholders as principals and management as agents hired to act in the owners' interests and to be accountable for performance [26]. However, information asymmetry and differing objectives may create conflicts of interest (agency problems), because shareholders typically pursue sustainability and increased firm value, while management may act opportunistically and reduce owners' returns if not constrained by adequate governance [27], [28]. To limit deviations, principals conduct monitoring and agents engage in bonding, although both generate agency costs [25]. In this study's context, profitability is viewed as a reflection of agent performance that may affect dividend policy and firm value; dividend policy can serve as a disciplining mechanism by limiting free cash flow and encouraging more efficient capital allocation, although decisions to retain earnings for operations or expansion may still generate tensions [29]. Therefore, profitability and dividend policy are positioned as control instruments demonstrating a firm's commitment to generating profits and delivering benefits to shareholders, thereby strengthening oversight of management and explaining their linkage to firm value formation [30], [31].

### Research Hypotheses

Based on theoretical arguments and empirical evidence, this study formulates four hypotheses:

H<sub>1</sub> profitability significantly affects firm value.

H<sub>2</sub> profitability significantly affects dividend policy.

H<sub>3</sub> dividend policy significantly affects firm value.

H<sub>4</sub> dividend policy mediates the effect of profitability on firm value.

### 3. Method

This study adopts a quantitative approach and focuses on mining companies listed on the Indonesia Stock Exchange (BEI) during 2020–2023. Data were collected through the BEI Investment Gallery at Musamus University, Merauke, as well as from the official IDX and company websites to obtain financial statements and annual reports. The research was planned to be conducted over six months, from May to November 2025. The population comprised 80 mining issuers, and the sample was determined using purposive sampling based on the following criteria: (1) mining firms that conducted an IPO before 2020, (2) firms

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that consistently published financial statements and annual reports during 2020–2023, and (3) firms that consecutively distributed cash dividends during 2020–2023. Based on this selection process, 13 firms were included as the final sample, yielding panel data (a combination of cross-sectional and time-series data) considered adequate for testing the relationships among profitability, dividend policy, and firm value in a more focused and relevant manner (Sugiyono, 2022; [9]).

The study uses secondary data obtained from financial statements, annual reports, and official publications of the firms and the IDX. The variables are operationalized on a ratio scale: profitability (X) is measured by Return on Equity (ROE), firm value (Y) is measured by Tobin’s Q, and dividend policy (Z) as the intervening variable is measured by the Dividend Payout Ratio (DPR). Data were collected using documentation techniques. Data analysis includes descriptive statistics, classical assumption tests (normality, multicollinearity, autocorrelation, and heteroscedasticity), and hypothesis testing using multiple linear regression and the t-test at a 5% significance level with SPSS. To test the mediating role of dividend policy, path analysis and the Sobel test were employed to identify direct, indirect, and total effects among constructs, while model explanatory power was evaluated using the coefficient of determination ( $R^2$ ) Ghozali, 2021:[21], [32].

#### 4. Results And Discussion

The recap of the main financial ratios used as the basis for analysis includes firm value proxied by Tobin’s Q, profitability proxied by Return on Equity (ROE), and dividend policy proxied by the Dividend Payout Ratio (DPR). The data were collected from 13 mining companies listed on the Indonesia Stock Exchange (IDX) over the 2020–2023 period, as summarized in the following table.

Table 1. Recapitulation of financial ratio data on firm value (Tobin’s Q), profitability (ROE), and dividend policy (DPR)

No	Stock Code	Indicator	2020	2021	2022	2023
1	ANTM	Tobin’s Q (x)	1,87	2,01	1,71	1,23
		ROE (%)	6,04%	8,93%	16,11%	9,88%
		DPR (%)	35%	50%	50%	100%
2	PTBA	Tobin’s Q (x)	1,64	1,19	1,30	1,17
		ROE (%)	14,22%	33,14%	44,19%	29,18%
		DPR (%)	34,69%	98,41%	98,34%	73,10%
3	ADRO	Tobin’s Q (x)	0,88	1,06	1,13	0,77
		ROE (%)	4,01%	23,07%	43,37%	25,04%
		DPR (%)	93,70%	69,63%	34,61%	45,47%
4	BYAN	Tobin’s Q (x)	2,73	2,81	11,72	12,86
		ROE (%)	39,98%	67,96%	115,35%	64,66%
		DPR (%)	88,14%	78,99%	78,21%	62,52%
5	BSSR	Tobin’s Q (x)	1,47	2,13	2,23	2,00
		ROE (%)	52,48%	81,22%	108,81%	66,92%
		DPR (%)	40,04%	86,76%	107,13%	85,04%
6	CITA	Tobin’s Q (x)	3,02	3,11	2,80	1,46
		ROE (%)	18,82%	15,48%	15,28%	13,01%
		DPR (%)	55,45%	33,72%	4,17%	64,48%
7	ELSA	Tobin’s Q (x)	0,85	0,76	0,79	0,84
		ROE (%)	6,66%	2,88%	9,18%	11,39%
		DPR (%)	30%	49,95%	50%	39,99%
8	GEMS	Tobin’s Q (x)	4,62	4,55	2,83	2,17

9	ITMG	ROE (%)	27,43%	111,91%	124,66%	79,74%
		DPR (%)	130,40%	86,12%	60,35%	78,49%
		Tobin's Q (x)	1,22	1,24	1,32	1,04
10	MBAP	ROE (%)	4,47%	39,56%	61,50%	27,93%
		DPR (%)	96,93%	70,57%	62,83%	64,33%
		Tobin's Q (x)	1,52	1,42	2,11	1,85
11	MYOH	ROE (%)	19,87%	50,29%	71,68%	12,55%
		DPR (%)	149,09%	73,27%	44,57%	441,24%
		Tobin's Q (x)	1,48	1,78	1,43	1,33
12	TPMA	ROE (%)	17,46%	19,17%	9,49%	11,06%
		DPR (%)	66,58%	18,58%	49,76%	16,22%
		Tobin's Q (x)	0,88	0,94	0,89	1,23
13	ISSP	ROE (%)	2,71%	5,14%	16,09%	21,29%
		DPR (%)	196%	55,65%	69,90%	64,45%
		Tobin's Q (x)	0,70	0,87	0,68	0,68
		ROE (%)	5,27%	12,83%	7,38%	10,78%
		DPR (%)	24,11%	13,08%	13,86%	21,28%

### 1. Descriptive Analysis

Descriptive statistics are used to describe data characteristics through the minimum, maximum, mean, standard deviation, and skewness. The results show that Ln\_TobinsQ\_Y ranges from -0.39 to 2.55, with a mean of 0.4327, a standard deviation of 0.61567, and skewness of 1.468 (right-skewed), indicating that several issuers have very high firm values. ROE\_X ranges from 2.71 to 124.66, with a mean of 33.0292, a standard deviation of 32.26018, and skewness of 1.411 (right-skewed), suggesting substantial variation in profitability across issuers. Ln\_DPR\_Z ranges from 1.43 to 6.09, with a mean of 4.0168, a standard deviation of 0.73937, and skewness of -0.716 (left-skewed), indicating that a small number of issuers distribute lower dividends than the majority.

Table 2. Descriptive Statistics

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Variance Statistic	Skewness	
							Statistic	Std. Error
ROE_X	52	2.71	124.66	330.292	3.226.018	1.040.719	1.411	0.330
Ln_TobinsQ_Y	52	-0.39	2.55	0.4327	0.61567	0.379	1.468	0.330
Ln_DPR_Z	52	1.43	6.09	40.168	0.73937	0.547	-0.716	0.330
Valid N (listwise)	52	—	—	—	—	—	—	—

Source: Processed data (2026)

### 2. Classical Assumption Tests

#### Normality Test

The normality test aims to ensure that regression residuals are normally distributed as a prerequisite for regression analysis (Ghozali, 2021). The test uses the One-Sample Kolmogorov–Smirnov method at a 0.05 significance level.

Table 3. Normality Test Using Kolmogorov–Smirnov

		Unstandardized Residual
N		52
Normal Parameters <sup>a,b</sup>	Mean	0.000000
	Std. Deviation	0.47600554
	Absolute	0.180

Most Extreme Differences	Positive	0.180
	Negative	-0.104
Test Statistic		0.180
Asymp. Sig. (2-tailed)		0.000 <sup>c</sup>
Monte Carlo Sig. (2-tailed)	Sig.	0.061 <sup>d</sup>
	95% Confidence Interval – Lower Bound	0.057
	95% Confidence Interval – Upper Bound	0.066

Source: Processed data (2026)

Based on the table above, the significance value in the Monte Carlo Sig. (2-tailed) row is 0.061 (>0.05); therefore, the residuals are normally distributed. Thus, the normality assumption is satisfied and the regression model can proceed to the next classical assumption tests.

### Multicollinearity Test

The multicollinearity test assesses whether there is a high correlation among independent variables that could compromise the precision of regression coefficient estimates (Ghozali, 2021). The indicators used are Tolerance and Variance Inflation Factor (VIF), with criteria of tolerance >0.10 and VIF <10.

Table 4. Multicollinearity Test

Variabel	Tolerance	VIF
ROE_X	0.941	1.062
Ln_DPR_Z	0.941	1.062

Source: Processed data (2026)

Based on Table 5, tolerance is 0.941 (>0.10) and VIF is 1.062 (<10). This indicates that multicollinearity is not present; therefore, the independent variables do not interfere with one another and the regression coefficients can be interpreted reliably.

### Autocorrelation Test

The autocorrelation test is used to determine whether residuals are correlated across observation periods; a good regression model should be free from autocorrelation (Ghozali, 2021). The test uses the Durbin–Watson (DW) statistic with reference to lower and upper bounds (dL and dU).

Table 5. Autocorrelation Test

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
0.531 <sup>a</sup>	0.282	0.252	0.41820	1.805

Source: Processed data (2026)

Based on Table 5, DW = 1.805. With 52 observations and 2 independent variables at  $\alpha = 0.05$ , dL = 1.4741 and dU = 1.6334. Because DW lies within  $dU < DW < (4 - dU)$ , the model is considered free of autocorrelation. This indicates no serial correlation in the residuals and the model satisfies the autocorrelation assumption.

### Heteroscedasticity Test

The heteroscedasticity test ensures that residual variance is constant (homoscedastic). This study applies the Glejser test, which regresses the absolute residual values on the independent variables; if the significance level is >0.05, heteroscedasticity is not present (Ghozali, 2021).

Table 6. Heteroscedasticity Test

Variabel	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	0.724	0.214	—	3.386	0.001
ROE_X	0.002	0.001	0.254	1.827	0.074
Ln_DPR_Z	-0.105	0.054	-0.272	-1.950	0.057

Source: Processed data (2026)

Based on Table 6, the significance values are 0.074 for ROE\_X and 0.057 for Ln\_DPR\_Z, both greater than 0.05. Therefore, heteroscedasticity is not detected and the model satisfies the homoscedasticity assumption, indicating that the regression estimates are efficient and unbiased for hypothesis testing.

### 3. t-Test

The t-test examines the partial effect of each independent variable on the dependent variable at a significance level of  $\alpha = 0.05$  (Ghozali, 2021). Decisions are based on the significance value (Sig.), where  $\text{Sig.} \leq 0.05$  indicates a significant effect and  $\text{Sig.} > 0.05$  indicates a non-significant effect.

#### t-Test for Equation I

Table 7. t-Test Results for Equation I

Variabel	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	3.834	0.145	—	26.527	0.000
ROE_X	0.006	0.003	0.242	1.763	0.084

Source: Processed data (2026)

Based on Table 7, ROE\_X has a coefficient of 0.006, with  $t = 1.763$  and  $\text{Sig.} = 0.084 (>0.05)$ . This indicates that profitability has a positive but non-significant effect on dividend policy (H2 is rejected), meaning that the evidence is insufficient to conclude that ROE affects DPR in the sample.

#### t-Test for Equation II

Table 8. t-Test Results for Equation II

Variabel	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	0.053	0.376	—	0.140	0.889
ROE_X	0.012	0.002	0.636	5.585	0.000

Source: Processed data (2026)

Based on Table 8, ROE\_X has a positive and significant effect on Ln\_TobinsQ\_Y, with a coefficient of 0.012,  $t = 5.585$ , and  $\text{Sig.} = 0.000 (<0.05)$ ; therefore, H1 is accepted. Interpretively, higher profitability receives a positive market response, leading to higher firm value. Meanwhile, Ln\_DPR\_Z has a coefficient of -0.005, with  $t = -0.055$  and  $\text{Sig.} = 0.957 (>0.05)$ , indicating that dividend policy has a negative but non-significant effect on firm value (H3 is rejected). This finding suggests that variation in DPR is not a direct determinant of firm value formation in the sample.

#### 4. Path Analysis

Path analysis is used to test the direct effect of profitability (X) on firm value (Y) and the indirect effect through dividend policy (Z) as a mediating variable. This technique allows significance testing of indirect effects to determine whether the mediator truly plays a role in the relationship between X and Y (Ghozali, 2021).

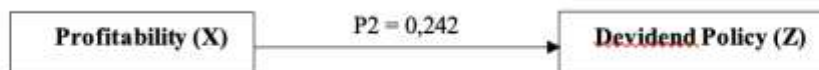


Figure 1. Path Diagram for Equation I

Figure 1 shows the effect of profitability on dividend policy with a path coefficient of  $P2 = 0.242$  (standardized), indicating a positive direction from X to Z.

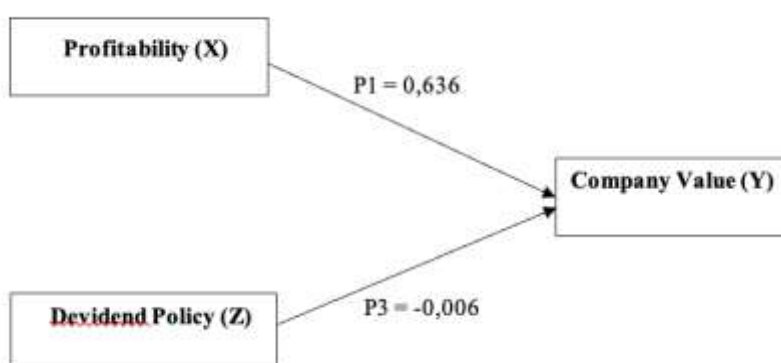


Figure 2. Path Diagram for Equation II

Figure 2 presents the structural model in which firm value (Y) is influenced by profitability (X) and dividend policy (Z), forming the basis for calculating direct and indirect effects in the mediation model.

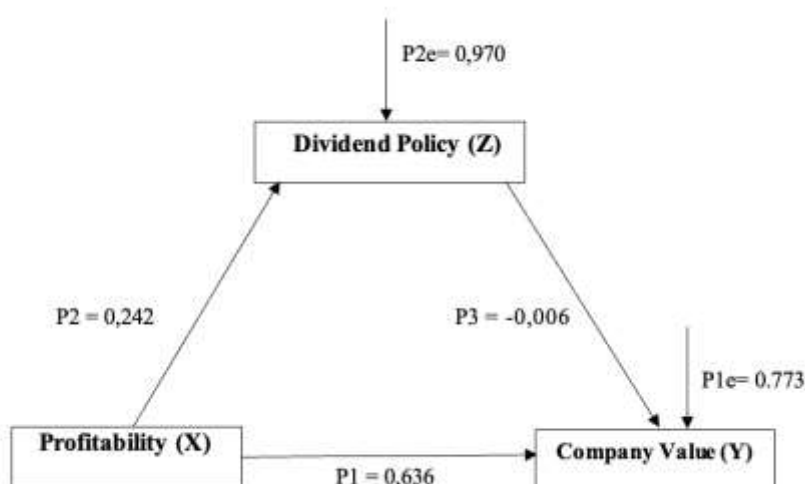


Figure 3. Path Diagram of the Effect of X on Y through Z

Based on Figure 4, the direct effect of profitability on firm value is  $P1 = 0.636$ , the path coefficient from profitability to dividend policy is  $P2 = 0.242$ , and the path coefficient from dividend policy to firm value is  $P3 = -0.006$ . The model also shows error terms, namely  $P2e = 0.970$  for Equation I and  $P1e =$  Testing the Mediating Role of Dividend Policy in the Relationship between Profitability and Firm Value in the Mining Sector Listed on the Indonesia Stock Exchange (2020–2023), Apolinaris S. Awotkay et al

0.773 for Equation II. The direct effect of X on Y is 0.636, while the indirect effect is  $P2 \times P3 = 0.242 \times (-0.006) = -0.001452$ . Thus, the total effect is  $P1 + (P2 \times P3) = 0.636 + (-0.001452) = 0.634548$ . Because the indirect effect is smaller than the direct effect (indirect effect < direct effect), dividend policy does not strengthen the relationship between profitability and firm value. To test the significance of the mediation effect, the Sobel test is applied at a 0.05 significance level with a critical value of 1.96. The calculated test statistic is  $t = -0.0471$ , which is smaller than 1.96; therefore, the indirect effect is not significant. Hence, dividend policy does not function as a significant intervening variable in the relationship between profitability and firm value; firm value in this sample is more strongly influenced by profitability through a direct pathway.

### 5. Coefficient of Determination (R<sup>2</sup>)

The coefficient of determination (R<sup>2</sup>) measures the extent to which the model explains variation in the dependent variable. R<sup>2</sup> ranges from 0 to 1; the larger the R<sup>2</sup>, the greater the proportion of variation in the dependent variable explained by the independent variables.

#### Coefficient of Determination for Equation I

Table 9. Coefficient of Determination Results for Equation I

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.242 <sup>a</sup>	0.059	0.040	0.72455

Source: Processed data (2026)

Based on Table 9, R Square = 0.059 indicates that ROE\_X explains only 5.9% of the variation in Ln\_DPR\_Z, while the remaining 94.1% is explained by factors outside the model. Adjusted R Square = 0.040 further indicates that, after adjustment, the model's explanatory contribution is relatively low. The error term for this equation is  $P2e = \sqrt{(1 - R^2)} = \sqrt{(0.941)} = 0.970$ , suggesting that external variables (e.g., liquidity, debt structure, growth, and ownership structure) dominate the explanation of dividend policy.

#### Coefficient of Determination for Equation II

Table 10. Coefficient of Determination Results for Equation II

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.634 <sup>a</sup>	0.402	0.378	0.48562

Source: Processed data (2026)

Based on Table 10, R Square = 0.402 indicates that ROE\_X and Ln\_DPR\_Z jointly explain 40.2% of the variation in Ln\_TobinsQ\_Y, while the remaining 59.8% is influenced by factors outside the model. Adjusted R Square = 0.378 shows that, after adjustment, the model maintains a moderate explanatory power. The error term for this equation is  $P1e = \sqrt{(1 - R^2)} = \sqrt{(0.598)} = 0.773$ , indicating that other factors (e.g., leverage, capital structure, firm size, and macroeconomic conditions) also contribute to explaining firm value in the mining sector.

## DISCUSSION

### 1. The Effect of Profitability on Firm Value

The results show that profitability has a positive and significant effect on firm value among mining firms listed on the IDX during 2020–2023. This indicates that higher ROE tends to be followed by higher market valuation because it reflects earnings-generating capacity, efficient capital utilization, and the quality of corporate management; thus, profitability becomes a strategic factor in firm value formation [33]. This finding is consistent with studies reporting a positive and significant effect of profitability on firm value [9], [34] and aligns with agency theory, which suggests that increasing profitability reflects agent competence in managing resources for principals' interests, thereby potentially reducing agency conflicts [6].

## **2. The Effect of Profitability on Dividend Policy**

Profitability has a positive but non-significant effect on dividend policy, implying that earnings levels are not the primary determinant of dividend distribution decisions in mining companies during the study period. This finding supports the argument that highly profitable firms do not necessarily increase dividends and may retain earnings to maintain financing flexibility and dividend stability [35]. The result is also consistent with evidence showing that profitability does not affect dividend policy [14], and it does not support the agency-theory expectation that dividends function as a free-cash-flow control mechanism when earnings increase [6].

## **3. The Effect of Dividend Policy on Firm Value**

Dividend policy has a negative and non-significant effect on firm value, indicating that variation in DPR is not a key determinant of Tobin's Q in the sample. This suggests that mining-sector investors prioritize fundamental prospects and capital-gain opportunities rather than dividend magnitude, so dividend policy is not always interpreted as a valuation-enhancing signal. This result is consistent with studies finding that dividend policy does not significantly affect firm value [23] and with the dividend irrelevance view that firm value is driven more by earnings-generating ability and investment decisions than by dividend distribution policy [36]. Accordingly, the finding also does not strengthen the role of dividends as a mechanism for controlling agency conflicts in this context [6].

## **4. The Effect of Profitability on Firm Value through Dividend Policy as an Intervening Variable**

Path analysis and the Sobel test indicate that dividend policy does not mediate the relationship between profitability and firm value, because the direct effect of profitability is more dominant than the indirect effect through dividends. This finding underscores that increases in firm value among mining issuers are more strongly determined by earnings-generating capacity than by earnings distribution through dividend policy. The result aligns with studies showing that the indirect effect of profitability through dividend policy is negative and non-significant and that profitability does not have a significant indirect effect on firm value through dividend policy. Conceptually, this indicates that disciplining mechanisms through free-cash-flow reduction via dividends do not operate optimally; therefore, a more direct performance indicator—profitability—better represents agent effectiveness in increasing firm value [6].

## **4. Conclusion**

Based on the analysis and findings, this study confirms that profitability has a positive and significant effect on firm value in mining companies listed on the Indonesia Stock Exchange during 2020–2023, indicating that the market places greater emphasis on earnings-generating capability in valuing

firms. However, profitability does not significantly influence dividend policy, and dividend policy itself does not significantly affect firm value, implying that dividend decisions are more driven by internal strategic considerations and are not a primary determinant of market valuation. Consequently, dividend policy is not proven to mediate the relationship between profitability and firm value, as the direct effect of profitability is more dominant than the indirect effect through dividends. These results suggest that efforts to enhance firm value are more effectively achieved through improving operational profitability rather than relying on dividend distribution. Nevertheless, this study is limited by its relatively small sample size, restricted observation period, and the exclusion of other relevant variables such as leverage, firm size, growth, and macroeconomic factors. Therefore, future research is recommended to expand the sample and sectoral coverage, include additional explanatory variables, extend the time horizon, and apply more advanced analytical approaches to obtain a more comprehensive understanding of firm value formation.

## 5. Referensi

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