

The Influence and Contribution of Financial Performance to Firm Value: A Study on Manufacturing Companies Listed on the Indonesia Stock Exchange

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Abstract: This research, titled "The Influence and Contribution of Financial Performance to Firm Value: A Study on Manufacturing Companies in the Indonesia Stock Exchange," aims to assess the impact and contribution of financial performance on firm value. Financial performance is measured using Return on Assets, debt-to-assets ratio, Total Assets Turnover, and Dividend Payout Ratio, while firm value is proxied using price-to-book value. The sample is determined through purposive sampling, and multiple linear regression analysis is employed to examine the influence of financial performance variables on firm value. The research findings indicate that Return on Assets and Debt to Assets Ratio have a significant favorable influence. Meanwhile, Total Assets Turnover has a non-significant negative impact, and the Dividend Payout Ratio has a positive but non-significant effect on firm value. Approximately 6.9% of the variability in firm value can be explained by financial performance variables. Implications: The findings of this research provide insights for investors in making investment decisions and underscore the importance of understanding financial performance and its impact on firm value.

Keyword: Price to Book Value, Return on Assets, Total Assets Turnover, Debt to Assets Ratio, Dividend Payout Ratio

INTRODUCTION

In the dynamic world of the capital market, investors often seek indicators that can provide a comprehensive overview of a stock's value. Investors and market analysts employ various stock valuation analysis techniques, one of which is fundamental analysis. This technique involves analyzing a company's financial statements, such as income statements, balance sheets, and cash flow statements. It assesses economic, industry, and management factors, utilizing financial ratios to evaluate the company's financial health. Fundamental analysis provides insights into the intrinsic value of a stock (De Luca, 2018; Smart & Zutter, 2020), especially when linked to financial performance, expansion plans, or significant events occurring within the evaluated company.

On the other hand, technical analysis involves examining price and trading volume charts, utilizing technical tools such as Moving Average Convergence Divergence (MACD) and Relative Strength Index (RSI) to identify trends and momentum (Daniswara et al., 2022). It looks for chart patterns and support and resistance levels (Edwards et al., 2018). Technical analysis offers insights into the direction of price movements based on patterns and indicators (Petrusheva & Jordanoski, 2016). Traders use technical signals to make buy or sell decisions, often faster than fundamental analysis, which may require data collection beforehand.

In this era of the digital economy, the role of information technology in analysis using big data and the Internet of Things (IoT) is extensive, including stock analysis in the global capital market (Yang & Gu, 2021). One manifestation of this is Investment Robots, which utilize algorithms and artificial intelligence to analyze market data, formulate investment strategies, and execute trades automatically. Investors are thus presented with an investment decision-making option. Additionally, investment robots have the advantage of overcoming emotions and making trading decisions based on logic and data (Back et al., 2023). Consequently, the increased speed of trade execution can influence liquidity and price movements.

The theory of financial management posits that corporations, as a form of entity, exhibit a principal-agent relationship between the owners (shareholders) and the management. In this relationship, the management acts as agents for their principals, the shareholders. The primary objective of the management in running the company should be to maximize the share price, aligning with the interests of the shareholders (Brigham & Ehrhardt, 2020). Therefore, the financial performance of a company, reflecting efficiency, financial health, and profitability, as well as the dividend policies adopted, should ideally signal a positive response for the enhancement of the company's stock price. Market responses to a company's financial performance can be assessed through various criteria, such as the price-to-earnings ratio (PER), price-to-book value (PBV), and Tbin's Q (Brealey et al., 2017). In this context, fundamental analysis becomes crucial to understanding how the financial health of a company can significantly impact the PBV of its stock.

This article will delve deeper into the impact of a company's financial performance on its value, proxied by the Price to Book Value (PBV). By utilizing critical financial performance indicators that reflect the outcomes of investment decisions, financing, asset management, and dividend policies as presented in the company's financial statements, the influence of these factors on PBV will be evaluated. A profound understanding of this interconnection not only provides better insights for investors but also serves as a valuable guide in corporate management's financial decision-making process.

Given the dynamics of the capital market and the sophistication of the analysis techniques used in stock buy/sell decision-making on the stock exchange, incorporating big data, the Internet of Things, and price movements such as Moving Average Convergence Divergence (MACD) and Relative Strength Index (RSI), the question arises: "How does a company's financial performance affect its value, measured by its Price to Book Value?".

METHOD

Theoretical Framework and Hypotheses

From various definitions of corporate finance, it can be concluded that financial management involves the administration of financial functions, encompassing investment decisions (Brigham & Houston, 2019), financing decisions (Brigham & Houston, 2019)

(Brigham & Houston, 2019; Gitman & Zutter, 2017), asset management (Brigham & Houston, 2019; Horne & John, 2009), and dividend policies or decisions (Gitman & Zutter, 2017). The operational outcomes of implementing these four functions are reflected in the company's primary financial statements, namely the balance sheet and income statement. By conducting a performance analysis using the company's financial ratios, variables that mirror the outcomes of these decisions can be obtained.

In a general sense, financial ratios, as intended, can be categorized into five groups: (1) Liquidity ratios, providing insights into a company's ability to settle short-term obligations within a year; (2) Asset management ratios, offering a depiction of how efficiently a company utilizes its assets; (3) Debt management ratios, portraying how a company finances its assets and its ability to meet long-term debts; (4) Profitability ratios, illustrating how lucratively a company operates and utilizes its assets; and (5) Market value ratios, presenting an overview of how investors perceive the company and its prospects (Brigham & Daves, 2019; Ross et al., 2019).

Sound investment decisions involving accurate cash flow estimates and precise cost of capital determination, resulting in a positive net present value or internal rate of return higher than the cost of capital, undoubtedly lead to profitable business operations. Return on assets (ROA), also referred to as return on investment (ROI), can indicate the profitability of all the funds invested in a company's assets (Zutter & Smart, 2022). Therefore, ROA or ROI can serve as a critical performance measure. The higher the ROI, the greater the confidence investors have in the company's ability to generate income for its shareholders, thereby positively impacting the company's value.

Financing decisions can be assessed through the company's debt management ratios, such as how the company determines its target capital structure in funding its assets and considering business and financial risks (Luo & Jiang, 2022). Debt management ratios provide insights into how a company finances its assets and its ability to meet long-term debts. One comprehensive ratio reflecting the funding of a company's assets is the debt-assets ratio (DAR) (Ferriswara et al., 2022), which measures the proportion of the company's total assets funded by creditors. The higher this ratio, the greater the amount of money from external sources (non-owners) used to generate profits (Gitman & Zutter, 2017). Thus, this ratio can be a proxy for the performance of financing decisions. A high Debt to Assets Ratio implies an increase in fixed debt burdens, concurrently raising the financial risk of the company. Assuming investors are risk-averse, an increase in this ratio will have a negative impact on the company's stock price.

Asset management performance, resulting from investment decisions, determines how much assets a company should allocate for its operations (Brigham & Houston, 2019). Once acquired, the company must manage its utilization efficiently and effectively to maximize profits (Gitman & Zutter, 2017). A financial performance ratio that can indicate the outcomes of these decisions is the total assets turnover (TAT). This ratio is calculated by dividing sales by total assets. It serves as a measure of how effectively a company utilizes all of its assets to generate sales (Brigham & Ehrhardt, 2020; Gitman & Zutter, 2017). A higher TAT signifies that the company is more efficient and effective in managing its assets, thereby enhancing the company's profitability. This performance will have a positive impact on investors' assessment of the company's stocks.

Dividend Policy Function: Investors and financial analysts carefully monitor dividend payments. It is generally believed that the level of dividend payments is related to the longterm recurring income anticipated by the company. Therefore, an increase in dividends is often considered a positive signal about future performance and is frequently followed by an increase in stock prices. Based on this logic, companies rarely reduce dividends unless necessary, as dividend reductions often result in a significant decline in stock prices (Easton et al., 2021). Even if investors plan to hold securities for one year or less, they have an interest in estimating long-term projections. Thus, dividends are used as a basis for investor assessment to gauge the prospects of stock issuers in the future (Fridson & Alvarez, 2020). In the Indonesian Stock Exchange, the ratio used to measure the outcomes of dividend decisions is the dividend payout ratio (DPR). Therefore, the higher the company's DPR, the more positively it will impact the company's stock price. Research results by Obaid Ur Rehman for companies in the All-Share KSE Non-Financial Index found that dividends influence the company's value (Rehman, 2016). Similarly, research by Stephen et al. at the Frontier Exchange supports this variable (Stephen et al., 2015).

Market assessment of company performance can be seen from market value ratios. One market value ratio that can be used to assess company performance is the price-to-book value (PBV), which is the ratio of the company's market stock price to its book value (Brigham & Ehrhardt, 2020). The PBV Ratio reflects the market's view of the company's future performance (Novita et al., 2022). If the market believes that the company will generate higher profits or growth, the PBV Ratio may be higher, and vice versa (Hasanudin & Wijareni, 2023). Thus, investment, financing, and asset management decisions that result in high ROA, TAT, and DPR at a certain debt-to-assets ratio (DAR) level will positively impact the company's value when measured by its price-to-book value.

Based on the above theoretical foundation, the research in this article employs a framework of variable relationships, as illustrated in Figure 1 below.



Source: Brigham and Houston (2019); Zutter and Smart (2022); and Horne and John (2009) Figure 1. Framework of Variable Relationships

Hypotheses:

- H1. The performance of investment decisions in manufacturing companies listed on the Indonesia Stock Exchange, proxied by Return on Assets (ROA), significantly and positively influences the firm's value measured by the price-to-book value (PBV).
- H2. The performance of financing decisions in manufacturing companies listed on the Indonesia Stock Exchange, proxied by Debt to Assets Ratio (DAR), significantly and negatively influences the firm's value measured by the price-to-book value (PBV).
- H3. The performance of asset management in manufacturing companies listed on the Indonesia Stock Exchange, proxied by Total Assets Turnover (TAT), significantly and positively influences the firm's value measured by the price-to-book value (PBV).
- H4. The performance of dividend policies in manufacturing companies listed on the Indonesia Stock Exchange, proxied by the Dividend Payout Ratio (DPR), significantly and positively influences the firm's value measured by the price-to-book value (PBV).

H5. The financial performance of manufacturing companies listed on the Indonesia Stock Exchange, proxied by ROA, DAR, TAT, and DPR, significantly contributes to explaining changes in the firm's value measured by the price-to-book value (PBV)

Population and Sample

The population of this study comprises manufacturing companies listed on the Indonesia Stock Exchange from 2020 to 2022, totaling 174 companies. The sample is determined using the purposive random sampling technique, which involves selecting samples based on specific considerations according to desired criteria to determine the number of samples to be studied (Sugiyono, 2017). The considerations used in this study are: (1) the companies are classified as manufacturing companies listed on the Indonesia Stock Exchange from 2020 to 2022, (2) the company's stocks are actively traded on the Indonesia Stock Exchange, (3) the companies provide consecutive financial reports from 2020 to 2022 and distribute cash dividends during that period.

Data Collection Method

The data for this research were collected using secondary sources provided by the Indonesia Stock Exchange (IDX), accessible through the website www.idx.com. The data collection process employed the documentation method (Sugiyono, 2017). Additionally, to cross-verify and ensure data completeness, information from the annual reports of the selected companies was also utilized. These annual reports were obtained through the official websites of the respective companies.

Operational Definition of Variables:

The variables in this study consist of independent variables representing the financial performance of companies suspected to influence the dependent variable, which represents the market assessment of the company's performance. Here are the operational definitions of all variables used in this research.

1. The dependent variable, proxied by Price to Book Value (PBV), refers to the comparison between the market price of a company's stock (market value) and the net book value of the company (Kusumawati et al., 2021). This ratio provides insight into how much investors are willing to pay for each unit of equity owned by the company (Gitman & Zutter, 2017). It is formulated as follows:

$Price \ to \ Book \ Value \ (PBV) = \frac{\text{Market Value of Common Stock}}{\text{Net Book Value of Common Equity}}$

- 2. The independent variable, represented by Return on Assets (ROA), measures the overall effectiveness of management in generating profits with the available assets (Markonah et al., 2020). It is also referred to as Return on Investment (ROI) and is calculated by the following formula (Gitman & Zutter, 2017):

$$Return on Assets (ROA) = \frac{Net \ Income \ Available \ to \ common \ stckhoders}{Total \ Assets}$$

3. The independent variable, represented by debt to assets ratio (DAR), measures the percentage of a company's capital provided by debt holders (Brigham & Ehrhardt, 2020). It is calculated using the formula:

$$Debt to Assets Ratio (DAR) = \frac{Total Debt}{Total Assets}$$

4. The independent variable, represented by Total Assets Turnover (TAT), measures the turnover of all assets in generating sales revenue. It is calculated by dividing sales by total assets (Brigham & Houston, 2019).

$$Total \ assets \ Turnover \ (TAT) = \frac{Net \ Sales}{Total \ Assets}$$

5. The independent variable, represented by the Dividend Payout Ratio (DPR), is the ratio between cash dividends and earnings per share (Zutter & Smart, 2022). It is formulated as follows:

 $Dividend Payout Ratio (DPR) = \frac{Dividens per share}{Earnings Per Share}$

Data Analysis Method

The manufacturing company data selected as a sample during the period 2020-2022 were analyzed using multiple linear regression. According to Ghozali (2018), multiple linear regression analysis is used to determine the direction and magnitude of the influence of independent variables on the dependent variable. The use of multiple linear regression analysis must meet the classical assumption requirements, including being applied to interval or ratio data and satisfying assumptions such as linearity, normality, homoscedasticity (non-heteroskedasticity), non-multicollinearity, and non-autocorrelation (Paolella, 2018). In this article's research, classical assumption tests include (1) Normality test of data using the Kolmogorov-Smirnov (K-S) statistical test, (2) Multicollinearity test using the t-test with the Variance Inflation Factor (VIF), (3) Autocorrelation test using the Durbin-Watson (DW test), (4) Heteroskedasticity test using the Glejser test by regressing the absolute residual values against the independent variables (Ghozali, 2018).

To prove the hypotheses and address the research questions in this article, the following multiple linear regression model is employed.

 $PBV = \alpha + \beta_1 ROA + \beta_2 DAR + \beta_3 TAT + \beta_4 DPR + e$

To assess the feasibility of the independent variables in explaining changes in the dependent variable, an F-test is conducted at a significance level of 5% (α =0.05). To examine the significance of the influence of each independent variable on its dependent variable, a t-test is employed at a significance level of 5% (α =0.05). Additionally, to evaluate the contribution of financial performance in explaining changes in the company's value, a coefficient of determination test will be performed using the Adjusted R2 value.

RESULTS AND DISCUSSION

Results

Descriptive statistical analysis provides a depiction of the research variables outlined in Table 1 below.

Table 1. Descriptive Statistics of Variable Values						
Variables	Ν	Minimum	Maximum	Mean	Std.	
PBV	90	.01	7.80	1.9932	1.72601	
ROA	90	-2.99	21.59	6.1240	4.88803	
DAR	90	.01	.75	.3678	.16873	
TAT	90	.00	3.58	.8825	.60406	
DPR	90	.01	9.29	.6984	1.36199	
Valid N	90					

Source: Data for all processed variables using the statistical application SPSS

Classic Assumption Tests:

Normality Test

The results of the normality test conducted in this study reveal that the Normal Parameters value is 0.00, the Kolmogorov-Smirnov statistic is 0.166, and the Asymp.Sig. (2-tailed) is 0.059. These values indicate that, with a significance level of the statistical test

exceeding 0.05, the data for the variables utilized in this study exhibit normal distribution. Consequently, the first classical assumption, which mandates normal distribution of data, has been satisfied.

Multicollinearity Test

Multicollinearity testing is conducted to detect correlations among the independent variables employed in the study (Daoud, 2018). A desirable regression model should exhibit no correlations among its independent variables. The SPSS output of the multicollinearity test provides two key indicators: the tolerance value and the variance inflation factor (VIF). When the tolerance value surpasses 0.10, it signifies the absence of multicollinearity; conversely, if it falls below 0.10, multicollinearity is observed among the independent variables. Meanwhile, with respect to the variance inflation factor (VIF), a value less than 10.00 indicates the absence of multicollinearity, whereas a value exceeding 10.00 suggests the presence of multicollinearity. The values of tolerance and variance inflation factor for all independent variables are presented in Table 2 below.

Table 2. Tolerance and VIF Values of Independent Variables					
Variable	Tolerance	VIF			
ROA	0.613	1,632			
DAR	0.800	1,249			
TAT	0.789	1,267			
DPR	0.854	1,170			

Source: Output of the processing of independent variable values

In Table 2, it can be observed that the tolerance values for all independent variables are more significant than 1.00, and the VIF values are lower than 10.00. Therefore, there is no multicollinearity in the regression model used in the research.

Autocorrelation Test

The Durbin-Watson test was employed for autocorrelation testing, and the results are presented in Table 3 below. _____ . . .

Table 3. Model Summary							
	Model	R	R Square	Adjusted R	Std. Error of	Durbin-	
				Square	the Estimate	Watson	
	1	.333a	.111	.069	1.66567	2.400	
							_

a. Predictors: (Constant), ROA, DAR, TAT, DPR b. Dependent Variable: PBV

In Table 3 of the SPSS model summary output, it is observed that the Durbin-Watson (d) value is 2.400. This value is then compared with the Durbin-Watson table values (dU; dL), where dU = 1.7508. Therefore, the criteria used are du < d < 4 - du. The position of the d value (Durbin-Watson) in this study is 1.7508 < 2.400 < 2.2492, indicating that there are no symptoms of autocorrelation in the model.

Heteroskedasticity Test

The Heteroskedasticity Test, in this study, uses the Glesjer test. The SPSS output showing the results of the heteroskedasticity test is presented in the following Table 4.

	Table 4 Heteroskedasticity Test Results						
	Unstandardized		Standardized				
Coefficients Coefficients							
Mod	del	В	Std. Error	Beta	t	Sig.	
1	(Constant)	.794	.391		2.030	.045	
	ROA	.005	.028	.023	.173	.863	
	DAR	1.330	.698	.222	1.906	.060	
	TATO	.033	.196	.020	.169	.867	
	DPR	103	.084	139	-1.229	.222	

Source: Data analysis conducted using SPSS

The significance level used in this study is 0.05. Based on the results of the heteroskedasticity test in Table 4, it can be seen that the significance of all independent variables is above 0.05. It can be concluded that there are no symptoms of heteroskedasticity in the regression model used.

Application of Regression Model

Based on the results of the classical assumption tests conducted, it is concluded that the model satisfies the conditions of BLUE (Best Linear Unbiased Estimators); hence, it can be applied to the research data. The application results are presented in the following Table 5.

Tabel 5 Coefficients						
		Unstar	ndardized	Standardized		
		Coef	ficients	Coefficients		
Mod	el	В	Std. Erro	Beta	t	Sig
1	(Constant)	.441	.655		.672	.503
	ROA	.137	.046	.387	2.958	.004
	DAR	2.592	1.170	.253	2.215	.029
	TATO	-323	.329	113	981	.329
	DPR	.070	.140	.055	.497	.620

Source: Data analysis conducted using SPSS

Based on the regression coefficients of each variable, as indicated in Table 5, the regression equation can be written as follows.

PBV = 0,441 + 0,070 ROA + 2,591 DAR - 0,323 TAT + 0,070 DPR

The summary of results for the t-test, F-test, and the coefficient of determination test conducted for the model in this study is presented in Table 6.

Table 6. Summary of T-test, F-Test, and Coefficient of Determination Test Results						
Variable	Regression Coefficients	t-statistic	Sig.			
ROA	.137	2.958	.004			
DAR	2.591	2.215	.029			
TAT	323	981	.329			
DPR	.070	.497	.620			
F-statistic		2.641	.039			
Adjusted R ²		.069	-			

Data was processed using SPSS.

From the summary of the F-test, t-test, and Coefficient of Determination test results summarized in Table 6, the explanation is as follows:

1. The F-test results show that the F-statistic is 2.641, significant at 0.039, which is lower than the 0.05 significance level used in the test. This indicates that collectively, the

independent variables ROA, DAR, TAT, and DPR significantly explain the changes in the dependent variable PBV.

- 2. The t-test results at a significance level of 0.05 indicate that out of the four tested variables, two variables have significance levels less than 0.05, namely ROA and DAR. Therefore, it can be concluded that only Return on Asset (ROA) and debt-to-assets ratio (DAR) significantly influence price-to-book value (PBV), while TAT and DPR do not significantly affect Price Book Value (PBV).
- 3. The coefficient of determination test results show that the Adjusted R2 value is 0.069, meaning that only about 6.9% of the changes in the dependent variable can be explained by the independent variables in the regression model generated in this study.

DISCUSSION

Return on Assets (ROA), serving as a proxy for investment decisions in this study, measures the productivity of funds invested by the company across all its assets. It significantly has a positive impact on the price-to-book value (PBV). Thus, the first hypothesis (H1) in this study is proven to be true. A higher ROA indicates that the company's management is more efficient in using its assets to generate profit. Investors tend to assign a higher market value to companies that can generate good profits from their assets. This result also indicates investor confidence in the company's future performance, expressed through a higher valuation of the company's stock, resulting in a higher PBV. For prospective investors, a company with a high ROA can be considered more attractive as an investment because it can generate a high return. Therefore, they are willing to buy the company's stock at a higher premium, as it is perceived to have good prospects. This finding is supported by Husna and Satria's research (2019) as well as Ferriswara et al.'s (2022).

Debt to Asset Ratio (DAR) has a significant positive impact on the price-to-book value (PBV), indicating that the company's financing decisions have been able to maintain the right balance between leverage and return (Brigham & Houston, 2019). This results in a healthy and productive capital structure, impacting the increase in the company's stock price and consequently leading to an increased price-to-book value (PBV). According to Brigham and Ehrhardt (2020), debt interest provides a tax shield for company profits, and therefore, leverage up to a reasonable level will benefit in enhancing the return on assets, subsequently having a positive impact on the company's stock price and increasing PBV. The second hypothesis in this study (H2), stating that DAR significantly has a negative impact on PBV, is not supported. This finding is consistent with the research of Dang and Do (2021) in Vietnam and Ogbulu and Emani (2012) in the Nigerian Stock Exchange (NSE).

Total Asset Turnover (TAT) has a negative but not significant impact on the price-tobook value (PBV); therefore, the third hypothesis (H3) in this study is not proven to be true. This result suggests that investors are more focused on profitability rather than the level of operational activity of the company. In other words, although the company generates relatively high sales relative to its assets, investors may be more concerned about profit margins and net income when evaluating the stock of a manufacturing company. This is reflected in ROA having a positive impact on PBV. The descriptive statistics of this research indicate that the average return on assets (ROA) for the selected sample companies over three years is 6.12%, while the average total asset turnover is 0.88. This suggests that the operational cost efficiency of the companies in this industry is high, enabling them to achieve high-profit margins and consequently yielding a high return on assets. Such performance is highly valued by investors when assessing company stocks. Research conducted by Nurlaela et al. (2019) shows a significant favorable influence of Total Asset Turnover on firm value.

The research results indicate that the Dividend Payout Ratio (DPR) has a positive but not significant impact on the price-to-book value (PBV); thus, the fourth hypothesis (H4) proposed in this study is not proven to be true. This result suggests that investors in manufacturing companies are more focused on profitability and company growth rather than dividend distribution during the observed period. This is attributed to manufacturing companies being in the recovery phase from COVID-19, focusing on operational recovery, and investors prioritizing profitability and growth over dividends. The findings of this study align with the research conducted by Bustani et al. (2021).

The explanatory power of the independent variables ROA, DAR, TAT, and DPR in explaining the changes in the dependent variable and describing the changes in PBV is about 0.069 or 6.9%. This indicates that the influence of external or macroeconomic factors is more dominant in explaining the variation in PBV in manufacturing companies listed on the Indonesia Stock Exchange during the recovery from COVID-19. The fifth hypothesis (H5) in this study, stating that the independent variables ROA, DAR, TAT, and DPR significantly contribute to the company's value proxied by the price to book value, is proven to be true.

CONCLUSION

- 1. ROA has a significantly positive impact on PBV, but the Dividend Payout Ratio does not significantly influence PBV. This indicates that during the recovery from the COVID-19 pandemic, investors' focus in evaluating manufacturing company stocks lies in their fundamental ability to generate profits, with a greater emphasis on growth rather than dividends distributed at present. Higher expected growth is anticipated to increase stock prices in the future and provide higher capital gains from their investments.
- 2. DAR has a positive impact on PBV, and TAT, albeit not significant, has a negative effect. This is because investors pay more attention to a healthy capital structure when evaluating manufacturing companies. Due to their focus on assessing manufacturing company stocks based on profitability and growth, the tax shield benefits of company profits from debt interest become more critical than asset efficiency, as reflected in the significant impact of debt-to-asset ratio on price-to-book value.
- 3. The limited explanatory power of the independent variables in explaining the changes in the dependent variable in this study is due to investors still placing more emphasis on macroeconomic aspects to assess the recovery of manufacturing companies' business operations after the implementation of COVID-19 protocols in Indonesia.
- 4. The weakness of this study lies in the relatively short observation period of 3 years, influenced by the data availability of manufacturing companies during the COVID-19 pandemic and its recovery, where many still need to meet the variables used in this research.

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