

The Role of Capital Structure, Profitability, and Dividend Policy on Firm Value in Indonesian Manufacturing Companies

Andika Putra^{1*}, Muizzuddin², Kemas Muhammad Husni Thamrin³

^{1,2,3} Master of Management Study Program, Faculty of Economics, Sriwijaya University, Indonesia

*Corresponding Author: agamboyz86@gmail.com

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ABSTRACT

This study examines the effects of financial leverage (DER), profitability (ROA), and dividend policy (DPR) on firm value (Tobin's Q) among manufacturing companies listed on the Indonesia Stock Exchange over the 2018–2024 period, grounded in Agency Theory. The sample was obtained through purposive sampling from an initial pool of 93 companies, resulting in 69 companies after the exclusion of 24 firms containing residual outliers via entity-level removal, yielding 483 observations in a balanced panel dataset. The Fixed Effect Model was employed, with bootstrapping (10,000 replications) for robust inference. Results indicate that financial leverage and profitability positively and significantly affect firm value, with profitability as the most dominant determinant, while dividend policy shows no significant effect. Simultaneously, all three variables are significant. These findings confirm the empirical relevance of Agency Theory in Indonesian manufacturing firms.

INTRODUCTION

Firm value reflects management's ability to effectively manage all available resources to sustainably create wealth for shareholders. According to Jensen and Meckling (1976), within the corporate finance perspective, firm value is not solely determined by the magnitude of assets controlled, but rather by the extent to which the market appreciates the effectiveness of financial decisions made by management.

Firm value, proxied by Tobin's Q, compares the market value of a firm's equity and debt to the replacement cost of its assets. Tobin's Q has been widely accepted as a proxy capable of capturing forward-looking market expectations and is relatively less affected by differences in accounting practices across firms (Lim & Mali, 2023). Understanding the determinants of firm value is therefore crucial, as it directly influences investors' capital allocation decisions and a firm's access to financing in capital markets.



Figure 1. Condition of Financial Leverage, Profitability, and Dividend Policy Manufacturing Companies IDX 2018 to 2024

Source: Financial data of manufacturing companies, processed 2026

The condition of financial decisions of manufacturing companies on the IDX during the period 2018 to 2024 shows dynamics that are interesting to be studied more deeply. From the financial leverage side, the average of manufacturing companies is in the range of 1.01 times, which means the proportion of debt is almost equal to equity with quite wide fluctuations from 0.87 times in 2023 to 1.10 times in 2022. This condition shows that Indonesian manufacturing companies do not yet have a consistent direction of funding policy, where in some periods they increase the portion of debt, and in others they reduce it. In the perspective of agency theory by Jensen (1986), this inconsistency has the potential to influence the effectiveness of debt as a disciplinary mechanism toward management.

From the profitability side, the average shows significant volatility, plunging to the lowest point of 3.95 percent in 2020 due to the impact of the COVID-19 pandemic which caused contraction in production and a decline in domestic demand, then gradually recovered to reach 6.31 percent in 2023, but weakened again to 4.50 percent in 2024. This boom-bust pattern shows that the profitability of Indonesian manufacturing companies is very sensitive to external shocks and does not yet have sufficient resilience to maintain performance sustainably.

From the dividend policy side, the average fluctuates without a clear trend and instead jumped to 39.00 percent in 2020 when profitability decreased, then dropped sharply to 26.93 percent in 2021 when profitability began to recover, and rose again to 36.38 percent in 2024. This contradictory pattern, by paying higher dividends when profits decline, indicates that the dividend policy of Indonesian manufacturing companies is not based on planned strategic considerations, but is residual in nature and influenced by non-fundamental factors. This phenomenon is consistent with the findings of Wirama et al. (2024) regarding residual dividend theory in Indonesian public companies.

These structural problems are also reflected in the market valuation condition of manufacturing companies on the Indonesia Stock Exchange (IDX). Recent empirical studies show that the majority of manufacturing companies listed on the IDX have firm value proxied

by Tobin's Q below one and this indicates that the market value of the company is lower than the book value of its assets (Ana & Wibowo, 2025). This phenomenon raises a fundamental question about how large the role of internal financial decisions, especially related to financial leverage, profitability, and dividend policy, is in encouraging or instead inhibiting the creation of firm value.

Within the framework of agency theory proposed by Jensen & Meckling (1976), this undervaluation condition is a consequence of agency costs that arise due to the misalignment of interests between managers as agents and shareholders as principals. Managers who have discretion over the company's financial decisions have the potential to take decisions that benefit themselves but harm shareholders, thereby gradually eroding firm value.

Financial leverage is one of the most critical financial decisions that reflects the composition between the use of debt and equity in financing the company's operations and investments. According to agency theory by Jensen (1986), the use of debt has a disciplinary role because of the obligation to pay interest and principal periodically which limits the cash flow available for managers to be used on inefficient expenditures so that it has the potential to reduce agency costs and increase firm value.

Empirical evidence shows inconsistent results where the research of Qurrotu'ainii et al. (2025) found that financial leverage has a positive and significant effect on firm value. Meanwhile, the research of Qamariyah et al. (2026) shows that financial leverage does not have a significant effect on firm value. These diverse findings show that the relationship between financial leverage and firm value still leaves empirical debate that needs to be clarified especially in the manufacturing sector as a whole.

Profitability reflects the capability of the company in generating profit from the utilization of total assets it owns. Profitability is an accounting-based indicator that is backward looking, while firm value is a market-based measure that is forward looking so that the relationship between the two contains the dimension of market expectations toward future performance based on historical performance (Lim & Mali, 2023).

Research by Wardana et al. (2025) and (Lestari et al., 2025) confirm that profitability has a positive and significant effect on firm value. However, inconsistency still appears in the research of Qurrotu'ainii et al. (2025) which found that profitability has a positive but not significant effect, while in the research of Qamariyah et al. (2026) found that profitability does not affect firm value. This lack of uniformity of results indicates that the role of profitability in the creation of firm value is very contextual and depends on sector characteristics, observation period, and the proxies used.

Dividend policy describes management's decision regarding the proportion of net income that is distributed to shareholders in the form of dividends. In the perspective of agency theory by Jensen (1986), dividend payments function as a mechanism to reduce agency cost because they distribute cash flow out of the control of managers, thereby limiting the possibility of the use of funds for projects that do not maximize shareholder wealth.

In the study by Damanik et al. (2026) it was found that dividend policy has a positive and significant effect on firm value, which indicates that investors view dividend payments as a positive signal of the company's performance. However, the study by Salsabila & Imronudin (2025) found that dividend policy does not have a significant effect on firm value, so the role of dividend policy on firm value in manufacturing companies still requires further investigation.

The urgency of this research is driven by several strategic factors that require a more comprehensive understanding of the determinants of firm value in Indonesian manufacturing companies, namely (1) the manufacturing sector faces increasingly intensive competitive pressure both in domestic and global markets, so the ability to maximize firm value becomes a critical success factor to attract investment and maintain sustainability, (2) the unique characteristics of the Indonesian manufacturing sector with a high level of capital intensity, dependence on external financing, and sensitivity to macroeconomic fluctuations require a specific contextualization of research to produce applicable managerial implications, (3) the existence of inconsistency in the results of previous studies shows that the mechanism of the influence of leverage, profitability, and dividend policy on firm value may differ across industries and time periods, so research with a specific focus on the Indonesian manufacturing sector in the recent period becomes highly relevant.

Based on all the arguments above, this research needs to be conducted to provide more comprehensive empirical evidence regarding the role of financial leverage, profitability, and dividend policy on firm value in the Indonesian manufacturing sector. Therefore, this study takes the title "The Role of Capital Structure, Profitability, and Dividend Policy on Firm Value in Indonesian Manufacturing Companies."

RESEARCH METHOD

This study is a quantitative research with an explanatory approach using panel data to analyze the effect of financial leverage (DER), profitability (ROA), and dividend policy (DPR) on firm value (Tobin's Q) in manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2018–2024 period, with a scope that covers both cross-sectional and time-series dimensions (Gujarati & Porter, 2009). The data used are secondary data obtained from annual reports and financial statements of companies, with the population consisting of all manufacturing companies listed on the IDX. The sample was selected using purposive sampling based on specific criteria such as consistent listing status, positive equity, non-delisted firms, and financial reporting in Indonesian Rupiah, resulting in 93 companies that initially met the criteria out of 145 companies.

Furthermore, data screening was conducted based on outliers using standardized residuals ($|z| > 2.5$) at the entity level to maintain a balanced panel structure. As a result, 24 companies were excluded, yielding a final sample of 69 companies with 483 firm-year observations (69×7), which according to (Baltagi, 2021) provides an adequate observation-to-parameter ratio for panel data estimation. The independent variables consist of DER, ROA,

and DPR, while the dependent variable is Tobin's Q. The analytical technique used is panel data regression with EViews software. According to (Hsiao, 2022) panel data analysis has several advantages, including increasing estimation efficiency, controlling unobserved individual heterogeneity, reducing multicollinearity, and capturing dynamic changes over time, thus providing more robust estimation results for analyzing causal relationships among the research variables.

RESULT AND DISCUSSION

Classical Assumption Tests

Multicollinearity Test

Table 1. Correlation Matrix among Independent Variables

	LN (DER)	ASINH (ROA)	ASINH (DPR)
LN (DER)	1,000000	-0,426077	-0,256570
ASINH (ROA)	-0,426077	1,000000	0,347098
ASINH (DPR)	-0,256570	0,347098	1,000000

Source: EViews Output, processed data (2026)

Table 2. Variance Inflation Factor (VIF)

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0,000245	1,299779	NA
LN (DER)	0,000353	1,423541	1,242191
ASINH (ROA)	0,035683	1,361445	1,319374
ASINH (DPR)	0,000772	1,238654	1,155946

Source: EViews Output, processed data (2026)

Based on Table 1, all correlation coefficients among independent variables are below the threshold of 0.80, with the highest correlation being -0.426077 between LN(DER) and ASINH(ROA). This negative correlation has a logical economic interpretation, indicating that firms with higher leverage tend to have lower profitability due to greater interest expenses.

Based on Table 2, all Centered VIF values are far below the threshold of 10, with the highest value of 1.319374 for ASINH(ROA), followed by LN(DER) at 1.242191 and ASINH(DPR) at 1.155946. VIF values close to 1 indicate very low correlation among independent variables and do not interfere with coefficient estimation. Therefore, there is no serious multicollinearity, and the regression coefficient estimates are stable and can be interpreted individually (Gujarati & Porter, 2009).

Heteroskedasticity Test

The heteroskedasticity test was conducted using the Glejser method, where the absolute residual values from the FEM model are regressed on the independent variables.

Table 3. Glejser Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0,025460	0,002331	10,923670	0,0000
LN (DER)	-0,001017	0,002794	-0,363910	0,7161
ASINH (ROA)	0,028866	0,028099	1,027316	0,3049
ASINH (DPR)	-0,003747	0,004134	-0,906293	0,3653

Source: EViews Output, processed data (2026)

All independent variables are not significant with respect to the residuals: LN(DER) with $p = 0.7161$ (> 0.05), ASINH(ROA) with $p = 0.3049$ (> 0.05), and ASINH(DPR) with $p = 0.3653$ (> 0.05). All probabilities are well above $\alpha = 0.05$, indicating that the independent variables do not explain the variance of the residuals. Therefore, there is no heteroskedasticity, and the assumption of homoskedasticity is satisfied (Gujarati & Porter, 2009).

Autocorrelation Test

The autocorrelation test was conducted using the Durbin-Watson (DW) statistic, with decision criteria based on comparing the calculated DW value (d) with the lower bound (dL) and upper bound (dU) critical values from the Durbin-Watson table. For $n = 483$ observations and $k = 3$ independent variables at $\alpha = 0.05$, the critical values are $dL = 1.8436$ and $dU = 1.8608$ (Savin-White table).

Table 4. Durbin-Watson Test Results

Durbin-Watson hitung (d)	1,303119
dL (batas bawah)	1,8436
dU (batas atas)	1,8608

Source: EViews Output, processed data (2026)

Based on Table 4, the calculated Durbin-Watson value of 1.303119 lies within the range $0 < d < dL$ ($1.303119 < 1.8436$), thus H_0 is rejected, indicating positive autocorrelation in the residuals. Positive autocorrelation implies that error terms across time are serially correlated, where positive residuals tend to be followed by positive residuals and vice versa (Gujarati & Porter, 2009).

The presence of autocorrelation in the Fixed Effect Model (FEM) for panel data should be interpreted contextually. First, it is a common phenomenon due to temporal dependence within entities, where firm performance in year t is related to year $t-1$ (Baltagi, 2021). Second, autocorrelation does not bias coefficient estimates; OLS/FEM estimators remain unbiased and consistent, but it leads to underestimated standard errors, causing t-tests and F-tests to potentially overestimate statistical significance (Wooldridge, 2020).

Normality Test

Table 5. Jarque-Bera Test Results

Mean	1,38e-18
Median	-1,75e-05
Maximum	0,399103
Minimum	-0,341970
Std. Dev.	0,134841
Skewness	0,027096
Kurtosis	2,898794
Jarque-Bera	0,265237
Probability	0,875799

Source: EViews Output, processed data (2026)

The Jarque-Bera value of 0.265237 with a probability of 0.875799 (> 0.05) indicates that H_0 cannot be rejected, meaning that the residuals are normally distributed. The skewness value, which is very close to zero (0.027096), indicates an almost symmetric distribution, while the kurtosis value of 2.898794, which is close to 3 (the kurtosis of a normal distribution), confirms that the residual distribution closely approximates a normal distribution. These findings confirm that the data transformation (LN and ASINH) successfully addresses the non-normality problem in the original data and that inference from the t-test and F-test in the FEM model is valid (Gujarati & Porter, 2009).

Bootstrapping

Although the normality assumption has been satisfied, bootstrapping is still applied as a robust inference technique specifically to address the issue of positive autocorrelation detected in the Durbin-Watson test ($DW = 1.3031 < dL = 1.8436$). Bootstrapping produces valid standard errors and confidence intervals without relying on the assumption of residual independence, thereby correcting the potential underestimation of parametric standard errors caused by autocorrelation (Rajh-weber et al., 2026). The number of replications is set at $B = 10,000$ to obtain a more precise and stable bootstrap distribution compared to the standard minimum of 1,000 replications.

Table 6. Bootstrapping Results (B = 10,000 Replications)

Variable	Orig.Coeff	Boot.Mean	Boot.SE	CI 2,5%	CI 97,5%	Sig.
LN (DER)	0,150340	0,154730	0,033185	0,098130	0,224732	Ya
ASINH (ROA)	1,177319	1,205852	0,218435	0,786597	1,645933	Ya
ASINH (DPR)	-0,009893	-0,012601	0,030489	-0,079228	0,042661	Tidak

Source: Processed data (2026)

The bootstrapping results with 10,000 replications consistently confirm the FEM findings. LN(DER) is significant, where the bootstrap mean (0.1547) is very close to the FEM coefficient (0.1503) with a bias of only 2.92%, and the confidence interval (0.0981–0.2247) does not include zero. ASINH(ROA) is also significant, where the bootstrap mean (1.2059) is close to the FEM coefficient (1.1773) with a bias of 2.42%, and the confidence interval

(0.7866–1.6459) does not include zero. Meanwhile, ASINH(DPR) is not significant as its confidence interval (-0.0792–0.0427) includes zero.

The closeness between the FEM coefficients and the bootstrap means for each variable (bias below 3% for significant variables) indicates that the FEM estimator is stable and not distorted by autocorrelation. The consistency between parametric (FEM) and non-parametric (bootstrapping with 10,000 replications) inference confirms that the detected positive autocorrelation (DW = 1.3031) does not affect the substance of the findings, where the direction, magnitude, and significance of the coefficients remain consistent across both approaches (Rajh-weber et al., 2026).

Summary of Classical Assumption Tests

Table 7. Summary of Classical Assumption Test Results

No.	Test	Statistic	Prob.	Conclusion
1	Multicollinearity	r maks 0,4261	-	Satisfied
2	Heteroskedasticity	Glejser: all $p > 0.05$	$> 0,05$	Satisfied
3	Autocorrelation	DW = 1,3031, dL = 1,8436	$< dL$	Positive Autocorrelation → Bootstrap
4.	Normalitas	JB = 0,2652	0,8758	Satisfied

Source: Processed data (2026)

Note: Positive autocorrelation is addressed using bootstrapping with 10,000 replications, which confirms the consistency of all hypothesis conclusions.

Hypothesis Testing

Hypothesis testing is conducted using the selected Fixed Effect Model based on the Chow and Hausman tests. The significance level is $\alpha = 0.05$. With degrees of freedom ($N \times T - N - k$) = 483 - 69 - 3 = 411, the t-table value ($\alpha = 0.05$, two-tailed) is ± 1.966 , and the F-table value (3, 411) is 2.627 (Gujarati & Porter, 2009).

Partial Test (t-test)

Table 8. Partial Test Results (t-test)

Variable	Coefficient	Std. Error	t-statistic	t-table	Prob.	Decision
C	0,039212	0,015669	2,5025	-	0,0127	-
LN (DER)	0,150340	0,018782	8,0043	1,966	0,0000	H_0 Rejected
ASINH (ROA)	1,177319	0,188900	6,2325	1,966	0,0000	H_0 Rejected
ASINH (DPR)	-0,009893	0,027792	-0,3560	1,966	0,7220	H_0 Accepted

Source: EViews Output, processed data (2026)

1. Hypothesis 1: Financial Leverage has a positive effect on Firm Value

LN(DER) produces a coefficient of 0.150340 with a t-statistic of 8.004306 (= 0.150340 / 0.018782), which far exceeds the t-table value of 1.966 and has a p-value of 0.0000 (< 0.05). Thus, H_1 is accepted, indicating that financial leverage has a positive and significant effect on firm value. The coefficient represents elasticity: a 1% increase in DER

is associated with a 0.150% increase in Tobin's Q, *ceteris paribus*. The bootstrap CI (0.0981–0.2247) confirms significance. This finding supports Jensen (1986) agency theory that debt acts as a disciplinary mechanism reducing the agency cost of free cash flow.

2. Hypothesis 2: Profitability has a positive effect on Firm Value

ASINH(ROA) produces a coefficient of 1.177319 with a t-statistic of 6.232487, exceeding the t-table value of 1.966 and a p-value of 0.0000. Thus, H_2 is accepted, indicating that profitability has a positive and significant effect on firm value. This is the largest coefficient among the variables, confirming ROA as the most dominant determinant. The bootstrap CI (0.7856–1.6553) confirms significance. This finding supports Jensen & Meckling (1976) agency theory that high ROA reflects managerial efficiency and low agency costs.

3. Hypothesis 3: Dividend Policy has a positive effect on Firm Value

ASINH(DPR) produces a coefficient of -0.009893 with a t-statistic of -0.355967, which is far below the t-table value of 1.966 and a p-value of 0.7220 (> 0.05). Thus, H_3 is rejected, indicating that dividend policy does not have a significant effect on firm value. The bootstrap CI (-0.0784–0.0429) includes zero, confirming the insignificance.

Simultaneous Test (F-test)

Table 9. Simultaneous Test Results (F-test)

F-hitung	107,8239
F-tabel (3, 411)	2,627
Prob(F-statistic)	0,000000

Source: EViews Output, processed data (2026)

The F-statistic of 107.8239 far exceeds the F-table value of 2.627 (a ratio of 41.0 times) with a p-value of 0.000000. Thus, the three variables financial leverage, profitability, and dividend policy simultaneously have a significant effect on firm value (Baltagi, 2021).

Coefficient of Determination (R^2)

Table 10. Coefficient of Determination

R-squared	0,949049
Adjusted R-squared	0,940247

Source: EViews Output, processed data (2026)

The R-squared value of 0.949049 indicates that 94.90% of the variation in LN(Tobin's Q) can be explained by the model, which includes the three independent variables along with fixed effects for 69 firms. The Adjusted R-squared value of 0.940247 confirms an excellent goodness of fit (Baltagi, 2021).

Summary of Hypothesis Testing

Table 11. Summary of Research Hypothesis Decisions

Hyp.	Hypothesis Statement	Result	Decision
H1	Financial leverage (DER) has a positive effect on firm value (Tobin's Q)	(+) Sig. t = 8,00 p = 0,0000	Accepted
H2	Profitability (ROA) has a positive effect on firm value (Tobin's Q)	(+) Sig. t = 6,23 p = 0,0000	Accepted
H3	Dividend policy (DPR) has a positive effect on firm value (Tobin's Q)	Tidak Sig. t = -0,36 p = 0,7220	Rejected
Simultaneous Effect: DER, ROA, and DPR simultaneously affect Tobin's Q → Significant (F = 107.82; p = 0.0000)		Sig. F = 107,82 p = 0,0000	
Model Fit: R-squared = 0.9490 and Adjusted R-squared = 0.9402 All decisions are confirmed by bootstrapping with 10,000 replications.			

Source: Processed data (2026)

CONCLUSION

This study aims to analyze and empirically prove the effect of financial leverage (DER), profitability (ROA), and dividend policy (DPR) on firm value (Tobin's Q) in manufacturing companies listed on the Indonesia Stock Exchange during the period 2018 to 2024, both partially and simultaneously, using agency theory by Jensen & Meckling (1976) and Jensen (1986) as the theoretical foundation.

The analysis was conducted on 69 manufacturing companies spread across five sectors (Basic Materials, Industrials, Consumer Non-Cyclicals, Consumer Cyclicals, and Healthcare) with a total of 483 firm-year observations forming balanced panel data.

The model was estimated using panel data regression with the Fixed Effect Model selected based on the Chow Test (F = 65.087749; p = 0.0000) and the Hausman Test ($\chi^2 = 56.751437$; p = 0.0000). The model has satisfied the assumptions of multicollinearity (maximum correlation 0.4261; maximum Centered VIF 1.3194), Glejser heteroskedasticity (all p-values > 0.05), and Jarque-Bera normality (JB = 0.265237; p = 0.875799). In the autocorrelation test, the Durbin-Watson value of 1.303119 is below dL = 1.8436 which indicates positive autocorrelation, but bootstrapping with 10,000 replications confirms that all hypothesis conclusions remain consistent and valid. Based on all analysis results, the following conclusions can be drawn.

First, regarding the first research question on the effect of financial leverage on firm value, the t-test results show that financial leverage proxied by the Debt to Equity Ratio (DER) has a positive and significant effect on firm value proxied by Tobin's Q in manufacturing companies on the IDX during the period 2018 to 2024. The elasticity coefficient of 0.150340 with a t-statistic of 8.004306 (far exceeding the t-table of 1.966) and a

p-value of 0.0000 shows very strong statistical evidence. Economically, a 1 percent increase in DER is associated with a 0.150 percent increase in Tobin's Q ceteris paribus. The results of bootstrapping 10,000 replications confirm this significance with a 95 percent confidence interval (0.0981 – 0.2247) that does not contain zero and a bias of only 2.92 percent.

This finding supports the prediction of agency theory by Jensen (1986) that debt functions as a disciplinary mechanism that reduces the agency cost of free cash flow. At the average sample DER of 0.86 times, the disciplinary benefits of debt still dominate its bankruptcy costs. This finding is consistent with Bui et al. (2023) on 769 Vietnamese companies, Qurrotu'ainii et al. (2025) on Indonesian property companies, Wijayaningsih & Yulianto (2022) on IDX manufacturing companies, and Kartika et al. (2023) on Indonesian manufacturing companies.

Second, regarding the second research question on the effect of profitability on firm value, the t-test results show that profitability proxied by Return on Assets (ROA) has a positive and significant effect on firm value (Tobin's Q) in manufacturing companies on the IDX during the period 2018 to 2024. The coefficient of 1.177319 with a t-statistic of 6.232487 (more than 3 times the t-table) and a p-value of 0.0000 indicates that profitability is the most dominant determinant with the largest coefficient among the three independent variables. Bootstrapping results confirm this significance with a 95 percent confidence interval (0.7866 – 1.6459) that does not contain zero and a bias of only 2.42 percent.

This finding is consistent with agency theory by Jensen & Meckling (1976) which interprets high ROA as evidence of managerial efficiency and low agency cost. The consistency of findings is very strong across studies, namely Wardana et al. (2025) on LQ45, Lestari et al. (2025) on IDX manufacturing companies, Puri et al. (2024), Buallay et al. (2025) on 694 companies in 34 countries, Bon & Hartoko (2022), and Ajibola (2025) on Nigerian banking.

Third, regarding the third research question on the effect of dividend policy on firm value, the t-test results show that dividend policy proxied by the Dividend Payout Ratio (DPR) does not have a significant effect on firm value (Tobin's Q) in manufacturing companies on the IDX during the period 2018 to 2024. The coefficient of -0.009893 with a t-statistic of -0.355967 (far below the t-table of 1.966) and a p-value of 0.7220 indicates that there is no evidence of a relationship between changes in DPR and changes in Tobin's Q within a firm over time. Bootstrapping results confirm this insignificance with a 95 percent confidence interval (-0.0792 – 0.0427) that contains zero.

This insignificance can be explained by (a) consistency with the dividend irrelevance proposition of Miller & Modigliani (1961); (b) substitution mechanisms in agency theory where debt, which has been significant as a disciplinary mechanism, reduces the need for dividends as an additional control instrument, as confirmed by Trong & Nguyen (2020); and (c) the empirical fact that 49.3 percent of observations have a DPR of zero as well as the

residual nature of dividend policy in Indonesia (Wirama et al., 2024). This finding is in line with Salsabila & Imronudin (2025) and Ananda & Lisiantara (2022).

Fourth, regarding the simultaneous effect, the F-test results show that financial leverage (DER), profitability (ROA), and dividend policy (DPR) simultaneously have a significant effect on firm value (Tobin's Q) in manufacturing companies on the IDX during the period 2018 to 2024. The F-statistic of 107.8239 far exceeds the F-table of 2.627 (ratio 41.0 times) with a p-value of 0.000000. The R-squared of 0.949049 indicates that 94.90 percent of the variation in LN(Tobin's Q) can be explained by the model including the three independent variables along with the fixed effects of 69 companies. The adjusted R-squared of 0.940247 confirms a very good goodness of fit.

Overall, the final model equation obtained is:

$$\text{LN (Tobin's Q)}_i = 0,039212 + 0,150340 \text{ LN(DER)}_i + 1,177319 \text{ ASINH(ROA)}_i - 0,009893 \text{ ASINH(DPR)}_i$$

This study confirms that agency theory by Jensen & Meckling (1976) and Jensen (1986) has strong empirical relevance in the context of Indonesian manufacturing companies, particularly in explaining the role of financial leverage and profitability as determinants of firm value. The role of dividends as a disciplinary mechanism of agency cost is not empirically confirmed after controlling for firm fixed effects, which indicates that in the context of Indonesian manufacturing, debt is a more effective mechanism for controlling agency cost compared to dividends.

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