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Factors Affecting Company Value In Food And Beverage Manufacturing Companies Listed On The Indonesian Stock Exchange From 2020 To 2022

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ABSTRACT

This study aims to analyze the influence of Firm Size, Return on Assets (ROA), Debt to Equity Ratio (DER), Debt to Assets Ratio (DAR), and Net Profit Margin (NPM) on Firm Value as proxied by Price to Book Value (PBV). The research employs secondary data obtained from annual financial reports of companies listed on the Indonesia Stock Exchange (IDX), with a total of 36 observations. The analytical method used is multiple linear regression, along with classical assumption tests and hypothesis testing through t-test, F-test, and the coefficient of determination (R^2). The results indicate that Firm Size, ROA, and DER have a significant positive effect on Firm Value. Meanwhile, DAR and NPM show no significant effect on PBV. Simultaneously, the five independent variables significantly influence Firm Value with a significance level below 0.05. These findings support agency theory, which posits that effective management by agents can enhance Firm Value and reduce conflicts of interest with principals.

I. INTRODUCTION

In the world of business and finance, company value is not just a number on paper, but a strategic indicator that reflects how much the company is able to generate profits for shareholders and attract investors. This value describes the market's perception of the company's condition and prospects, covering aspects of operational performance, financial strength, and the ability to survive in the midst of market dynamics (Andhani, 2019). In general, company value is the main benchmark in assessing the competitiveness and credibility of a business entity. Investors and financial analysts will pay attention to this indicator to assess whether a company is a suitable place to invest capital. The higher the company value, the greater the market's confidence in the future growth and stability of the business (Silvia & Epriyanti, 2021).

In general, there are various internal factors that are believed to have a major influence on company value, such as company size, profitability, capital structure, and operational efficiency. Company size reflects the total assets and resources owned, which also indicates the company's ability to manage and expand its business (Tanisa & Maharani, 2024).

Profitability indicators such as *Return on Assets* (ROA) measure how efficiently a company utilizes its assets to generate profits. Capital structure is reflected through financial ratios such as *Debt to Equity Ratio* (DER) and *Debt to Asset Ratio* (DAR), which show the extent to which a company uses borrowed funds in its financing (Noviyanti & Zarkasyi, 2021).

In addition, the Equity Ratio provides an overview of the proportion of equity capital

in financing the company's overall activities, which is an important indicator in assessing the level of financial independence. *Net Profit Margin* (NPM) is also a key benchmark for assessing a company's ability to generate net profit from each sale made. All of these indicators play an important role in shaping investors' perceptions of the company's risks and future prospects, thereby contributing directly to the company's value (Melanie & Febriyanti, 2025).

The company's value itself is often reflected through indicators such as Price to Book Value (PBV) and Tobin's Q, which describe the comparison between market value and book value or the replacement value of the company's assets. These two indicators are dynamic and can change in line with developments in the company's internal and external conditions, including financial performance, managerial strategy, and the macroeconomic situation. However, in practice, there is often a phenomenon where companies with good financial performance have low market value, while companies with less than optimal performance receive high market valuations (Randy et al., 2022). This discrepancy reflects a gap between the fundamental value and market value of the company. This phenomenon shows that investors' assessments of companies are not only influenced by objective factors such as financial reports, but also by non-financial factors such as market perceptions, future expectations, management reputation, and industry sentiment (kurniawan & Pardistya, 2024). This emphasizes the importance of a comprehensive understanding of the elements that influence company value, both internally and externally, in order to develop effective strategies to enhance the company's attractiveness in the eyes of investors.

The reason for choosing food and beverage manufacturing companies as the object of research is based on the characteristics of this sector, which tends to be stable, grow consistently, and play an important role in the national economy. Moreover, from 2020 to 2022, this sector showed considerable resilience amid global pressures due to the pandemic, making it interesting to study further in the context of company value analysis. Furthermore, the presence of companies in this sector on the Indonesia Stock Exchange provides representative and accessible data for in-depth research.

Research by Hasan et al. (2023) shows that *the Debt to Equity Ratio* (DER) has a positive effect on company value, while managerial ownership and liquidity have a negative effect, and intellectual capital and audit committees have no significant effect. Different results are shown by Cut Zahri et al. (2022), who state that capital structure can mediate the relationship between profitability, liquidity, and company size on company value, but they also suggest the need to add external variables such as inflation and interest rates to enrich the analysis results. Meanwhile, Erni Alfisah et al. (2021) found that capital structure and financial performance simultaneously have a significant effect on company value, but when tested partially, DER and profitability do not have a significant effect.

Fitri Haryati et al. (2021) examined sales growth, capital structure, and company size, and only found that company size had a positive effect on company value. Research results showing the significant effect of DER and ROE on company value were found in a study by Suparno et al. (2021), which also stated that investment decisions also positively affect company value. However, Bahraini et al. (2021) showed that DER, ROE, and company size have a significant positive effect on company value, while TATO and Current Ratio have a negative effect. On the other hand, research by Hamzah Ahmad et al. (2020) found that DER has a significant negative effect on company value, TATO has a negative effect, Current Ratio has a positive effect, and ROE has no effect at all.

From these various results, there appear to be differences in findings between researchers regarding financial variables such as DER, ROA, and company size on company value. In addition, most studies only examine some of the variables and not many comprehensively combine variables such as company size, ROA, DER, DAR, Equity Ratio, and NPM simultaneously in one research model. Research is also generally conducted on

the manufacturing sector as a whole without specifying a particular sector, thus ignoring the unique characteristics of the food and beverage sub-sector. Furthermore, most of the research periods ended before or at the beginning of the pandemic, and not many have explored the latest data for the 2020 to 2022 period, which is an important period with highly dynamic economic conditions due to the COVID-19 pandemic. Therefore, there is still room for research that specifically analyzes financial factors on company value in food and beverage manufacturing companies listed on the Indonesia Stock Exchange during the 2020–2022 period.

II. LITERATURE REVIEW

Signaling Theory

This study is based on *Signaling Theory*, which was first introduced by Michael Spence in 1973. This theory explains that asymmetric information between management and investors can be reduced through signals sent by companies. In a financial context, these signals can take the form of financial reports, financial performance, capital structure, or other financial ratios (Putri & Sudjono, 2024).

Signaling Theory states that companies with good performance will try to send positive signals to the market so that investors respond by giving a higher valuation to the company.

One form of signal is financial ratios such as ROA, DER, NPM, and PBV. For example, a high ROA is a signal that the company is able to manage its assets well to generate profits. Similarly, a healthy capital structure (e.g., low DER and high Equity Ratio) signals that the company has controlled financial risk, which ultimately increases the company's value in the eyes of investors (Teng et al., 2022).

Company Size

Firm size indicates the size of a company based on its total assets. This measure is important because larger companies tend to have better access to financing, higher stability, and broader operational capabilities. Firm size in this study is measured using the natural logarithm of total assets (Nur et al., 2024).

Return on Assets (ROA)

Return on Assets describes a company's ability to generate net income from all of its assets. ROA shows the efficiency of management in utilizing available assets to generate profits. The higher the ROA value, the higher the level of efficiency of the company in generating profits. ROA is an important indicator in assessing financial performance because it provides an overview of the effectiveness of the management of the company's resources (Anggraini & Yudiantoro, 2023).

Debt to Equity Ratio (DER)

The Debt to Equity Ratio shows the proportion between total debt and total equity used to fund company activities. This ratio reflects the level of financial leverage or the company's dependence on external sources of funds. A high DER indicates that the company finances more of its activities with debt, which can increase financial risk if not offset by adequate profits. DER is often used to assess a company's capital structure and financial health (Paramita & Wahyuni, 2019).

Debt to Asset Ratio (DAR)

The Debt to Asset Ratio describes how much of a company's total assets are financed by debt. The higher the DAR, the greater the company's dependence on borrowed funds. This ratio is important because it shows the extent to which a company operates with external funding. A high DAR value may indicate greater financial risk, but it may also indicate an aggressive expansion strategy if accompanied by significant revenue growth (Anggraini & Lestariningsih, 2019).

Net Profit Margin (NPM)

Net Profit Margin indicates the percentage of net profit a company earns from total

sales. This ratio reflects the operational efficiency of a company in managing costs and generating profits from its business activities. The higher the NPM, the greater the net profit obtained from each sale made. NPM is often used as an indicator of profitability and a company's ability to generate added value from its business activities (Anggraini & Yudiantoro, 2023).

Firm Value

Firm value reflects the market's or investors' perception of a company's performance and future prospects. Firm value is an important indicator in investment decisions because it reflects a company's ability to create value for its shareholders. Firm value can be influenced by many factors, such as profitability, capital structure, and company size. The higher the firm value, the more attractive the company is to investors (Andhani, 2019).

III. METHODS

Type of Research

This research is an associative quantitative study. Quantitative research is used because the data analyzed consists of numbers and statistical calculations. Meanwhile, associative research aims to determine the relationship or influence between two or more variables. In this case, the study aims to analyze the influence of company size, ROA, DER, DAR, and NPM on company value in the food and beverage sector listed on the Indonesia Stock Exchange (IDX) during the period 2020–2022.

Data Sources

The data source in this study is secondary data. Secondary data was obtained from *annual reports* and company financial reports published on the official website of the Indonesia Stock Exchange (www.idx.co.id) and the official websites of each company. The data used includes financial information and stock prices from 2020 to 2022.

Data Collection Techniques

Data collection techniques were carried out using the documentation method, namely by downloading and reviewing the annual financial reports of the companies selected as samples. Data were collected systematically based on the variables studied, such as total assets, net income, total debt, equity, and stock prices.

Data Analysis Technique

The data analysis technique in this study used multiple linear regression with the help of SPSS (Statistical Package for the Social Sciences) software. This analysis was used to test the simultaneous and partial effects of several independent variables on the dependent variable, namely company value. Before performing the regression analysis, a series of classical assumption tests were conducted to ensure that the regression model met the eligibility requirements as a BLUE (Best Linear Unbiased Estimator) estimator. The classical assumption tests conducted included normality tests, multicollinearity tests, heteroscedasticity tests, and autocorrelation tests. The normality test aims to determine whether the residual data is normally distributed, which is an important requirement in regression analysis. The multicollinearity test is used to ensure that there is no high correlation between independent variables that could interfere with the model estimation results. Furthermore, the heteroscedasticity test is performed to see if there is variance inequality of the residuals across all predictor values, while the autocorrelation test is used to determine whether there is correlation between sequential residuals in time series data.

After the model is declared to meet all classical assumptions, multiple linear regression analysis is performed to measure the extent of the influence of each independent variable, namely company size, *Return on Assets* (ROA), *Debt to Equity Ratio* (DER), *Debt to Asset Ratio* (DAR), and *Net Profit Margin* (NPM) on company value. Hypothesis testing was conducted through statistical tests, namely the t-test and F-test. The t-test was used to determine the effect of each independent variable on the dependent variable partially.

Meanwhile, the F-test was used to determine whether all independent variables together (simultaneously) had a significant effect on company value. In addition, the coefficient of determination (R^2) was also calculated to see the extent to which the variation in company value could be explained by the independent variables in the model. The higher the R^2 value obtained, the greater the contribution of the independent variables in explaining the dependent variable.

IV. RESULTS AND DISCUSSION

Research Results

Descriptive Statistical Test

This test is used to describe or summarize data characteristics. Through values such as the mean, median, standard deviation, maximum, and minimum, researchers can understand the initial conditions of the data being studied before conducting further analysis.

Table 1. Descriptive Statistics Test

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Company Size	36	6,650	19,010	14,355	3,487
ROA	36	0.000	0.270	0.109	0.056
DER	36	0.110	2.140	0.658	0.461
DAR	36	0.100	0.680	0.354	0.162
NPM	36	0.000	0.300	0.126	0.086
PBV	36	0.050	18,530	4,726	4,298

Source: Processed by the researcher

Based on Table 1 Descriptive Statistics Test, it can be seen that all variables studied have a total of 36 observations (N). The Company Size variable shows a minimum value of 6.650 and a maximum of 19.010, with a mean of 14.355 and a standard deviation of 3.487. This indicates that the companies observed vary significantly in size. *The Return on Assets (ROA)* variable has a minimum value of 0.000 and a maximum of 0.270, with an average of 0.109 and a standard deviation of 0.056, indicating that the average ability of companies to generate profits from their total assets is still relatively low.

For the *Debt to Equity Ratio (DER)* variable, the minimum value recorded is 0.110 and the maximum is 2.140, with an average of 0.658 and a standard deviation of 0.461. This reflects variations in capital structure between companies, from conservative to quite aggressive in the use of debt. The *Debt to Assets Ratio (DAR)* variable has an average of 0.354 with a standard deviation of 0.162, which indicates that around 35% of company assets are financed by debt.

The *Net Profit Margin (NPM)* variable has an average of 0.126 and a standard deviation of 0.086, reflecting that the companies' ability to generate net profit from revenue is still moderate. Finally, the *Price to Book Value (PBV)* variable shows a fairly wide data distribution with a minimum value of 0.050 and a maximum of 18.530. The average PBV of 4.726 with a standard deviation of 4.298 indicates a disparity in market value between companies, which may be due to differences in investor perceptions of the value and prospects of each company. Overall, the results of the descriptive statistical test show diversity in the financial characteristics of the companies that are the subject of this study.

Normality Test

Used to test whether the data is normally distributed. Normal distribution is an important requirement in various parametric statistical tests. Several methods that are often used are the Kolmogorov-Smirnov and Shapiro-Wilk tests. If the data is not normally distributed, then non-parametric statistical techniques can be an alternative.

Table 2. Normality Test

One-Sample Kolmogorov-Smirnov Test

Unstandardized Residual

N		36
Normal Parameters ^{a,b}	Mean	.000000
	Std. Deviation	2.55556959
Most	Extreme	Absolute
		.114
Differences	Positive	.114
	Negative	-.094
Test Statistic		.114
Asymp. Sig. (2-tailed)		.200 ^{c,d}

Source: Processed by the researcher

Based on Table 2 Normality Test using the One-Sample Kolmogorov-Smirnov Test, an Asymp. Sig. (2-tailed) value of 0.200 was obtained. This value is well above the commonly used significance level of 0.05, so it can be concluded that the residual data is normally distributed.

Multicollinearity Test

This test aims to determine whether there is a very strong relationship between independent variables in the regression model. Multicollinearity can cause analysis results to be biased and inaccurate. It is usually tested using VIF (Variance Inflation Factor) and Tolerance values. A VIF above 10 or Tolerance below 0.1 indicates multicollinearity.

Table 3. Multicollinearity Test

Variable	Tolerance	VIF
Company Size	0.845	1.184
ROA	0.338	2.960
DER	0.525	1.031
DAR	0.539	1.561
NPM	0.418	2.391

Source: Processed by the researcher

Based on Table 3 Multicollinearity Test, all independent variables in the regression model show tolerance values above the minimum threshold of 0.10 and VIF or Variance Inflation Factor values below the maximum limit of 10. Overall, the results of this multicollinearity test indicate that there is no multicollinearity between the independent variables in the regression model.

Heteroscedasticity Test

Used to determine whether the variance of the residuals is constant or not. If it is not constant, then heteroscedasticity occurs, which can affect the accuracy of regression estimates.

Table 4. Heteroscedasticity Test

Variable	Sig
Company Size	0.969
ROA	0.511
DER	0.614
DAR	0.943
NPM	0.554

Source: Processed by the researcher

Based on Table 4 Heteroscedasticity Test, all independent variables show significance values above 0.05. The Company Size variable has a significance value of 0.969, which indicates no indication of heteroscedasticity. The ROA variable has a significance value of 0.511, DER of 0.614, DAR of 0.943, and NPM of 0.554. All of these values indicate that the residual variance is constant or homoscedastic. These results indicate that the regression model has fulfilled one of the classical assumptions, namely the absence of heteroscedasticity.

Autocorrelation Test

This test was conducted to determine whether there was a correlation between residuals in the regression model, especially in time series data. Autocorrelation can cause errors in model interpretation. The Durbin-Watson Test is the most commonly used method, where a DW value close to 2 indicates the absence of autocorrelation.

Table 5. Autocorrelation Test

Model	R	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	.804a	0.646	0.588	2.76033

Source: Processed by the researcher

Based on the Durbin-Watson value of 1.816 and the du value of 1.7987, and considering that the value of $4 - du$ is 2.2013, the Durbin-Watson position is between $du < DW < 4 - du$ or $1.7987 < 1.816 < 2.2013$. This indicates that there is no autocorrelation in the regression model. Thus, the model has fulfilled the classical assumption of no correlation between residuals.

R² Test (Coefficient of Determination)

This test shows how much of the variation in the dependent variable can be explained by the independent variables. The value ranges from 0 to 1, where the closer it is to 1, the better the model is at explaining the variation in the data.

Table 6. R² Test

Model	R	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	.804a	0.646	0.588	2.76033

Source: Processed by the researcher

Based on the Model Summary output, the R Square value of 0.646 indicates that 64.6 percent of the dependent variable PBV can be explained by the independent variables, namely Company Size, ROA, DER, DAR, and NPM. This means that this regression model has a fairly good ability to explain PBV variations.

Meanwhile, the Adjusted R Square value of 0.588 indicates that after adjusting for the number of predictor variables and the number of samples, approximately 58.8 percent of PBV variation can still be explained by the model. Adjusted R Square is used to avoid bias that may arise due to the addition of independent variables in the model. The difference between R Square and Adjusted R Square is not too large, indicating that the addition of variables does not cause overfitting and that all variables used are relevant in explaining changes in PBV values.

F Test (Simultaneous)

This test is used to assess whether all independent variables collectively have a significant effect on the dependent variable. If the significance value is less than 0.05, the model is considered simultaneously significant.

Table 7. F Test

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	418.037	5	83,607	10,973	.000b
	Residual	228,583	30	7,619		
	Total	646,62	35			

Source: Processed by the researcher

Based on Table 7 F Test, a significance value of 0.000 was obtained, which is smaller than the significance level of 0.05. This indicates that the regression model is simultaneously significant, meaning that the independent variables, namely Company Size, ROA, DER, DAR, and NPM, together have a significant effect on the dependent variable PBV.

The calculated F value of 10.973 also shows that the regression model used is strong enough to explain the relationship between variables. Thus, the model is suitable for further analysis because it meets the simultaneous significance requirements in linear regression testing.

t-test (Partial)

This test is used to test the effect of each independent variable on the dependent variable. If the significance value of the t-test is less than 0.05, then the variable is considered to have a significant effect on the dependent variable.

Table 8. T Test

Variable	t	Sig.
Company Size	3.073	0.002
ROA	3.160	0.004
DER	2.804	0.009
DAR	-1.881	0.070
NPM	-1.989	0.056

Source: Processed by the researcher

Based on Table 8 T-test and the t-table value of 2.040, an analysis can be performed on each independent variable against the dependent variable PBV as follows:

- 1) The Company Size variable has a t-value of 3.073 with a significance of 0.002, which is greater than the t-table and significant below 0.05. This indicates that Company Size has a significant effect on PBV.
- 2) The ROA variable has a t-value of 3.160 and a significance level of 0.004, which is also greater than the t-table value and significant, indicating that ROA has a significant effect on PBV.
- 3) The DER variable shows a t-value of 2.804 with a significance level of 0.009. Because the t-value is greater than the t-table and significant, DER also has a significant effect on PBV.
- 4) The DAR variable has a t-value of -1.881, which is smaller than the t-table, and a significance value of 0.070, which is greater than 0.05. This indicates that DAR does not have a significant effect on PBV.
- 5) The NPM variable has a t-value of -1.989 and a significance level of 0.056, which is also insignificant because it is above 0.05 and the t-value is smaller than the t-table value. Thus, NPM does not have a significant effect on PBV.

Discussion

Company Size on Firm Value (PBV)

The t-test results show that company size has a significant positive effect on company value as proxied by Price to Book Value (PBV), with a significance value of 0.002

< 0.05 and $9a$ t-value of $3.073 > t$ -table 2.040 . Company size plays an important role in determining market perceptions of company value itself. The larger the scale of the company, the more complex its structure and operational activities. However, it is precisely this complexity that encourages the implementation of a more rigorous and transparent governance system (Silvia & Epriyanti, 2021). Investors tend to view large companies as entities capable of maintaining financial and operational stability, as they are considered to have experience, a good track record, and capable internal control mechanisms. Thus, the market gives a positive assessment through an increase in market value or Price to Book Value (PBV), because large companies are considered capable of providing more stable and sustainable profits (Tanisa & Maharani, 2024).

Within the framework of agency theory, company size has direct implications for the dynamics of the relationship between agents (managers) and principals (owners). Large companies usually have more structured oversight systems in place, such as a board of commissioners, an audit committee, and the involvement of external parties such as independent auditors. This creates a more accountable work environment and reduces information asymmetry between management and owners (Noviyanti & Zarkasyi, 2021). With stricter control mechanisms, opportunistic behavior by agents can be minimized, so that company objectives can be more aligned with shareholder interests. This makes company size an instrument that indirectly strengthens market discipline on managerial performance (Melanie & Febriyanti, 2025).

Furthermore, large-scale companies tend to have competitive advantages in various aspects such as access to capital, use of advanced technology, and the ability to attract the best talent. These advantages strengthen the company's position in the industry, improve operational efficiency, and increase opportunities for expansion and long-term growth (kurniawan & Pardisty, 2024). In the eyes of investors, all these factors reflect the potential for high returns on investment with more controlled risks. Therefore, it is not surprising that company size is often used as an indicator by the market in assessing the prospects and credibility of a business entity (Randy et al., 2022). Thus, these findings reinforce the validity of agency theory that company size not only reflects the size of assets but also serves as a positive signal of the company's ability to manage agency relationships and increase market value.

Research by Dwipa (2023) on 72 companies in the food and beverage sub-sector on the IDX for the 2017–2021 period concluded that company size has a simultaneous effect on PBV, although it is not significant in part. These results show that company size remains an important factor in the market's assessment of company value. Furthermore, a study from the Journal of Economics and Investment (2023) examining the plastics and packaging sector for the period 2016–2020 found that company size has a positive and significant effect on PBV. This is reinforced by research by Meilin Veronica et al. (2024), which shows that company size significantly affects PBV at PT Garuda Indonesia Tbk, meaning that the larger the company, the higher its value in the eyes of investors.

Return on Assets (ROA) on Firm Value (PBV)

The t-test results show that ROA also has a significant effect on PBV, with a significance value of $0.004 < 0.05$ and a t-value of $3.160 > t$ -table. A high *Return on Assets* (ROA) indicates that the company has high efficiency in managing and utilizing assets to generate profits. Good ROA reflects the company's ability to convert asset investments into real profits, which ultimately has a direct impact on increasing the company's value in the eyes of investors (Putri & Sudjono, 2024). In this context, efficiency is not only a matter of technical operations, but also an indicator of the company's strategic success in allocating its resources.

Investors view companies with high ROA as financially healthy entities capable of creating added value with relatively low risk (Teng et al., 2022).

When viewed from the perspective of agency theory, ROA serves as a concrete measure of the performance of agents (managers) in carrying out the mandate of principals (owners). The higher the ROA value, the greater the evidence that managers are performing their functions effectively and responsibly. Efficient management performance indicates that they do not abuse the trust of owners, do not waste assets, and have a strong focus on achieving the company's main objective, namely increasing shareholder value (Nur et al., 2024). A high ROA is a strong signal that managerial control is working well, so that the potential for agency conflicts can be significantly reduced.

In addition, a positive and consistent ROA signals to the market that the company has reliable management and the right operational strategy. Investors tend to respond positively to companies with high ROA because they see the potential for sustainable profit growth (Teng et al., 2022). From an agency theory perspective, this shows that synergy between managers and owners has been created through measurable and transparent performance (A). Thus, ROA is not only a financial indicator but also an important tool for evaluating the quality of agency relationships and the long-term prospects of a company.

Research by Nurul Izzah Ravelina (2025) found that ROA has a significant positive effect on PBV in food and beverage companies listed on the IDX for the period 2014–2023. These results indicate that the market highly appreciates a company's efficiency in generating profits from its total assets. Another study by Polgan Research Staff (2024) also shows that ROA has a significant effect on PBV, indicating that profitability is a major concern for investors in assessing company valuations. In addition, a study by Misran and Chabachib (2023) conducted on property and real estate companies states that ROA has a significant effect as a mediating variable between DER and PBV, strengthening the position of ROA in bridging capital structure and market value.

Debt to Equity Ratio (DER) on Company Value (PBV)

Based on the t-test results, the DER variable also has a significant positive effect on PBV, with a significance value of 0.009 and a t-value of 2.804. A capital structure that is supported more by debt than equity, as long as it is within optimal limits, can contribute positively to increasing company value. These results indicate that debt is not merely a financial burden, but can also function as a strategic tool to drive operational efficiency and strengthen the financial structure (Nur et al., 2024). In many cases, the prudent use of debt reflects managerial courage and careful planning in utilizing external resources to finance the company's growth (Anggraini & Yudiantoro, 2023a). When debt is used effectively, companies can increase their financial leverage to seize expansion opportunities, increase profits, and ultimately boost market valuation of the company.

From an agency theory perspective, the use of debt is a disciplinary mechanism that can reduce conflicts between managers (agents) and owners (principals). With scheduled interest and principal payments, managers are encouraged to be more cautious in making financial decisions, maintain cash flow stability, and avoid wasteful and non-value-adding projects (Paramita & Wahyuni, 2019). Creditors who are actively involved in supervision also become external parties that help control management actions. In this condition, debt functions as a tool to limit opportunistic behavior by agents, thereby reducing agency costs that arise from differences in interests between parties within the company (Anggraini & Lestariningsih, 2019).

Furthermore, when the *Debt to Equity Ratio* (DER) is managed strategically and does not exceed the company's payment capacity, investors see this as a sign of management discipline in managing capital structure. Companies that are able to utilize debt effectively demonstrate that they have good control over financial risks and are able to maintain performance and profitability (Rivalda et al., 2022). Therefore, these findings further strengthen the argument in agency theory that debt can be a tool to align the interests of managers with owners, while increasing the credibility and value of the company in the eyes

of shareholders and the market in general.

Research from the plastics and packaging sector by Ravelina (2025) also proves that DER contributes positively to increasing PBV in food and beverage companies. These results are in line with the findings of Misran and Chabachib (2023), where DER indirectly affects PBV through ROA as a mediating variable, explaining that an optimal debt structure supports company performance, which in turn increases market value.

Debt to Assets Ratio (DAR) on Company Value (PBV)

Unlike DER, the t-test results show that DAR does not have a significant effect on PBV, with a significance value of $0.070 > 0.05$ and a t-value of $-1.881 < t\text{-table}$. These results show that the proportion of total debt to total assets (*Debt to Asset Ratio* or DAR) does not have a significant effect on investors' assessment of company value. Although DAR describes the company's overall leverage level, this indicator tends to be less informative in explaining the effectiveness of debt management by management (Anggraini & Yudiantoro, 2023b). Investors are more selective in assessing the composition and quality of debt than just looking at its aggregate quantity. When debt increases without an accompanying increase in profitability or operational efficiency, debt is perceived as a source of risk rather than added value (Noviyanti & Zarkasyi, 2021). In this case, DAR is less successful in providing strong signals regarding the company's long-term growth or stability potential.

Within the agency theory framework, DAR has limitations as a tool for controlling agent (manager) behavior. Unlike the debt-to-equity ratio (DER), which can exert pressure from shareholders and financing institutions directly, DAR does not necessarily explain whether a company's debt structure provides incentives for managers to act more efficiently and responsibly (Melanie & Febriyanti, 2025). In fact, in many cases, a high proportion of debt without proper control can actually worsen agency relationships by increasing the risk of financial failure. Investors who understand this tend to be cautious and do not necessarily consider DAR as an indicator of managerial health or an effective internal control mechanism (Melanie & Febriyanti, 2025).

Furthermore, DAR does not provide information on the debt term, interest rate, or efficiency of loan utilization. This makes the ratio relatively less effective in assessing the company's overall financing strategy. Investors who prioritize fundamental analysis tend to consider more detailed and contextual variables, such as *Return on Assets* (ROA), DER, or interest coverage ratio, to evaluate the quality of a company's financial management (Putri & Sudjono, 2024). Therefore, it is not surprising that DAR is not considered a strategic variable in determining a company's value, as it cannot fully represent managerial control from an agency theory perspective.

Research by Kevin Rizky Dwiputra and Silvi Reni Cusyana (2022) shows that DAR has a significant positive effect on Price to Book Value (PBV) in construction and property companies listed on the Indonesia Stock Exchange for the period 2016–2020. The partial test results show a t-value of 3.290, which is greater than the t-table value of 1.998, meaning that DAR makes an important contribution to increasing company value. This study emphasizes that the use of debt in proportion to total assets can encourage an increase in market perception of company performance and valuation. Furthermore, Desi Rahmawati and Eko Budiyanto (2022) also prove that DAR has a significant effect on PBV in consumer goods manufacturing companies, indicating that capital structure plays an important role in determining market value. Meanwhile, Ahmad Bhakti and Marwan Ismail (2021) in their research on BEI housing companies for the 2017–2020 period revealed that although DAR is not as strong as ROA, it still has a positive effect on PBV because it reflects the efficiency of debt management in the company's asset structure.

Net Profit Margin (NPM) on Company Value (PBV)

The t-test results also show that NPM does not have a significant effect on PBV, with a significance value of $0.056 > 0.05$ and a calculated t-value of $-1.989 < t\text{-table}$. Although *Net Profit Margin* (NPM) is an important indicator that shows how much net profit a company generates from each unit of sales, the findings show that NPM is not strong enough to significantly affect Price to Book Value (PBV). This indicates that high profit margins alone are not enough to increase the perception of company value in the eyes of investors. In practice, investors tend to value the sustainability and quality of profits more highly than short-term profit figures (Teng et al., 2022). Large margins without the support of long-term strategies, business innovation, or operational efficiency do not necessarily reflect strong company fundamentals (Nur et al., 2024).

From an agency theory perspective, net profit as reflected in NPM is not always the primary measure of agent (manager) performance, especially if it is not linked to the effective use of assets or the creation of long-term value for owners (principals). In many cases, net profit can be distorted by non-operational factors such as foreign exchange gains, sales of fixed assets, or income from other temporary extraordinary items (Anggraini & Lestariningsih, 2019). This means that NPM can be high but does not reflect actual managerial performance. Investors who are aware of this dynamic will tend to pay more attention to other indicators that represent profit efficiency and sustainability, such as ROA or *operating cash flow* (Rivalda et al., 2022).

Furthermore, a high NPM does not fully guarantee that agency conflicts will not occur. In an effort to show attractive financial performance, managers may engage in accounting manipulation practices such as deferring expenses or accelerating revenue recognition in order to artificially inflate margins. These actions can mislead investors and risk undermining market confidence. Therefore, even though NPM reflects net profit, investors tend to be more cautious and do not use it as the main reference in assessing company value (Anggraini & Yudiantoro, 2023b). This finding is in line with agency theory, which states that financial indicators must be examined holistically and cannot be based solely on profit margins that appear high on the surface.

Research by Kevin Rizky Dwiputra and Silvi Reni Cusyana (2022) also tested the effect of NPM on PBV in the construction and property sectors. The results show that NPM does not have a significant effect on PBV, as seen from the t-value of -1.812 , which is smaller than the t-table. This indicates that although net profit margin is an indicator of profitability, the market tends to assess company value based on other factors such as asset efficiency and debt structure. Similar results were found in a study by Desma N. Mutiara Senja, Chaidir Chaidir, and Sulaeman Sulaeman (2020) on the food and beverage sub-sector for the period 2015–2018. They found that NPM had no significant effect on stock prices, while PBV and DER had a significant effect. Recent research by Annisa Wulandari Fitriyana and Tri Cahyo Nugroho (2024) on telecommunications companies on the IDX reinforces these findings, where NPM does not have a significant effect on stock prices even though other variables such as PBV are very influential. This indicates that investors consider market value and capital structure more than net profit margin in assessing a company's prospects.

V. CONCLUSION

Based on the results of regression analysis and hypothesis testing, it can be concluded that:

Company size, *Return on Assets* (ROA), and *Debt to Equity Ratio* (DER) have a positive and significant effect on company value (Price to Book Value/PBV). This indicates that the larger the company size, the more efficient the management in managing assets, and the more optimal the capital structure used, the higher the company value in the eyes of investors. Debt to Assets Ratio (DAR) and *Net Profit Margin* (NPM) do not have a

significant effect on PBV. This indicates that these ratios are not yet sufficient to be the main consideration for investors in assessing the value of a company.

These findings support agency theory, whereby the effectiveness of management as agents in managing resources and a healthy capital structure can increase investor confidence, reduce conflicts of interest, and create added value for company owners.

Limitations

This study has several limitations that need to be considered: The sample size is limited, with only 36 observations, which may affect the generalization of the results to a wider population of companies. The study only uses five independent variables, so it does not cover all factors that may affect PBV, such as sales growth, dividend policy, or market risk. The data used is secondary data from financial reports and does not consider qualitative aspects such as corporate governance (GCG), investor perceptions, or external factors such as macroeconomic conditions.

Recommendations for Further Research

To enrich the results and scope of the research, several recommendations that can be considered for future studies include:

- 1) Increasing the sample size and observation period, so that the research results are statistically stronger and can be better generalized. Adding other relevant variables such as EPS (Earning Per Share), sales growth, dividend policy, ownership structure, or corporate governance index.
- 2) Using a quantitative-qualitative approach, by adding risk management analysis, interviews or surveys of investors to capture market perceptions more holistically. Testing moderating or mediating relationships, such as the influence of ownership structure or liquidity as moderators of the relationship between financial performance and company value.
- 3) Expanding the research object not only to one industry sector, but also across sectors in order to compare differences in financial characteristics between sectors.

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