

Capital Structure, Financial Performance, and Firm Size on Firm Value: The Moderating Role of the Independent Board of Commissioners

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Abstract. This research aims to examine the effects of capital structure, financial performance, and firm size on firm value, as well as the role of the independent board of commissioners as a moderator in this relationship. The data used comes from annual reports of companies in the mining sector listed on the Indonesia Stock Exchange (BEI) for the period 2018–2022. The method used is a quantitative approach using multiple linear regression as an analytical tool. Sampling was carried out using a purposive sampling method involving 85 companies. The research results show that capital structure has an effect on firm value, while financial performance has no effect on firm value and firm size has an effect on firm value. The independent board of commissioners moderates the relationship between capital structure and firm size on firm value but is unable to moderate the relationship between financial performance and firm value. The implications of this research are expected to make a positive contribution to investors and creditors in assessing company conditions and understanding reported profits.

Keywords: Capital Structure, Financial Performance, Firm Size, Firm Value, Independent Board of Commissioners.

1. Introduction

Rapid economic growth in the era of globalization triggers the intensity of business competition. Increasingly fierce and competitive business competition encourages a company to continue to excel in sustaining its existence. This situation requires companies to implement the right business strategy through involvement in the capital market. The capital market acts as a liaison between companies and investors related to funding facilities that can support business development. Companies build investor confidence through maintaining and improving firm value. Company value is a reference for investors in assessing the actual state of the company [1]. High company value is able to prosper shareholders, and vice versa, low company value represents a less favourable situation for shareholders [2]. The stock price reflects the company's

value; a high stock price indicates the company's high value, while a low stock price indicates the company's low value. [3]. An increase in stock price can illustrate that the company has promising future prospects, so that it is able to achieve public recognition, which has the potential to attract investors to invest their capital.

The Composite Stock Price Index (JCI), the primary indicator of changes in stock prices, is made up of shares of every industry listed on the Indonesia Stock Exchange (IDX). Launching from CNBC Indonesia, the JCI movement in 2020 decreased by 5.09% but managed to recover in 2021 with a growth of 10.08%. The stock market capitalization at the end of 2021 reached IDR 8,255.62 trillion, an increase of 18.4%. Continued with a growth of 4.09% in 2022, which reached its highest peak at 7,318 [4]. Launching from the business market, the movement of IDX stock prices in the mining sector is one of the pillars of the JCI throughout 2022, with a significant increase of 269.14 points, or 4.09%. PT Bayan Resources Tbk (BYAN) became one of the main drivers, which recorded an increase of 677.8%, followed by PT Adaro Energy Indonesia Tbk (ADARO), which recorded an increase of 71.1%; then there was PT Adaro Minerals Indonesia Tbk (ADMR), which increased by 1,595%, followed by PT Bumi Resources Tbk (BUMI), which rose 140.3%. The condition of mining sector stocks since the second half of 2022 has fluctuated [5]. The increase in share price that occurs can affect the perception of the company's value. The increase in share price can generate market confidence, not only through superior company performance but also in the company's future potential.

There are several factors that are the driving aspects of the rise and fall of firm value. The first factor is the capital structure. Capital structure is the allocation of funding sources for financing the operational activities of a company that compares between own capital and foreign capital [6]. Own capital funding sources obtained by the company are in the form of share capital, retained earnings, and reserves, while foreign capital funding sources are obtained in the form of debt [7]. Companies need to consider the use of debt in supporting business development when facing capital constraints. However, the addition of debt with a large amount can trigger an increase in the company's risk, which is getting higher, causing a decrease in stock prices, which includes a decrease in company value [8]. Therefore, choosing an efficient source of funds is important to achieve an optimal capital structure. With an optimal capital structure, it can maintain a balance between risk and return so that it has the potential to encourage an increase in firm value. This is in line with the trade-off theory, which states that the proportion of debt at a certain level encourages an increase in firm value in the form of a reduction in the amount of income subject to tax, but if it exceeds a certain proportion, it can be the cause of a decrease in firm value because it is not comparable to the benefits obtained from the use of debt [9]. Numerous conclusions on the impact of the capital structure on business value have been drawn from the research that has been conducted. For example, prior studies have demonstrated that the capital structure positively affects firm value. Supported by other studies by obtaining the same results that the capital structure has a positive and significant influence on firm value [6] [7] [10] [11]. However, it is contrary to previous research, which states that capital structure

has a negative and significant influence on firm value [12] [13]. Meanwhile, other studies argue that capital structure has no effect on firm value [14].

Financial performance is the second element that may have a significant role in the fluctuations in a company's value. Financial performance is an indicator in assessing the condition of the company by providing an overview of future profit prospects [15]. Financial performance is a benchmark in investor decision-making. Investors tend to think about investing in companies that have good financial performance. Companies with good financial performance have a low level of risk so that they become an attraction for investors, which ultimately contributes to increasing the value of the company [16]. The increase in company value is reflected in the improvement of financial performance, which involves evaluating financial statements in its measurement. Financial performance measurement includes important information related to management accountability, benchmarks of company success, and consideration of investor decisions. Financial performance measurement is needed to improve the company's performance in the coming period [17]. The existence of financial performance measurement can evaluate the progress of the company's development and provide added value to the company so that it can compete effectively with other companies. This is supported by signaling theory, which states that the information obtained from the company has a major impact on investor considerations. To gain a favorable reaction from investors, businesses must continue to send signals through financial reports or yearly reports that contain all accounting information. Disclosure of these signals can show the company's financial health [18]. This statement is reinforced by previous research, which proves that financial performance has a positive and significant relationship with firm value [12] [18] [19]. However, it is inversely proportional to previous research, which states that financial performance has a negative and significant effect on firm value [15] [20]. While other studies reveal that financial performance has no effect on firm value [14].

The third factor that can be a driving aspect of the rise and fall of company value is company size. Company size represents the overall assets owned by the company. Company size depends on the total assets involved in increasing company value. A large company size indicates the growth of a company characterized by an increase in total assets that exceeds debt. Companies with large total assets indicate that the company has long-term prospects and stable company conditions [21]. This condition can make it attractive for investors to invest their capital in the hope of getting greater profits. Companies with large sizes are more likely to access various sources of funding. This is related to signaling theory, which states that large company size provides signals through revenue or asset growth as a signal of the progress and stability of a company. Disclosure of these signals is considered by investors as factors and conditions that reflect the company's prospects [22]. There is a study gap on company size because prior studies have shown a strong and positive correlation between firm value and company size [23] [24] [11]. However, there are differences in statements from other studies that show the results that company size has a negative and significant effect on firm value [2] [25]. It is different from previous research, which states that company size has no effect on firm value [15].

Based on previous research on capital structure, financial performance, and company size on firm value, there are inconsistent results, so researchers add the independent board of commissioners as a moderating variable that can strengthen or weaken the influence of these factors on firm value. As a board member who is not involved in the company and is not constrained by business relationships or other attachments, the independent board of commissioners is a component of effective corporate governance [26]. The existence of an independent board of commissioners plays a role in strengthening supervision and control in the company, which is shown by objective supervision, risk management, and exposure to company potential. This role is able to attract investors' interest in investing their capital while at the same time encouraging an increase in company value [27]. The existence of an independent board of commissioners that acts as moderation is expected to control capital structure, financial performance, and company size on firm value.

The independent board of commissioners can strengthen the relationship between capital structure and firm value, according to prior research that examines the capital structure that drives the rise and fall of firm value with the moderating variable of the independent board of commissioners [28] [29]. However, in contrast to other studies, which state that the independent board of commissioners is unable to strengthen the relationship between capital structure and firm value [30]. In addition, the independent board of commissioners is also able to strengthen the relationship between financial performance and firm value as evidenced by [26] [31]. Supported by previous research, which obtained the same results, the independent board of commissioners was able to strengthen the relationship between financial performance and firm value [32]. Another variable that has an impact on firm value by considering the independent board of commissioners as moderation is firm size. Previous research proves that the independent board of commissioners is able to strengthen the relationship between company size and firm value [22] [33]. Contrary to other studies, which state that the independent board of commissioners as a moderating variable is not able to strengthen the relationship between firm size and firm value [28].

Signaling theory serves as the theoretical foundation for this study. The independent board of commissioners can strengthen the relationship between capital structure and firm value, according to prior research that examines the capital structure that drives the rise and fall of firm value with the moderating variable of the independent board of commissioners [28] [29]. Signaling theory includes the existence of unequal access to information between managers and investors in a company. Managers signal to investors to influence their decisions by providing positive information or good news that can increase investor interest in making investments [22]. The existence of complete, relevant, accurate, and timely information is very important for investors as a means of analysis before making investment decisions [25]. Signaling theory is used in financial performance variables and company size as a mechanism for delivering information to investors. In the financial performance variable, good financial reports are used as a positive signal to show the company's financial health [18]. Similarly, with company size, revenue, or asset growth, signals the progress and stability of the company [22]. Although the

capital structure is often associated with trade-off theory, the capital structure also provides a signal to investors related to the optimal use of debt and can state that the company has good performance and is able to bear the risk of bankruptcy [12]. By using these signals, managers seek to increase investor confidence and influence investor decisions and the market value of the company's shares.

This study expands on research conducted by [34]. As an update of this study, researchers include one additional independent variable, namely capital structure. Researchers added the capital structure variable because the determination of capital structure in funding policy has a significant impact on the survival of the company. The determination of the capital structure is targeted at creating an appropriate and profitable combination in terms of debt and equity that has the potential to encourage an increase in firm value [30]. Besides that, the sampling conducted by researchers is also different, namely in mining sector companies in 2018-2022. The selection of the mining sector as a sample is based on significant capitalization compared to other sectors, which has great potential in relation to investor interest in investing. The phenomena of mining stocks has somewhat increased and changed in recent years, which has piqued the curiosity of researchers. The researchers hope that the results of this study can contribute to investors and potential investors in analyzing stock prospects before investing by considering capital structure, financial performance, company size, and independent board of commissioners, which have a major influence on investment. The purpose of the researcher is to determine the effect of capital structure, financial performance, and company size on firm value with the moderating role of the independent board of commissioners.

2. Literature Review

The Effect of Capital Structure on Firm Value

Determination of capital structure in funding policy has an impact on the survival of a company. Policies related to funding must be appropriate because there are widespread consequences, especially when companies rely excessively on debt; the burden borne by the company gets bigger. However, the use of debt can provide benefits in the form of reducing the tax burden and can signal that the company is optimistic about its future prospects so that it can convince investors that the company has the capacity to achieve the desired rate of return. Proper funding can be achieved with an optimal capital structure [35]. Based on trade-off theory, the optimal proportion of debt contributes to an increase in stock prices while encouraging an increase in firm value [9]. This statement is in line with the results of previous studies, which state that capital structure has a positive and significant correlation with firm value [7] [10]. This means that if the capital structure is below the efficient limit point, then any additional debt has an impact on increasing the company.

H₁: Capital structure affects firm value.

The Effect of Financial Performance on Firm Value

Financial statements change every period along with the company's operations. Changes in financial statements have an impact on stock prices, which are directly related to company value. A high share price can attract investors [15]. Investors tend to look at companies that have good financial performance because they have a low level of risk. Improved financial performance can be measured by calculating financial ratios that can represent the financial condition of a company. The better the financial performance, the higher the company value [32]. Based on signaling theory, consistency in the presentation of information through good financial reports reflects the company's financial health, which can contribute to increasing the company's value [18]. This statement is in line with the results of previous studies, which state that financial performance has a positive and significant correlation with firm value [12] [19]. This means that an increase in financial management is able to encourage an increase in profits so that it has an impact on increasing the company's share price, which is related to an increase in company value.

H₂: Financial performance affects firm value.

The Effect Of Firm Size On Firm Value

Company size describes the size of a company, which can be expressed through total assets. The amount of total assets reflects the amount of capital invested, including representing the size of a company [25]. The larger the size of the company, the more it tends to attract the attention of more investors because large companies can indicate company growth with stable conditions. Based on signaling theory, revenue or asset growth is considered a signal related to the progress and stability of the company, which can provide valuable information for investors so that it has the potential to increase company value [22]. This statement is in line with the results of previous research, which state that company size has a positive and significant correlation with firm value [11] [24]. This means that investors assume a high company value when witnessing the company's positive development. Positive investor perceptions can facilitate the achievement of maximum company value.

H₃: Firm size affects firm value.

The Effect of Capital Structure on Firm Value With The Moderating Role of The Independent Board of Commissioners

The ability to manage company operations is seen through the implementation of good corporate governance. Good corporate governance, proxied by the independent board of commissioners, plays an objective supervisory role. Effective operational management of the company is shown by a capital structure that can control the proportion of debt so that any increase in debt contributes to an increase in firm value. On the other hand, poor management of its capital structure has the potential to cause bankruptcy. The existence of an independent board of

commissioners can minimize the risk of deviations in the use of debt through optimizing the capital structure so as to enable the company to increase company value while obtaining positive investor perceptions [30]. Supported by trade-off theory, which states that the use of debt at a certain point can increase firm value. After exceeding the limit, it will result in an imbalance with the benefits obtained from debt so that it can cause a decrease in the value of the company [9]. This statement is in line with previous research, which proves that the relationship between capital structure and firm value can be strengthened by the independent board of commissioners [28] [29].

H4: The independent board of commissioners moderates the relationship between capital structure and firm value.

The Effect of Financial Performance on Firm Value With The Moderating Role of The Independent Board of Commissioners

Investors' perceptions in making decisions not only examine the company's financial statements but also see the implementation of good corporate governance of a company. The implementation of good corporate governance reflects the ability to manage assets and capital effectively. The role of good corporate governance as proxied by the independent board of commissioners can reduce the risk of fraud in financial reporting, increase the effectiveness of supervision, and contribute to improving the quality of financial statements. The existence of an independent board of commissioners makes investors feel safe so that it can increase their confidence to invest their capital [32]. Supported by signaling theory, which states that information originating from the company has a significant impact on investor considerations. Consistency in signaling through good financial reports can reflect the company's financial health, so it is very important to get a positive response from investors [18]. This statement is in line with previous research, which proves that the relationship between financial performance and firm value can be strengthened by the independent board of commissioners [26]. [31].

H5: The independent board of commissioners moderates the relationship between financial performance and firm value.

The Effect of Firm Size on Firm Value With The Moderating Role of The Independent Board of Commissioners

Companies with large sizes require the implementation of good corporate governance to manage company operations. The existence of an independent board of commissioners is expected to provide added value to the company related to effective supervision and control of the organization, which has the potential to increase company value [33]. Supported by signaling theory, which states that large company size provides signals that are considered by investors as factors and conditions that reflect the company's prospects. Revenue or asset growth can be a signal of the progress and stability of a company [22]. This statement is in line with previous

research, which proves that the relationship between company size and firm value can be strengthened by the independent board of commissioners [22]. [33]

H6: The independent board of commissioners moderates the relationship between firm size and firm value.

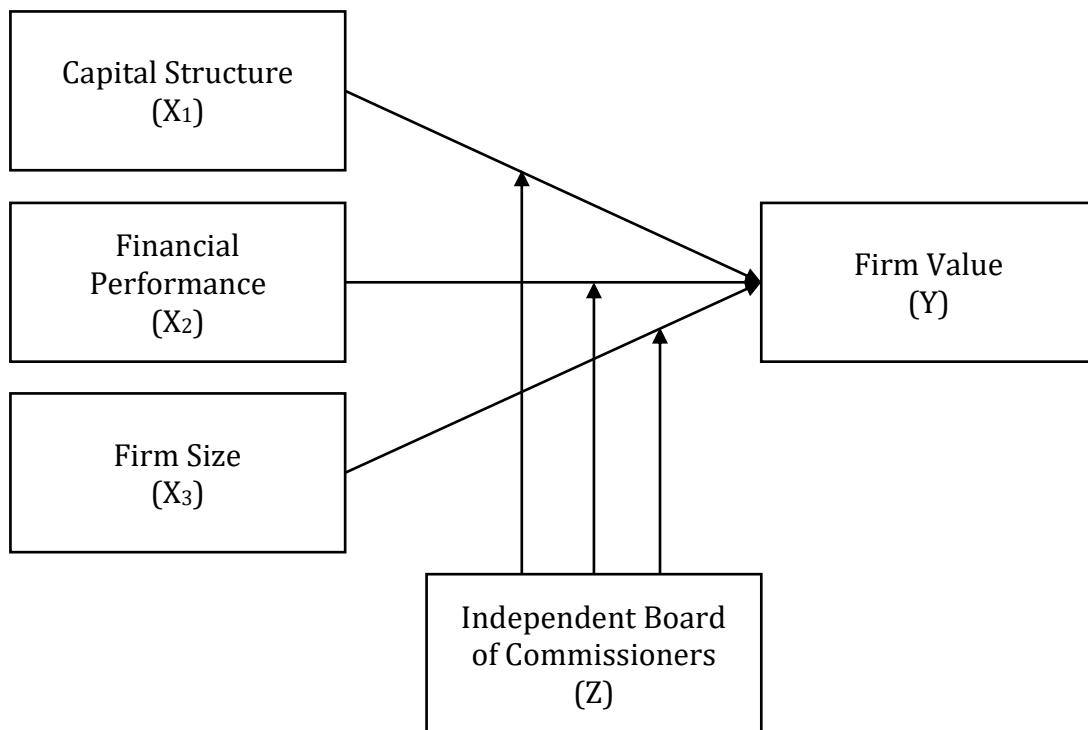


Figure 1. Research Framework

3. Research Method

Type and Object of Research

This study uses a type of quantitative research. The object in this study uses mining sector companies listed on the Indonesia Stock Exchange (IDX) in 2018-2022 by taking data samples from the official website of the Indonesia Stock Exchange, namely www.idx.co.id.

The type of data in this study is secondary data. The data source used is in the form of *annual financial reports* or *annual reports*. The data collection technique is carried out with company documentation in the form of mining company financial reports for 2018-2022, which can be

accessed through the official website of the Indonesia Stock Exchange (IDX), namely www.idx.co.id.

Population and Sample

The population of this study uses mining sector companies that have been listed on the Indonesia Stock Exchange (BEI) in 2018-2022, with a total population of 83 companies. The sample in this study used *the purposive sampling technique*, which is a sampling technique using certain criteria. The samples obtained according to the criteria in this study amounted to 17 companies as listed in the following table.

Table 1. Sampling Criteria

No.	Sample Criteria	Total Company
	The total population of mining sector companies listed on the IDX	83
1.	Mining sector companies that continuously publish financial reports in 2018-2022	(27)
2.	Mining sector companies that have recorded consecutive profits in 2018 - 2022	(39)
	Number of companies selected as research samples	17
	Number of companies selected 17 X 5 years	85

Variable Identification and Indicators

In this study, the main focus is on the dependent variable, namely firm value. In addition, there are three independent variables that become the focal point of the analysis, namely capital structure, financial performance, and company size. The researcher also involves the independent board of commissioners as a moderating variable to complement the three variables.

Table 2. Variable Indicator

Variables	Indicator	Data Scale
Firm Value (Y)	$PBV = \frac{\text{Market Price Per Share}}{\text{Book Value Per Share}}$ Source: [9] and [10]	Ratio
Capital Structure (X ₁)	$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$ Source: [2] and [13]	Ratio

Variables	Indicator	Data Scale
Financial Performance (X ₂)	$ROA = \frac{Net\ Profit}{Total\ Assets}$ Source: [18] and [21]	Ratio
Firm Size (X ₃)	$Size = \ln (Total\ Assets)$ Source: [3] and [25]	Ratio
Independent Board of Commissioners (Z)	$DKI = \frac{Number\ of\ Independent\ Commissioners}{Total\ Company\ Commissioners}$ Source: [28] and [30]	Ratio

Analysis Technique

The analysis technique applied in this study involves multiple linear regression analysis using the *moderated regression analysis* (MRA) test, which utilizes SPSS 23 *software* as an analysis tool. The use of the *moderated regression analysis* (MRA) test is a type of multiple linear regression that involves an element of interaction in its regression to analyze the potential of moderating variables in strengthening or weakening the relationship between the independent and dependent variables. Before conducting the analysis, it is necessary to conduct a descriptive statistical test to describe the data. Then there is a classic assumption test, which includes a normality test to evaluate the normal distribution of data, a multicollinearity test to check the correlation between independent variables, a heteroscedasticity test to determine whether there is heteroscedasticity, and an autocorrelation test using *Durbin-Watson* to determine whether the regression model does not occur autocorrelation. Hypothesis testing between variables is done with the T test (partial) with a significant level of 0.05 and the coefficient of determination (R²) test to measure the contribution of the model [32]. In this study, *moderated regression analysis* (MRA) is used to determine the role of the independent board of commissioners as a moderating variable in strengthening or weakening the influence of independent variables, which include capital structure, financial performance, and company size, on the dependent variable, namely, firm value.

4. Results and Discussion

Descriptive Statistics Test

Descriptive statistical tests are used to describe data by looking at the minimum, maximum, average, and standard deviation values of each variable. The results of the descriptive analysis in this study are presented as follows.

Table 3. Descriptive Statistical Test Results Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Firm Value (Y)	85	-7261098563	9420156101	1436952539	2374503388
Capital Structure (X1)	85	-7710645754	9030280241	742160256.9	2636937193
Financial Performance (X2)	85	-1122196143	340600427.0	-43310076.0	194713295.6
Firm Size (X3)	85	2785525.00	3144563429	2608200358	636059671.1
Independent Board of Commissioners (Z)	85	4.00	333333333.0	164705885.4	167644188.8
Valid N (listwise)	85				

Source: Secondary Data Processing Results with SPSS 23

The results of descriptive statistical analysis in table 3 obtained the number of research samples ($N = 85$). Based on the test results above, it can be seen that the firm value variable (Y) obtained the highest value of 9420156101, while the lowest value was -7261098563, and the average value was 1436952539 with a standard deviation of 2374503388. The capital structure variable (X1) obtained the highest value of 9030280241, while the lowest value was -7710645754, and the average value was 742160256.9 with a standard deviation of 2636937193. The financial performance variable (X2) obtained the highest value of 340600427.0, while the lowest value was -1122196143, and the average value was -43310076.0 with a standard deviation of 194713295.6. The firm size variable (X3) obtained the highest value of 3144563429, while the lowest value was 2785525.00, and the average value was 2608200358 with a standard deviation of 636059671.1. The independent board of commissioners variable (Z) obtained the highest value of 333333333.0, while the lowest value was 4.00, and the average value was 164705885.4 with a standard deviation of 167644188.8.

Normality Test

Table 4. One-Sample Kolmogorov-Smirnov Test

Unstandardized Residual		
N		85
Normal Parameters ^{a,b}	Mean	0.0000000
	Std. Deviation	20499.93939
Most Extreme Differences	Absolute	0.077
	Positive	0.077
	Negative	-0.036
Test Statistic		0.077
Asymp. Sig. (2-tailed)		0.200 ^{c,d}

Source: Secondary Data Processing Results with SPSS 23

The normality test is a test of the normal distribution of data that determines the residual value of each regression model. The normality test in this study is obtained from the test results in table 4, which shows that the *Asymp. Sig. (2-tailed)* of 0.200 exceeds the significant level $\alpha = 0.05$. From the results of the normality test with the *Kolmogorov-Smirnov test*, it can be concluded that the normality test is fulfilled. The normality test results show that the data has a normal distribution because the significant value is greater than 0.05.

Heteroscedasticity Test

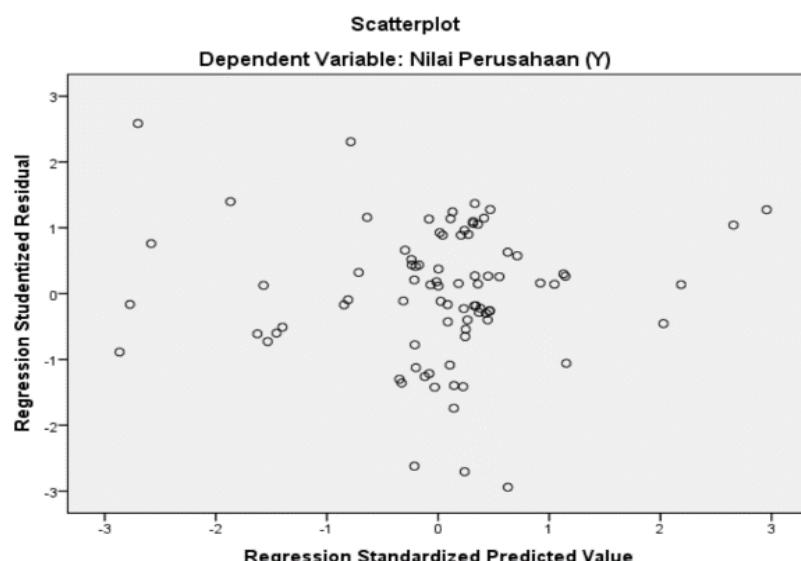


Figure 2. Heteroscedasticity Test Results

The heteroscedasticity test is a test to identify discrepancies in a regression model, which includes inequality of variance from the residuals of one observation to another. A good regression model is one in which heteroscedasticity does not occur. Heteroscedasticity can be detected by looking at the pattern on the *scatterplot* graph [10]. Based on Figure 2 regarding the results of the *scatterplot* graph, which shows that the data observations are widely spread from point 0 on the Y axis by not forming a certain pattern and not being close to each other. These results indicate that there is no indication of heteroscedasticity in the regression model.

Multicollinearity Test

Table 5. Multicollinearity Test Results Coefficients

	Model	Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Capital Structure (X1)	0.919	1.089
	Financial Performance (X2)	0.901	1.110
	Firm Size (X3)	0.996	1.004
	Independent Board of Commissioners (Z)	0.976	1.024

Source: Secondary Data Processing Results with SPSS 23

The multicollinearity test is a test to determine the correlation between independent variables in the regression model. The results of multicollinearity testing can be seen in table 5, which obtained the VIF value of the capital structure variable (X1) of 1.089 and a *tolerance value of* 0.919, the VIF value of the financial performance variable (X2) of 1.110 and a *tolerance value of* 0.901, the VIF value of the firm size variable (X3) of 1.004 and a *tolerance value of* 0.996, and the VIF value of the independent board of commissioners variable (Z) of 1.024 and a *tolerance value of* 0.976. The multicollinearity test results show that there is no multicollinearity disorder between the independent variables because the VIF value of all independent variables is < 10 and the *tolerance value of* all independent variables is > 0.10 .

Autocorrelation Test

Table 6. Autocorrelation Test Results

Model Summary					
Model	r	r Square	Adjusted r Square	Std. Error of the Estimate	Durbin - Watson
1	0.461 ^a	0.213	0.173	2007320776	2.059

a. Predictors: (Constant), Independent Board of Commissioners (Z), Capital Structure (X1), Financial Performance (X2), Firm Size (X3)

b. Dependent Variable: Firm Value (Y)

Source: Secondary Data Processing Results with SPSS 23

The autocorrelation test is a test to assess whether there is a correlation between errors in one period and errors in the previous period. A good regression model is one that does not experience autocorrelation. Table 6 shows the results of the autocorrelation test, which obtained a DW (*Durbin-Watson*) of 2.059. From this value, it is then compared with the DW 0.05 (5%) significant table with the number of research samples (N) = 85 and the number of independent variables 3 (k = 3) and the conditions that must be met, namely $du < dw < 4 - du$. The results obtained include $1.7210 < 2.059 < 2.279$, which indicates that the du value of 1.7210 is smaller than the dw value of 2.059, and the dw value is smaller than the 4 - du value of 2.279. Thus there is no autocorrelation in this study.

Test Coefficient of Determination (R^2)

Table 7. Coefficient of Determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.461 ^a	0.213	0.173	2007320776

a. Predictors: (Constant), Independent Board of Commissioners (Z), Capital Structure (X1), Financial Performance (X2), Firm Size (X3)

b. Dependent Variable: Firm Value (Y)

Source: Secondary Data Processing Results with SPSS 23

By looking at the data contained in table 7, it shows that the *R-Square (R2)* value recorded is 0.213, which indicates that the influence of independent variables, including capital structure (X1), financial performance (X2), and firm size (X3), on the dependent variable, firm value (Y), is 21.3%. Meanwhile, the remaining 78.7% can be influenced by other factors outside the regression model, such as *human capital*, working capital turnover, and investment decisions. [18] [7] [35].

Hypothesis Test

Hypothesis testing is carried out with the aim of knowing the acceptance or rejection in a sample that can be considered representative of the population as a whole. Hypothesis testing indicates the extent to which the independent variable affects the dependent variable and the moderating role in the relationship between the two. In this study, using a significant level of 0.05. If a significant value is obtained < 0.05 , the proposed hypothesis is accepted; otherwise, when a significant value is obtained > 0.05 , the proposed hypothesis is rejected [28].

Table 8. T-Test Results

Model	Coefficients				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-188942889	1006073588		-0.188	0.852
Capital Structure (X1)	0.377	0.090	0.419	4.197	0.000
Financial Performance (X2)	0.638	1.228	0.052	0.519	0.605
Firm Size (X3)	0.728	0.357	0.195	2.036	0.045
Independent Board of Commissioners (Z)	-3.187	1.370	-0.225	-2.326	0.023

a. Dependent Variable: Firm Value (Y)

Source: Secondary Data Processing Results with SPSS 23

Based on the t-test results (partial) listed in table 8, it shows that the capital structure variable (X1) has a t-count value greater than the t-table value ($4.197 > 1.989$) with a smaller significant level (sig.) ($0.000 < 0.05$); it can be said that hypothesis 1 is accepted and shows that the capital structure variable (X1) has an effect on firm value (Y). The financial performance variable (X2) has a t-count value smaller than the t-table ($0.519 < 1.989$) with a greater significant level (sig.) ($0.605 > 0.05$); it can be said that hypothesis 2 is rejected and shows that the financial performance variable (X2) has no effect on firm value (Y). The firm size variable (X3) has a t-count value greater than the t-table value ($2.036 > 1.989$) with a smaller significant level (sig.) ($0.045 < 0.05$); it can be said that hypothesis 3 is accepted and shows that the firm size variable (X3) has an effect on firm value (Y).

Moderated Regression Analysis (MRA)

Based on the results of the moderated *regression analysis* (MRA) test listed in table 9, it shows that the relationship between the capital structure variable (X1) on firm value (Y) moderated by the independent board of commissioners (Z) has a smaller significant value ($0.024 < 0.05$); it

can be concluded that the independent board of commissioners (Z) can moderate the relationship between the capital structure variable (X1) on firm value (Y) so that hypothesis 4 is accepted. The relationship between the financial performance variable (X2) on firm value (Y) moderated by the independent board of commissioners (Z) has a greater significant value ($0.891 > 0.05$); it can be concluded that the independent board of commissioners (Z) is unable to moderate the relationship between the financial performance variable (X2) on firm value (Y) so that hypothesis 5 is rejected. The relationship between the firm size variable (X3) on firm value (Y) moderated by the independent board of commissioners (Z) has a smaller significant value ($0.042 < 0.05$); it can be concluded that the independent board of commissioners (Z) can moderate the relationship between the firm size variable (X3) on firm value (Y) so that hypothesis 6 is accepted.

Table 9. Moderated Regression Analysis (MRA) Test Results

Model	Coefficients				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Eror	Beta		
1	(Constant)	3234221059	945432302.7	3.421	0.001
	Moderation X1	8.700E-10	0.000	0.262	2.300 0.024
	Moderation X2	1.057E-9	0.000	0.015	0.137 0.891
	Moderation X3	-59692333.3	28834272.80	-0.225	-2.070 0.042

a. Dependent Variable: Firm Value (Y)

Source: Secondary Data Processing Results with SPSS 23

Discussion

Capital Structure Disclosure to Firm Value

The t-test results listed in table 8 show that the capital structure variable has an influence on firm value because the t-statistic test result is 4.197 with a value below the significant level of ($0.000 < 0.05$), so hypothesis 1 is accepted. The results of this study indicate that the capital structure of a company as measured by DER can encourage an increase in firm value. The higher the DER, the greater the proportion of total debt compared to total equity, which indicates that the company's burden on outsiders is getting bigger. Companies use debt as an indicator of trust for investors to affirm confidence in the company's future prospects. Determination of the capital structure in the funding policy affects the survival of a company, where the policy must be appropriate to avoid excessive burden so that it can give confidence to investors that the company is able to achieve the expected rate of return. Proper funding can be achieved by implementing an optimal capital structure [7]. The results of this study are in accordance with the trade-off theory, which states that the optimal proportion of debt is able to increase the stock price, which contributes to an increase in firm value [9]. The results of this study are in line with

previous research, which states that capital structure has an influence on firm value [10] [11], and inversely proportional to the results of previous studies, which revealed that capital structure has no effect on firm value [14].

Financial Performance Disclosure to Firm Value

The t-test results listed in table 8 show that the financial performance variable has no effect on firm value because the t-statistic test result is 0.519 with a value above significant ($0.605 > 0.05$), so hypothesis 2 is rejected. The results of this study indicate that the financial performance of a company as measured by ROA cannot encourage an increase in firm value. Although a high ROA can indicate a high company value and ROA can provide an overview of past performance, investors also consider other factors besides ROA that can provide adequate information about the potential growth and risks that the company may face in the future in making investment decisions because the effectiveness of using company assets to generate net profit after tax is not the main benchmark for investors in investing and assessing company performance. Thus, ROA does not guarantee an increase in stock prices, so it does not affect the value of the company [14]. The results of this study are in line with previous research, which states that financial performance has no effect on firm value [13] [14], and inversely proportional to the results of previous research, which revealed that financial performance has an influence on firm value [19].

Disclosure of Firm Size to Firm Value

The t-test results listed in table 8 show that the company size variable has an influence on firm value because the t-statistic test result is 2.036 with a value below the significant value of ($0.045 < 0.05$), so hypothesis 2 is accepted. The results of this study indicate that the size of a company can encourage an increase in firm value, where the larger the size of the company, the higher the level of popularity. Larger company sizes tend to attract more investors because they are considered indicators of stable company growth. Therefore, company size has an impact on investor confidence so that it can affect company value. The results of this study are in accordance with signaling theory, which states that revenue or asset growth is considered a signal regarding the progress and stability of the company, which can provide important information for investors and potentially increase firm value [22]. The results of this study are in line with previous research, which states that company size has an influence on firm value [2] [25], and inversely proportional to the results of previous research, which revealed that company size has no effect on firm value [15].

Capital Structure on Firm Value Moderated by Independent Board of Commissioners

The moderated regression analysis (MRA) test results listed in table 9 show that the relationship between the capital structure variable and firm value moderated by the independent board of commissioners has a value below significant at $0.024 < 0.05$. It can be concluded that the

independent board of commissioners is able to moderate and strengthen the relationship between the capital structure variable and firm value so that hypothesis 4 is accepted. The results of this study indicate that the number of independent commissioners contributes to more effective capital structure management. The existence of an independent board of commissioners shows that there is stricter supervision of the policy of using debt, which is able to control the debt ratio and ensure that an increase in debt can contribute to an increase in firm value and trust from investors [29]. The results of this study are in accordance with the trade-off theory, which states that the use of debt within reasonable limits can increase the value of the company, but the use of debt beyond reasonable limits can cause a decrease in the value of the company [9]. The results of this study are in line with previous research, which proves that the independent board of commissioners is able to moderate the effect of capital structure variables on firm value [29] and contrary to the results of previous research, which revealed that the independent board of commissioners did not moderate the relationship between capital structure variables and firm value [36].

Financial Performance on Firm Value Moderated by Independent Board of Commissioners

The results of the moderated regression analysis (MRA) test listed in table 9 show that the relationship between the financial performance variable and firm value moderated by the independent board of commissioners has a value above significance ($0.891 > 0.05$). It can be concluded that the independent board of commissioners is unable to moderate the relationship between the financial performance variable and firm value, so hypothesis 5 is rejected. The results of this study indicate that the number of independent commissioners has no correlation with improving financial performance, which contributes to increasing firm value. Investors do not pay much attention to the number of independent commissioners, but the main focus is on the company's ability to generate profits. Firm value is also influenced by many external factors that are beyond the control of the independent board of commissioners because the independent board of commissioners only plays a role in strategic supervision, not direct operations [36]. The results of this study are in line with previous research, which proves that the independent board of commissioners is unable to moderate the relationship between financial performance variables and firm value [36], and contrary to the results of previous research, which revealed that the independent board of commissioners is able to moderate the relationship between financial performance variables and firm value [26].

Firm Size to Firm Value Moderated by Independent Board of Commissioners

The results of the moderated regression analysis (MRA) test listed in table 9 show that the relationship between the firm size variable and firm value moderated by the independent board of commissioners has a value below significant ($0.042 < 0.05$); it can be concluded that the board of commissioners is able to moderate the relationship between the firm size variable and firm value so that hypothesis 6 is accepted. The results of this study indicate that the number of

independent commissioners contributes to more effective supervision and control. The existence of an independent board of commissioners shows that companies with large sizes can remain controlled and directed so that they can attract investor interest and contribute to increasing company value. The results of this study are in accordance with signaling theory, which states that a large company size provides a signal to investors regarding the company's prospects, with revenue or asset growth as an indicator of the progress and stability of a company [22]. The results of this study are in line with previous research, which proves that the independent board of commissioners is able to moderate the relationship between the firm size variable and firm value [22] [33], and contrary to the results of previous research, which revealed that the independent board of commissioners did not moderate the relationship between the firm size variable and firm value [36].

5. Conclusion

Based on the test results above, the capital structure proxied by DER has a significant effect on firm value, because the optimal proportion of debt is able to attract positive investor perceptions related to the balance between risk and return, which has the potential to encourage an increase in firm value. Financial performance proxied by ROA does not have a significant effect on firm value, because if you only rely on ROA, it is not able to provide adequate information about the potential growth and risk of the company in the future, considering the effectiveness of using assets to generate net profit after tax is not the main benchmark for investors in assessing company performance. Therefore, ROA does not guarantee an increase in stock prices, so it does not affect the value of the company. Company size proxied by total assets has a significant effect on firm value, because companies with large sizes tend to attract positive investor perceptions related to asset growth, which can reflect the progress and stability of a company so that it has the potential to increase company value.

The independent board of commissioners is able to moderate the effect of the capital structure variable on firm value because the presence of an independent board of commissioners can control the capital structure more effectively against the use of debt within reasonable limits and ensure that an increase in debt contributes to an increase in firm value. The independent board of commissioners is not proven to be able to moderate the effect of financial performance variables on firm value, because the presence of an independent board of commissioners has no correlation with improving financial performance.

In addition, investors pay more attention to the company's ability to generate profits than the number of independent commissioners of a company, and the role of the independent board of commissioners is limited to strategic supervision rather than direct operations. The independent board of commissioners is able to moderate the effect of the firm size variable on firm value because the presence of an independent board of commissioners contributes to more effective supervision. Companies with large sizes can also remain controllable and directed so that they

can be attractive and have the opportunity to access various sources of funding, which indirectly contribute to increasing company value.

References

- [1] Dina Shafarina Dwiaستuti and Vaya Juliana Dillak, "Pengaruh Ukuran Perusahaan, Kebijakan Hutang, dan Profitabilitas Terhadap Nilai Perusahaan," *J. Aset (Akuntansi Riset)*, vol. 11, no. 1, pp. 137–146, 2019, doi: <https://doi.org/10.17509/jaset.v11i1.16841>.
- [2] Yohana, A. I. Bp, N. Kalbuana, and C. I. Cahyadi, "Pengaruh Ukuran Perusahaan, Kebijakan Hutang, Profitabilitas Terhadap Nilai Perusahaan (Studi Kasus Perusahaan Properti Yang Terdaftar Di Bursa Efek Indonesia Tahun 2016 – 2020)," *J. Ris. Akunt. Politala*, vol. 4, no. 2, pp. 58–66, 2021, doi: <https://doi.org/10.34128/jra.v4i2.79>.
- [3] S. Sembiring and I. Trisnawati, "Faktor - Faktor Yang Mempengaruhi Nilai Perusahaan," *J. BISNIS DAN Akunt.*, vol. 21, no. 1, pp. 173–184, 2019.
- [4] R. Binekasri, "Kinerja IHSG 10 Tahun Terakhir," CNBC Indonesia.
- [5] A. K. Saumi, "10 Saham Pendorong IHSG 2022, Batu Bara dan Bank Paling Hot," Market bisnis.
- [6] I. Utami, "Pengaruh Struktur Modal Terhadap Nilai Perusahaan (Studi Kasus Terhadap Sub Sektor Perdagangan Eceran Yang Terdaftar Di BEI Tahun 2011-2015)," *JASA (J. Akuntansi, Audit dan Sist. Inf. Akunt.)*, vol. 3, no. 3, pp. 389–397, 2019.
- [7] M. R. Setiawan, N. Susanti, and N. M. Nugraha, "Pengaruh Struktur Modal, Perputaran Modal Kerja, dan Ukuran Perusahaan Terhadap Nilai Perusahaan," *Own. Ris. J. Akunt.*, vol. 5, no. 1, pp. 208–218, 2021, doi: <https://doi.org/10.33395/owner.v5i1.383>.
- [8] R. Bintara, "Pengaruh Profitabilitas, Growth Opportunity, dan Struktur Modal Terhadap Nilai Perusahaan Dengan Good Corporate Governance Sebagai Variabel Pemoderasi," *J. Profita Komun. Ilm. Akunt. dan Perpajak.*, vol. 11, no. 2, pp. 306–328, 2018, doi: 10.22441/profita.2018.v11.02.010.
- [9] R. Novitasari and Krisnando, "Pengaruh Struktur Modal, Pertumbuhan Perusahaan, dan Firm Size terhadap Nilai Perusahaan Pada Perusahaan Consumer Goods yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2017-2020," *J. Akunt. dan Manaj.*, vol. 18, no. 2, pp. 71–81, 2021, doi: <https://doi.org/10.36406/jam.v18i02.436>.
- [10] R. Nopianti and Suparno, "Pengaruh Struktur Modal Dan Profitabilitas Terhadap Nilai Perusahaan," *JAK (J. Akunt.) Kaji. Ilm. Akunt.*, vol. 8, no. 1, pp. 51–61, 2021, doi: <https://doi.org/10.30656/jak.v8i1.2381>.

[11] I. Zuraida, “Pengaruh Struktur Modal, Ukuran Perusahaan, Profitabilitas, dan Kebijakan Dividen Terhadap Nilai Perusahaan,” *Balanc. - J. Akunt. dan Bisnis*, vol. 4, no. 1, pp. 529–536, 2019, doi: <https://doi.org/10.32502/jab.v4i1.1828>.

[12] M. E. S. Siregar, S. Dalimunthe, and R. S. Trijuniyanto, “Pengaruh Profitabilitas, Ukuran Perusahaan, Kebijakan Dividen dan Struktur Modal Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode 2015 – 2017,” *J. Ris. Manaj. Sains Indones.*, vol. 10, no. 2, pp. 356–385, 2019.

[13] D. Anggraini and A. S. MY, “Pengaruh Struktur Modal, Profitabilitas dan Ukuran Perusahaan terhadap Nilai Perusahaan,” *Manag. Account. Expo.*, vol. 2, no. 1, pp. 1–9, 2019, doi: <https://doi.org/10.36441/mae.v2i1.92>.

[14] H. T. Mahanani and A. Kartika, “Pengaruh Struktur Modal, Likuiditas, Ukuran Perusahaan, Dan Profitabilitas Terhadap Nilai Perusahaan,” *Fair Value J. Ilm. Akunt. dan Keuang.*, vol. 5, no. 1, pp. 360–372, 2022, doi: <https://doi.org/10.32670/fairvalue.v5i1.2280>

[15] L. P. E. Setiawati, N. P. A. M. Mariati, and K. I. K. Dewi, “Pengaruh Kinerja Keuangan dan Ukuran Perusahaan Terhadap Nilai Perusahaan,” *Remik Ris. dan E-Jurnal Manaj. Inform. Komput.*, vol. 7, no. 1, pp. 222–228, 2023, doi: <https://doi.org/10.33395/remik.v7i1.12024>

[16] S. Haryanto, N. Rahadian, M. F. I. Mbapa, E. N. Rahayu, and K. V. Febriyanti, “Kebijakan Hutang, Ukuran Perusahaan dan Kinerja Keuangan Terhadap Nilai Perusahaan: Industri Perbankan di Indonesia,” *AFRE (Accounting Financ. Rev.)*, vol. 1, no. 2, pp. 62–70, 2018, doi: 10.26905/afr.v1i2.2279.

[17] Nurhidayati, Novianty, T. S. Wibowo, H. B. Ginting, and N. Aini, “Peningkatan Nilai Perusahaan Melalui Kinerja Keuangan Dengan Good Corporate Governance Sebagai Variabel Moderasi,” *JAP J. Akunt. dan Pajak*, vol. 23, no. 2, pp. 1–4, 2023, [Online]. Available: <https://www.jurnal.stie-aas.ac.id/index.php/jap/index>

[18] R. I. Adyaksana, M. S. Umam, and C. M. Singgangsari, “Pengaruh Kinerja Keuangan, Human Capital, Dan Kinerja Lingkungan Terhadap Nilai Perusahaan,” *JAA J. Apl. Akunt.*, vol. 7, no. 2, pp. 265–277, 2023, doi: <https://doi.org/10.29303/jaa.v7i2.185>.

[19] A. Fajri and A. Munandar, “Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Pada Industri Infrastruktur Telekomunikasi Tahun 2017-2021,” *Fair Value J. Ilm. Akunt. dan Keuang.*, vol. 5, no. 4, pp. 1586–1596, 2022, doi: <https://doi.org/10.32670/fairvalue.v5i4.2582>

[20] N. Handayani, J. Asyikin, S. Ernawati, and S. Boedi, “Analisis Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Perbankan Indonesia,” *KINERJA J. Ekon. dan Manaj.*, vol. 20, no. 2, pp. 233–242, 2023, doi: 10.30872/jkin.v20i2.13024.

[21] D. A. Susesti and E. T. Wahyuningtyas, “Pengaruh Profitabilitas, Leverage, dan Ukuran Perusahaan Terhadap Nilai Perusahaan (Studi Empiris Pada Perusahaan LQ45 Pada Bursa Efek Indonesia Periode 2018-2020),” *Account. Manag. J.*, vol. 6, no. 1, pp. 36–49, 2022, doi: <https://doi.org/10.33086/amj.v6i1.2821>

[22] D. K. Wardani and W. W. Kaleka, “Pengaruh Ukuran Perusahaan Terhadap Nilai Perusahaan Dengan Good Corporate Governance Sebagai Variabel Moderasi,” *JPDSH J. Pendidik. Dasar Dan Sos. Hum.*, vol. 1, no. 10, pp. 2019–2026, 2022.

[23] K. H. G. Anugerah and I. K. Suryanawa, “Pengaruh Leverage dan Ukuran Perusahaan Pada Nilai Perusahaan,” *E-Jurnal Akunt.*, vol. 26, p. 2324, 2019, doi: 10.24843/eja.2019.v26.i03.p24.

[24] D. N. Pandhega and Prasetyono, “Analisis Pengaruh Struktur Modal, Likuiditas, Profitabilitas, dan Ukuran Perusahaan Terhadap Nilai Perusahaan (Pada Perusahaan Manufaktur yang Terdaftar di BEI dalam Periode Tahun 2015-2019),” *Diponegoro J. Manag.*, vol. 10, no. 5, pp. 1–15, 2021.

[25] Safaruddin, E. Nurdin, and N. Indah, “Pengaruh Struktur Modal dan Ukuran Perusahaan Terhadap Nilai Perusahaan Yang Terdaftar Di Bursa Efek Indonesia,” *JAK J. Akunt. dan Keuang.*, vol. 8, no. 1, pp. 166–179, 2023.

[26] M. S. Muhammad Noval, S.E.I., S.E., M. S. Agus Widodo, S.E., and M. S. Hetika, S.Pd., “Pengaruh Kinerja Keuangan dan Kinerja Lingkungan Terhadap Nilai Perusahaan Dimoderasi Oleh Good Corporate Governance,” *Simp. Nas. Akunt. Vokasi*, vol. 9, no. 1, pp. 54–64, 2021.

[27] N. T. A. Puspa, Y. Chomsatu, and P. Siddi, “Pengaruh Corporate Social Responsibility Disclosure dan Good Corporate Governance terhadap Nilai Perusahaan,” *Akuntabel*, vol. 18, no. 2, pp. 200–209, 2021.

[28] K. Y. Dir, A. Halim, and R. I. Mustikowati, “Pengaruh Ukuran Perusahaan Dan Struktur Modal Terhadap Nilai Perusahaan Dengan Dewan Komisaris Independen Sebagai Variabel Moderasi,” *J. Ris. Mhs. Akunt.*, vol. 7, no. 2, pp. 1–12, 2020, doi: 10.21067/jrma.v7i2.4256.

[29] D. K. Wardani and S. M. E. P. Djando, “Pengaruh Struktur Modal Terhadap Nilai Perusahaan Dengan Good Corporate Governance Sebagai Variabel Moderasi (Studi Kasus Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2016-2020),” *JPDSH J. Pendidik. Dasar Dan Sos. Hum.*, vol. 1, no. 8, pp. 1427–1434, 2022.

[30] A. V. Noviani, A. D. R. Atahau, and R. Robiyanto, “Struktur Modal, Profitabilitas, dan Nilai Perusahaan: Efek Moderasi Good Corporate Governance,” *JEB J. Ekon. Dan Bisnis*, vol. 22, no. 2, pp. 391–415, 2019, doi: <https://doi.org/10.24914/jeb.v22i2.2601>.

- [31] R. H. W. Hidayat, Iranita, and F. Kusasi, “Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Dengan Penerapan Good Corporate Governance Sebagai Variabel Pemoderasi Pada Perusahaan Bidang Kelautan Yang Terdaftar Di Bursa Efek Indonesia Periode 2015-2019,” *Student Online J.*, vol. 1, no. 2, pp. 672–682, 2020.
- [32] Ni Putu Enny Widhi Padmayanti, N. N. A. Suryandari, and I. B. Munidewi, “Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Dengan Dewan Komisaris Independen Sebagai Variabel Pemoderasi Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia,” *JUARA J. Ris. Akunt.*, vol. 9, no. 1, pp. 62–72, 2019.
- [33] R. H. Koeshardjono, S. Priantono, and T. Amani, “Pengaruh Corporate Social Responsibility, Ukuran Perusahaan, Leverage dan Profitabilitas Terhadap Nilai Perusahaan Dengan Kepemilikan Manajerial dan Komisaris Independen Sebagai Variabel Moderating,” *JIAI (Jurnal Ilm. Akunt. Indones.)*, vol. 4, no. 2, pp. 148–165, 2019, doi: <https://doi.org/10.32528/jiai.v4i2.2661>.
- [34] A. Latif, J. Jasman, and Asriany, “Pengaruh Kinerja Keuangan dan Ukuran Perusahaan Terhadap Nilai Perusahaan Dengan GCG Sebagai Variabel Moderasi,” *Own. Ris. J. Akunt.*, vol. 7, no. 3, pp. 1968–1980, 2023.
- [36] E. Dela Oktiwiati and M. Nurhayati, “Pengaruh Profitabilitas, Struktur Modal, Dan Keputusan Investasi Terhadap Nilai Perusahaan (Pada Sektor Farmasi Yang Terdaftar Di Bursa Efek Indonesia Tahun 2013-2017),” *Mix J. Ilm. Manaj.*, vol. 10, no. 2, p. 196, 2020, doi: 10.22441/mix.2020.v10i2.004.
- [36] Sarah, “Pengaruh Profitabilitas dan Ukuran Perusahaan Terhadap Nilai Perusahaan Dengan Good Corporate Governance Sebagai Variabel Moderasi,” *Artik. Ilm.*, pp. 1–15, 2021.