

CSR Moderation on The Impact of Financial Performance on The Firm Value of Coal Mining Companies Listed on The IDX

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KEYWORDS

financial performance,
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ABSTRACT

This study aims to analyze the effect of financial performance on firm value with Corporate Social Responsibility (CSR) as a moderating variable. Financial performance is measured using financial indicators such as Return on Equity (ROE) and Net Profit Margin (NPM), while firm value is represented by Price to Book Value (PBV). The type of research used is quantitative research. The variables used in this study consist of independent variables, namely Financial Performance, dependent variables, namely company value and moderating variables, namely Corporate Social Responsibility (CSR). The population used in this research is 34 coal mining companies. The sampling technique used purposive sampling with a sample obtained of 19 companies. Data collection techniques using documentation by taking data on the Indonesia Stock Exchange (IDX). Data analysis techniques used using Descriptive Statistical Analysis, regression analysis and Moderate Regression Analysis. The results showed that financial performance as measured by ROE has a positive and significant influence on company value. Meanwhile, NPM has no influence on company value. In addition, CSR is proven to moderate the ROE relationship positively, where companies with good CSR implementation show a higher increase in firm value than companies with low levels of CSR. However, CSR has not been able to moderate NPM on company value. The conclusion of this study is that Return On Equity affects the company's value. Net Profit Margin has no effect on company value, while CSR only moderates the effect of ROE on company value.

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Introduction

The development of the business world today is very rapid. This can be seen from the increasing number of competing companies that have a good competitive advantage. The number of business competitors that have emerged has resulted in changing business

dynamics, so companies need funds to develop their business. Companies are responsible for everything they have received from their social environment in a social accountability report, more than just a moral obligation that has been in place in society. The form of accountability can be disclosed by the company in the annual report, namely in the corporate social responsibility section (Pasaribu & Hariani, 2022).

The performance of a company is reflected in the financial statements. Herawati (2019) stated that therefore, financial statements are used as a source of information needed by investors as one of the bases for consideration in making investment decisions in the capital market and from these financial statements investors know the value of a company which is reflected in the price of the shares traded. Given the importance of financial statements, companies that go public listed on the Indonesia Stock Exchange (IDX) are required to report financial statements and annual reports to the stock exchange, investors and the public every year. Regarding the movement of the value of coal mining companies, it is reflected as the share price, as shown in Figure 1 below.

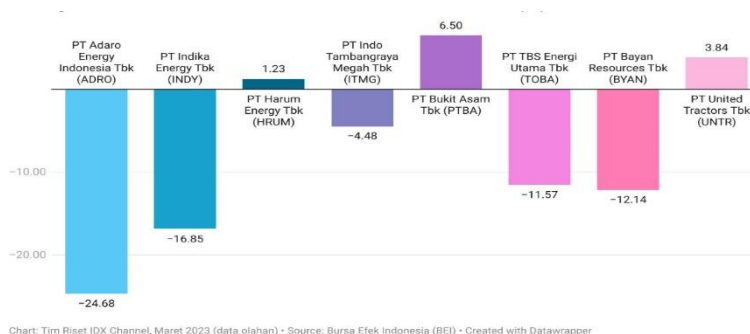


Figure 1. Stock performance of coal mining issuers in Indonesia

Source: www.idx.co.id

Based on Figure 1 above, it can be understood that the IDX reported that the share prices of BYAN and TOBA contracted by 12.14% and 11.57% respectively on a YTD basis. Meanwhile, ITMG shares declined by 4.48% throughout 2023. Although most of the shares of coal issuers were corrected by YTD, the shares of PT Harum Energy Tbk (HRUM), PT United Tractors Tbk (UNTR), and PT Bukit Asam Tbk (PTBA) still recorded growth in this period. Launching IDX data in the same period, HRUM and UNTR shares rose by 1.23% and 3.84%, respectively, throughout 2023. Meanwhile, PTBA shares recorded the most superior performance, which shot up 6.50% on a YTD basis.

Maximizing company value is very important. Utama & Lisa (2018) stated that corporate value is very useful for a company, because by maximizing company value means that the company is also trying to maximize the company's goals. To achieve the goals of a company, synergy and mutual relations between the company and the community, investors, and employees, of course, are needed. One way that can be done is by interacting between the company and the environment, because the environment contributes to the sustainability of the company and also social welfare. Company value can be described as an aspect of assessing the performance of a company's activities which is reflected by the company's share price. The Price To Book Value (PBV) ratio, which indicates a higher value, implies how far a company can create company value relative to the total capital invested. According to Weston & Copeland (1995), the value of a company can be measured using the Price To Book Value (PBV) formula which is a ratio that can help investors assess an issuer. Sadiq et al (2023) also said that capital structure affects the value

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of a company which can be measured through financial performance. Financial performance is often used as an indicator of a company's success in creating value for stakeholders. Previous research has shown that good financial performance, measured through indicators such as Return on Assets (ROA) or Price to Book Value (PBV), can increase a company's value. Some of the financial performance measurements include Return on Equity, Net Profit Margin and many others. Sutomo and Budiharjo (2019) stated that ROE affects the value of the company, which means that large profits will also provide good prospects for the company so that investors can respond to increase stock demand. Increased demand for shares will cause the value of the company to increase. Inconsistent research was conducted by Simanullang et al (2021) which said that ROE has no influence on company value.

Another measurement is with NPM, research from Ichسانی et al (2021) said that NPM has a positive influence on the company's value as measured by price book value. Net profit margin, or simply net margin, measures how much revenue or net profit is generated as a percentage of revenue. NPM measures how much net profit is generated as a percentage of revenue received. NPM helps investors assess whether a company's management is making enough profit from its sales and whether operational costs and overhead costs are under control. Investors usually look at a company's profitability history to assess the risks of investing in the company. It is the ratio of net profit to revenue for a company or business segment. But apart from what has been mentioned, this relationship can be influenced by various factors, one of which is CSR. According to Chen and Lee (2017), investing in CSR can improve the company's image and attract more resources, thereby improving operational performance. In addition, financial performance is often used as an indicator of a company's success in creating value for stakeholders. Previous research has shown that good financial performance, measured through indicators such as Return on Assets (ROA) or Price to Book Value (PBV), can increase a company's value. However, this relationship can be influenced by various factors, one of which is CSR. CSR can act as a moderation variable that strengthens the influence of financial performance on company value by increasing investors' positive perception of the company's operational sustainability Here are some data from coal mining companies listed on the Indonesia Stock Exchange (IDX) showing an increasing trend in the disclosure of sustainability reports:

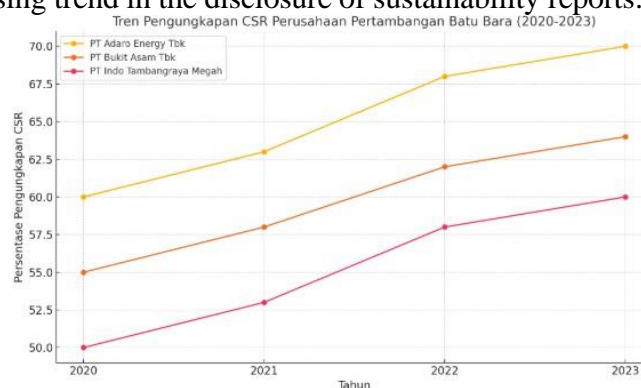


Figure 2 Trends in CSR disclosure of coal mining companies in 2020-2023

Source: www.idx.co.id

Based on Figure 1, the data above reflects the company's awareness of the importance of CSR which illustrates the trend of CSR disclosure in several coal mining companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2023. The companies shown in this graph show an upward trend in their CSR disclosures during the

period, reflecting their growing commitment to social responsibility and sustainability. Companies such as PT Adaro Energy, PT Bukit Asam, and PT Indo Tambangraya Megah show a similar trend, with a consistent increase in disclosures year over year. Research also shows that CSR disclosure

Contribute to increasing the company's market value by building trust and reputation in the eyes of investors. The coal mining industry has an important role in Indonesia's economy, but it also poses major challenges related to environmental and social impacts. Companies in this sector face pressure from various parties, including governments, communities, and investors, to integrate Corporate Social Responsibility (CSR) into their operations. CSR has become an important element in strengthening a company's reputation, especially in sectors with a high risk of environmental damage. In Indonesia, regulations such as Article 74 of Law No. 40 of 2007 mandate mining companies to carry out CSR programs as part of their social and environmental responsibilities.

Corporate Social Responsibility (CSR) is often considered the core of business ethics, which means that the company not only has economic and legal obligations (meaning to shareholders or shareholders) but also obligations to other interested parties (stakeholders). Whose scope exceeds the above obligations (economic and legal). Corporate Social Responsibility refers to all relationships that occur between a company and all stakeholders, including customers or customers, employees, communities, owners or investors, governments, suppliers and even competitors (Puspita & Kurnia, 2018).

Corporate Social Responsibility (CSR) is an action carried out by a company as a sense of corporate responsibility to society and the surrounding environment where the company is located. The success parameter of a company from the perspective of CSR accountability is to prioritize moral and ethical principles, namely achieving the best results, without harming other community groups (Agustina & Ardiansari, 2015). Good environmental CSR management will be able to maintain the balance of nature for future generations and natural resources. Ardila (2019) stated that CSR disclosure is divided into two indicators, namely, environmental and social.

In the research of Akousa and Fadilah (2024), it was found that there was an effect of Corporate Social Responsibility (CSR) disclosure on company value, based on this, this study aims to test whether there is an effect of Corporate Social Responsibility (CSR) disclosure on company value. Based on social, economic and environmental components.

Corporate Social Responsibility (CSR) in mining companies has issues of soil, water, air pollution, exploitation of energy and mineral resources, and damage to flora and fauna. The company must be responsible for the problems that occur. For this reason, efforts are made to disclose every item in the environmental CSR sustainability report as a form of what actions have been taken by the company as a result of the company's operational activities (Ardila, 2019). Meanwhile, Corporate Social Responsibility (CSR) in the social component is related to employment, human rights, society and products. The development of corporate social programs can be in the form of physical assistance, health services, community development, outreach, scholarships and so on (Ardila 2019). This evidence is increasingly relevant because it is regulated in regulations, such as Article 74 of Law No. 40 of 2007, which requires certain companies to carry out CSR, especially in sectors related to natural resources. In addition to regulations, the relevance of CSR can also be seen from the KPMG report (2021), which shows that CSR reporting in Indonesia has increased due to companies' awareness of its impact on financial performance and capital market attractiveness.

In addition, the importance of Corporate Social Responsibility (CSR) research is a discourse that makes companies not only obligatory or operate for shareholders but also have social responsibility to stakeholders. CSR is a form of corporate responsibility to the environment and society in which the company is located. The company's goal is not only to hunt for economic profits but also for the welfare of people, and has a concern for the preservation of the planet's environment Sulbahri (2021) and Lu (2024) who stated that CSR In the long term, engaging in sports CSR helps build healthy human resources, brand value, and corporate image, providing insurance against shocks from macro-negative events such as those that occurred in the Covid-19 atmosphere.

When the value of a company's is not high, investment in CSR will also fail to gain the trust of stakeholders. This is because the company will not be able to effectively reduce transaction costs with its stakeholders, and thus investing in CSR will not reduce operational costs to increase the company's value. However, if the corporate value of a company is high, then the company will be able to bear more CSR and efficiently reduce transaction costs (Chen and Lee 2017).

The phenomenon that occurs from Corporate Social Responsibility (CSR) in coal mining nationally from environmental components indirectly can damage the environment (soil damage, groundwater damage, can cause landslides and damage to the ecosystem of flora and fauna). CSR from the social and economic components can occur due to coal mining in an area, both positive and negative impacts. Among them are the availability of social facilities and public facilities, job opportunities due to the acceptance of labor, increasing income levels of people around the mine, and business opportunities. In addition, there can also be negative impacts including the emergence of various types of diseases due to declining air quality, increased traffic accidents, and the occurrence of social conflicts during land acquisition.

Community economic development is also carried out by the company through Corporate Social Responsibility (CSR) which can provide direct benefits for the community to improve the quality of life such as poverty alleviation, help in providing health facilities, education, scholarships, increasing the purchasing power of people around mining,

Provide training so that the community around the mine has competitiveness, and help build the infrastructure needed by the community, including clean water facilities. Furthermore, Fitriyanti (2016) stated that the potential economic benefits with the presence of mining in several ways such as, becoming a pioneer of the economic wheel, encouraging regional development to provide regional and national economic benefits and increasing science with technology transfer.

Through the explanation of the empirical data above, this is in line with the agency theory explaining the relationship between the owner of the company (principal) and the management (agent). In this theory, CSR disclosure can serve as a tool to reduce information asymmetry between management and external stakeholders, such as investors. By integrating CSR into the analysis, it can help explain whether CSR can moderate potential agency conflicts, so that good financial performance is more effective in increasing company value. In line with the same theoretical agency theory, namely stakeholder theory According to this theory, the success of a company is not only measured by financial benefits but also by the extent to which the company can meet the needs of its stakeholders, including the community, government, and the environment. CSR serves as a means to show the company's concern for non-financial stakeholders. Thus, this research is important to explore how good financial performance can be

moderated by CSR, resulting in higher corporate value through stakeholder satisfaction.

Based on the above phenomenon, the object of this research is a coal mining company listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. Coal mining companies were chosen because the form of environmental and social responsibility of mining companies is clearer compared to other companies that are also listed on the IDX. In mining companies, the form of environmental, economic and social responsibility of the company, namely the Partnership and Environmental and Social Development Program, will facilitate the research process.

The company in question is a coal mining sector company listed on the IDX is a high profile company that has a high level of sensitivity and is in the spotlight of the public because the company's operating level has a large number of workers and in the production process causes an impact on the environment in the form of waste and pollution. Mining, especially the coal sub-sector throughout its history, has been a controversial sector. On the one hand, it provides an important source of energy and materials that make the progress of mankind possible. But on the other hand, mining is also known as a sector that presents a lot of problems for the environment and the people who live around the mines. Poor management results in severe environmental damage. The former mine pits with their acidic water are a picture that can be seen in all parts of the world.

Mining, especially the coal sub-sector throughout its history, has been a controversial sector, in the production process it causes impacts on the environment in the form of waste and pollution. On the one hand, it provides an important source of energy and materials that make the progress of mankind possible. On the other hand, mining is also known as a sector that presents a lot of problems for the environment and the people who live around mines. Poor management results in severe environmental damage. The former mine pits with their acidic water are a sight to behold in all parts of the world

Based on several previous studies, research related to the influence of Corporate Social Responsibility (CSR) disclosure on corporate value in the coal mining sector in the social, environmental, and economic context from several articles that the author refers to have never been studied. Therefore, the originality of this study is studied from the Corporate Social Responsibility (CSR) in the social, economic and environmental components of coal mining companies, especially on the value of the company.

Research on CSR is mostly carried out on mining companies, as a research subject because mining is the lifeblood of national development, so it is hoped that from this research a significant relationship can be observed between coal mining companies and how they carry out their environmental and social responsibilities. Based on the background of the above problems, it is important to conduct a research entitled "CSR Moderation on the Impact of Financial Performance on the Value of Coal Mining Companies Listed on the IDX".

Research by Sutomo and Budiharjo (2019) emphasized the impact of Return on Equity (ROE) on firm value, asserting that companies with higher ROE experience better prospects, thus leading to increased stock demand and company value. Similarly, Simanullang et al. (2021) found that financial performance, measured by ROE, has a direct impact on the value of companies in the banking sector, highlighting the importance of profitability for enhancing firm value. Both studies provide valuable insights into the significant relationship between financial performance and firm value, which this study aims to further investigate within the coal mining sector.

The urgency of this research lies in the growing role of Corporate Social Responsibility (CSR) in influencing the value of firms, particularly in the coal mining industry. The environmental and social impacts of mining activities are becoming more scrutinized by the public and investors, making CSR an essential aspect for companies seeking to enhance their reputation and firm value. This research will shed light on how CSR moderates the relationship between financial performance and firm value, helping companies understand how to leverage CSR initiatives for long-term sustainability and investor confidence, particularly in sectors with high environmental risks.

Although there is extensive research on the relationship between financial performance and firm value, there is limited research specifically addressing how CSR moderates this relationship in the coal mining sector. Previous studies have often focused on either financial indicators or CSR separately but have not fully explored the interactive effect of CSR on financial performance measures such as Return on Equity (ROE) and Net Profit Margin (NPM) in determining firm value. This research aims to fill this gap by examining the moderating role of CSR in the coal mining industry, where the impacts of environmental and social responsibilities are particularly pronounced.

The objective of this study is to analyze the impact of financial performance on firm value with CSR acting as a moderating variable in coal mining companies listed on the Indonesia Stock Exchange (IDX). The study will provide insights into how financial performance, particularly ROE, influences company value and how CSR can enhance or diminish this effect. The findings of this research will benefit investors, company management, and policymakers by providing a deeper understanding of how CSR strategies can be integrated into financial performance metrics to improve corporate value and sustain long-term business growth in the mining industry.

Research Methods

This research is a quantitative research. The variables used in this study consist of independent variables, namely Financial Performance, dependent variables, namely company value, and moderation variables, namely Corporate Social Responsibility (CSR). Data in the form of numbers is already available in the company's audited financial statements, then the data is collected and further processed in accordance with the purpose of the study, which is to find the influence between moderated independent variables on dependent variables. The data is obtained from financial statements and annual reports which can be calculated in the form of numbers or about data (in the form of statements) collected and expressed in the form of numbers.

The research approach used is a verifier approach. Sugiyono (2016) stated that the verifier approach is a research approach that aims to test or prove the truth of pre-existing knowledge. This approach is carried out by collecting facts to prove whether the hypothesis is supported by facts. The verifiable research approach can be used to find out and assess the magnitude of the influence of something on something else.

The verifiable approach is a method that aims to determine the relationship between each free and bound variable which is then tested using hypothesis analysis (Sugiyono, 2016). In this study, a verifiable approach is used to determine the influence of financial performance moderated by the disclosure of Corporate Social Responsibility (CSR) on the value of companies in the coal mining sector listed on the Indonesia Stock Exchange (IDX) in 2021-2023.

The data collection technique in this study is a documentation technique, namely the researcher collects secondary data obtained from certain websites that are in accordance with the circumstances of the coal company to be studied, the website is sourced from www.idx.co.id which is a website that collects information data of companies listed on the Indonesia Stock Exchange (IDX). In addition, the researcher also conducts literature studies through books and journals related to the problems being studied.

The type of data used in this study is secondary data. Secondary data refers to information collected by a person, in addition to the researcher conducting the current study. The data used in this study are annual reports and audited financial statements on coal mining companies listed on the IDX for the 2021-2023 period.

Results and Discussions

Results of Descriptive Statistical Analysis

Descriptive analysis is used to describe and describe the variables in this study. The dependent variable in this study is the value of the company. The independent variables in this study are Return On Equity and Net Profit Margin as well as moderation variables, namely CSR. Descriptive statistical analysis in this study includes mean, maximum, minimum and standard deviation. The results of the descriptive statistical analysis can be seen in Table 1 below:

Table 1. Descriptive statistics

	Y	ROE	NPM	CSR
Mean	3.358082	0.386371	0.286282	0.360709
Median	0.959826	0.203950	0.213878	0.384615
Maximum	33.15372	4.948736	4.794242	0.417582
Minimum	0.001034	-0.002250	-0.166263	0.252747
Std. Dev.	6.658679	0.707445	0.623919	0.051381
Skewness	2.908315	4.938049	6.773941	-0.727808
Kurtosis	11.11095	31.67626	49.54635	2.104714
Jarque-Bera	236.5990	2184.680	5581.507	6.935835
Probability	0.000000	0.000000	0.000000	0.031182
Sum	191.4107	22.02316	16.31807	20.56044
Sum Sq. Dev.	2482.928	28.02676	21.79938	0.147838
Observations	57	57	57	57

Based on Table 3, overall from 57 observations in this study, the average value of Return On Equity (ROE) was obtained of 0.386371 in the 2021-2023 time range. The maximum value of ROE is 4.9487, namely at PT. Harum Energy Tbk - HRUM in 2022, while the minimum ROE value is -0.02, namely PT. Pelayaran Nasional Bina Buana Raya Tbk – BBRM in 2022. The standard deviation value of ROE is 0.707445 which means that the tendency of ROE data between one company and another during the period has a deviation rate of 0.70744

The results of the study show that the average Net Profit Margin (NPM) value is 0.286282 in the 2021-2023 time frame. The maximum value of NPM was obtained as 4.794242, namely PT. Dwi Guna Laksana Tbk – DWGL in 2023 and the minimum NPM value is -0.166263, namely PT. Rig Tenders Indonesia Tbk - RIGS in 2021. The standard deviation value of NPM is 0.623919 which means that the tendency of NPM data between one company and another during the period has a deviation rate of 0.623919.

The results of the study show that in the CSR variable, the average value obtained is 0.360709 in the 2021-2023 time range. The maximum value of CSR is 0.417582, namely

PT. Baramulti Suksessarana Tbk – BSSR during three year consecutively, and value Minimum variable CSR of 0.252747, namely PT. Trans Power Marine Tbk – TPMA for three consecutive years. The standard deviation value of the CSR variable is 0.051381 which means that the tendency of the CSR variable data between one company and another during the period has a deviation rate of 0.051381. The results of the study show that the PBV variable has an average of 3.358082 in the 2021-2023 time range. The maximum value of PBV is 33.15372, which is PT. Bayan Resources Tbk - BYAN in 2021 and the minimum value of the PBV variable is 0.001034, namely PT. Golden Eagle Energy Tbk - SMMT in '2021. The standard value of NPM deviation is 6.658679, which means that the trend of intangible asset growth data between one company and another during the period has a deviation level of 6.658679.

Classical Assumption Test

Normality Test

In this study, the normality test was carried out by looking at the histogram graph and looking at the probability value of Jarque Bera. A good regression model is one that is normally distributed or close.

The data is said to be normal if the probability value is > 0.05. If the residual test is not normally distributed, then the t-test and the F test become invalid. The results of the normality test are presented in the following graph:

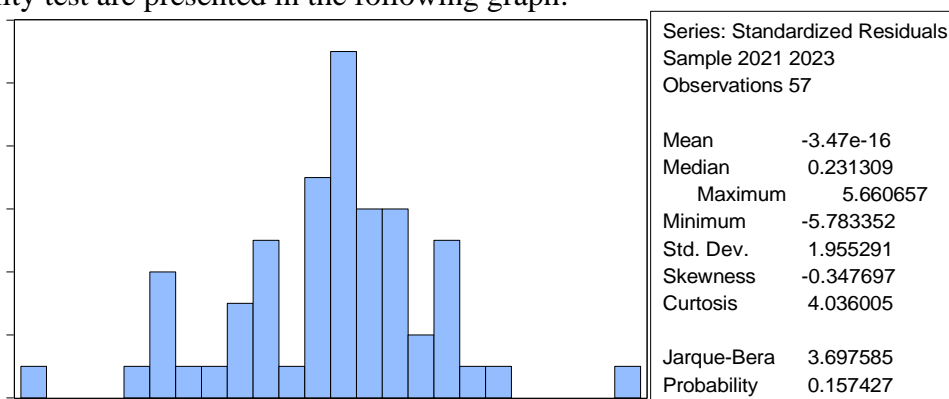


Figure 3 Normality test

Based on the image of the model test results, it can be seen that the probability value is 0.157 > 0.05. This means that the model of the distributed equation is normal.

Multicollinearity Test

Multicollinearity test to test whether the regression model finds a correlation between independent variables. In the regression model, there should be no correlation between independent variables. The way to find out is if the correlation value is below 0.8, the data is free from multicollinearity (Ghozali 2016). The results of the multicollinearity test can be seen in Table 4 below:

Table 2 Multicollinearity test

	Y	X1	X2	Z
Y	1.000000	0.514133	0.096479	0.216669
X1	0.514133	1.000000	0.015865	0.218584
X2	0.096479	0.015865	1.000000	-0.045899
Z	0.216669	0.218584	-0.045899	1.000000

Looking at the equation model that the correlation value between variables is less than 0.8, so it can be said that there is no multicollinearity problem.

Heterokedasticity Test

In this study, the presence or absence of heteroscedasticity was detected by using the glacier test by regressing the residual absolute value to the independent variable. If the statistically significant independent variable affects the dependent variable, then there is an indication of heteroscedasticity. This can be seen from the probability of its significance above the confidence level of 5%, so the regression model does not contain heteroscedasticity (Ghozali 2016). The results of the heteroscedasticity test are presented in the following Table 3:

Table 3 Heterokedasticity test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.567198	4.345683	-1.511200	0.1367
X1	1.282621	0.873704	1.468027	0.1480
X2	0.326441	0.967733	0.337326	0.7372
Z	25.01827	12.04096	2.077763	0.0526

Based on the results of the heteroscedasticity test, it can be seen in the Prob value. More than a significance level of 0.05, this means that there are no heteroscedasticity problems in the model.

Autocorrelation Test

The autocorrelation test in the study aims to see if there is a correlation between the perturbator error in the t-1 period (previously) and the perturbator error in the t-1 period (previously) in the linear regression model. The Autocorrelation Test can be seen in the following Table 4:

Table 4 Autocorrelation test

Dependent Variable:				
Y				
Method: Panel Least Squares				
Date: 11/20/24 Time: 15:56				
Sample: 2021 2023				
Periods included: 3				
Cross-sections included: 19				
Total panel (balanced) observations: 57				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.049912	5.575978	-0.726314	0.4708
X1	4.589791	1.121056	4.094168	0.0001
X2	1.003124	1.241705	0.807860	0.4228
Z	14.82482	15.44985	0.959545	0.3416
R-squared	0.284565	Mean dependent var		3.358082
Adjusted R-squared	0.244068	S.D. dependent var		6.658679
S.E. of regression	5.789344	Akaike info criterion		6.417507
Sum squared resid	1776.375	Schwarz criterion		6.560879
Log likelihood	-178.8989	Hannan-Quinn criter.		6.473226
F-statistic	7.026922	Durbin-Watson stat		0.281442
Prob(F-statistic)	0.000459			

Based on these results, the probability value > 0.05 or there is no autocorrelation problem.

Selection of Estimation Models

Estimation Model Regression Model

In this study, a panel data regression analysis with financial performance (ROE) and (NPM) was used as independent variables. And Company Value as a Dependent variable. In the panel data in estimating the model, the first one is the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) estimation. Furthermore, the selection of the best model will be carried out with the Chow Test, and the Hausman Test. The following are the results of the analysis of the panel data regression estimate, namely:

a. Chow Test

The chow test aims to determine the most appropriate model to be used in panel data regression, whether it is a Common Effect Model (CEM) or a Fixed Effect Model (FEM). The chow test shows the results in the following table:

Table 5 Chow test

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistics	D.F.	Prob.
Cross-section F	33.566004	(18,35)	0.0000
Cross-section Chi-square	165.576488	18	0.0000

Based on Table 7 above, the results of the chow test show that the probability value of csross-section chi-square is 0.0000 which means that the value is lower than the level of 0.05. And it can be said that in this test, the right model is used, namely the Fixed Effect Model (FEM) and will be continued with the hausman test.

b. Hausman Test

The Hausman test aims to choose whether the Random Effect Model (REM) or Fixed Effect Model (FEM) is the most appropriate to use. The results of the hausman test are as follows:

Table 6 Hausman test

1. Correlated Random Effects - Hausman Test				
2. Equation: Untitled				
6. Test cross-section random effects				
	Chi-Sq. Statistics	Chi-Sq.	D.F.	Prob.
8. Test Summary				
10. Cross-section random	5.456867	3		0.1412

From Table 8 above, it gives a probability value greater than 0.05. So it can be said that the Random Effect Model (REM) is the best model that will be used in this study. Then continued with the LM test.

c. Uji Lagrange Multiplier Test

The LM test uses the following criteria, when the probability value of the Bruesch-

Pagan > 0.05 then H0 is accepted and Ha is rejected. If the probability value of BrueschPagan < 0.05 then H0 is rejected and Ha is accepted. The results of the LM test in this study are presented in the following Table 7:

Table 7 LM test

Lagrange multiplier (LM) test for panel data			
Date: 11/20/24 Time: 16:11			
Sample: 2021 2023			
Total panel observations: 57			
Probability in ()			
Null (no rand. effect)	Cross-section	Period	Both
Alternative	One-sided	One-sided	
Breusch-Pagan	39.57905 (0.0000)	0.917012 (0.3383)	40.49606 (0.0000)
Honda	6.291188 (0.0000)	-0.957608 (0.8309)	3.771411 (0.0001)
King-Wu	6.291188 (0.0000)	-0.957608 (0.8309)	1.080982 (0.1399)
GHM	--	--	39.57905 (0.0000)

The probability value of the Breusch-Pagan from the results of the LM Test can be seen in the table above the both column, which is $0.0000 < 0.05$, then it can be concluded that H0 is rejected and Ha is accepted. The interpretation of the results of the LM Test is that the random effect model is better when compared to the common effect model, so it can be concluded based on the results of the Chow Test, Hausman Test and LM Test that the estimated regression of the panel data used in this study is a random effect model.

Hypothesis Testing

Testing Model I

The output results of Eviews 10 can be seen in the following table 8:

Table 8 Model 2 Estimation Results

Dependent Variable: Y				
Method: Panel Least Squares				
Date: 11/20/24 Time: 15:56				
Sample: 2021 2023				
Periods included: 3				
Cross-sections included: 19				
Total panel (balanced) observations: 57				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.049912	5.575978	-0.726314	0.4708
X1	4.589791	1.121056	4.094168	0.0001
X2	1.003124	1.241705	0.807860	0.4228
Z	14.82482	15.44985	0.959545	0.3416
R-squared	0.284565	Mean dependent var		3.358082
Adjusted R-squared	0.244068	S.D. dependent var		6.658679
S.E. of regression	5.789344	Akaike info criterion		6.417507
Sum squared resid	1776.375	Schwarz criterion		6.560879
Log likelihood	-178.8989	Hannan-Quinn criter.		6.473226
F-statistic	7.026922	Durbin-Watson stat		1.781442
Prob(F-statistic)	0.000459			

Test T

The t test is used to show the level of influence of the independent variables Return on Equity (ROE), Net Profit Margin (NPM), in explaining changes in the dependent variable Company value and is used to determine whether the influence of each independent variable on the dependent variable is tested at a significant level of 0.05 or with a confidence level of 95% and an error rate of 5%. Based on the t test (partial) that the author has carried out in this research, it can be seen that the results obtained from the t test are as follows:

- 1) Hypothesis 1 (H1): Return on Equity (ROE) has an influence on company value. With a coefficient value of 4.589791 and a probability value of 0.0001 which is lower than the significant value of 0.05. This shows that ROE influences company value in the coal mining sector for the 2021-2023 period.
- 2) Hypothesis 2 (H2): Net Profit Margin (NPM) has no influence on company value. With a coefficient value of 1.003124 and a probability value of 0.4228, which is higher than the significant value of 0.05. This shows that NPM has no effect on company value in the coal mining sector for the 2021-2023 period.

Test F

Hypothesis testing (F-test) is carried out to see whether the relationship between all independent variables and the dependent variable is significant simultaneously. Seen in Table 10, the F test results above show a significance value of F of 0.000459, this value is smaller than the significance value of 0.05. So, it can be concluded that the independent variable simultaneously has an influence on the dependent variable.

Coefficient of Determination

The Coefficient of Determination (R²) aims to measure the model's ability to explain the variance of the dependent variable. If the R² value is close to 1, it means that the independent variables are able to explain their influence on the dependent variable. Based on the results from Table 10, the adjusted R square value is 0.244 (24%). This value shows that the independent variables can explain their influence on the dependent variable and as much as 76% is explained by other variables not discussed in this research, such as Non-Performing Loans (NPL), Loan to Deposit Ratio (LDR), and Operating Expenses on Operating Income (BOPO).

Results of Multiple Regression Analysis

Analysis using Eviews 10 resulted in a multiple linear regression equation which can be seen in Table 10.

The following is the equation:

$$Y = -4.049912 + 4.589791 * X_1 + 1.003124 * X_2 + 14.82482 * z + e$$

- a. The constant value is -4.049912, meaning that without the variables x₁, x₂, and z, the y variable will increase by -4.049912
- b. The value of the beta coefficient x₁ is 4.589791, if the values of other variables are constant and variable x₁ has increased by 1 unit then variable y will have increased by 4.589791 x₁ has decreased by 1 unit then variable y will have decreased by 4.589791
- c. The value of the beta coefficient x₂ is 1.003124, if the value of the other variables is constant and the variable x₂ has increased by 1 unit then variable y will have increased by 1.003124 x₂ has decreased by 1 unit then variable y will have decreased by 1.003124

Testing Model II

The output results of Eviews 10 can be seen in the following table 9:

Tabel 9 Result Estimation Models 2

Dependent Variable: Y				
Method: Panel Least Squares				
Date: 02/09/25 Time: 12:42				
Sample: 2021 2023				
Periods included: 3				
Cross-sections included: 19				
Total panel (balanced) observations: 57				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.73902	8.316211	1.892571	0.0641
ROE	19.66232	24.05357	0.817439	0.0015
NPM	-111.2066	33.23110	-3.346461	0.4175
ROE*CSR	329.2758	97.48698	3.377639	0.0014
NPM*CSR	-41.08704	61.43004	-0.668843	0.5066
CSR	-43.16425	23.30483	-1.852159	0.0698
R-squared	0.380211	Mean dependent var		3.357544
Adjusted R-squared	0.332535	S.D. dependent var		6.658626
S.E. of regression	5.440001	Akaike info criterion		6.309067
Sum squared resid	1538.868	Schwarz criterion		6.488282
Log likelihood	-174.8084	Hannan-Quinn criter.		6.378716
F-statistic	7.974876	Durbin-Watson stat		1.803374
Prob(F-statistic)	0.000043			

Discussion**The Effect of ROE and NPM Financial Performance on Company Value in Coal Mining Sector Companies Listed on the IDX in 2021-2023**

Based on the results obtained from this study, it is shown that the Return On Equity (ROE) variable has an effect on the Company's Value. This is evidenced by a significant value smaller than 0.05 or ($0.0000 < 0.05$) with a coefficient value of 3.726702, so it can be concluded that H_a is accepted and H_o is rejected. The results of this study are in line with previous research conducted by Rini et al (2023) which resulted in research that ROE has an influence on company value. ROE has an influence on the company's value. If a company has a high ROE, its performance is more productive, thus adding value to the company. If the value of the company rises, investor confidence to invest in the company also rises. Similar results were also researched by Virolita (2020), Mahayati et al (2021), Faris Ramadhan et al (2023), and Lestari et al (2023) who said that the greater the ROE value, the more effective and efficient the asset management will be, which will increase the company's value. This study is inversely proportional to the research from Cahyani Agustina and Anindya Ardiansari (2015) with the results showing that ROE has no effect on the company's value, as well as the research from Iskandar (2020) which got the same results.

Profitability is a very important factor for the survival of the company, the better the profitability, the easier it is for the company to attract capital from outside, while the profitability is poor, it results in the company's difficulty in attracting capital from outside, this probability can be measured by Return On Equity. Return On Equity (ROE) is a profitability ratio used to measure the level of change in a company or the effectiveness

of a company in generating net profit using its own capital and generating net profit that is available to owners or investors. The company's stock price rose in response to the increase in net profit. If the company's stock price rises, it means that the company's financial performance is strong enough that investors are interested in investing their capital in the company. Good financial performance will also increase the value of the company, and increase investor interest in the company.

In addition, all companies that are included in the study also tend to have a net profit value that increases again every year, but the increase is followed by an increase in the value of the company's net profit which is greater than the increase in the amount of company equity so that it causes an increase in the value of return on equity of the company. An increase in the value of return on equity will be an attraction for investors in making investment decisions, if investors are interested in investing in the company, there will be a high demand and supply of shares in the capital market so that there will be an increase in the company's share price. The increase in the company's share price shows that the value of the company proxied by Price to Book Value also increases because one of the components in calculating the Price to Book Value value is the stock price. So the higher the company's share price, the higher the value of the company. In addition, in calculating the Price to Book Value value, it also uses profit per share, where if the value per share decreases and is smaller than the decrease in the share price, the price to book value will also decrease.

The growth of ROE shows that the company's prospects are getting better because it means that there is a potential for increased profits obtained by the company so that it will increase investor confidence and will make it easier for company management to attract capital in the form of shares. If there is an increase in demand for a company's shares, it will indirectly increase the price of the shares in the capital market. The higher the company's ability to make a profit, the greater the return expected by investors, thus making the Company's Value better. So it can be concluded that when Return on Equity (ROE) increases, the company's value increases. According to Trafalgar & Africa (2019), a company with a high net profit after tax and total equity will generate a high ROE value and can be said to be a good or healthy company. This is inseparable from the company's performance and good internal management.

The results of the NPM test show that the results obtained from this study show that the Net Profit Margin (NPM) variable has a negative effect on the company's value. This is evidenced by a significant value greater than 0.05 or ($0.4428 < 0.05$) with a coefficient value of 1.003124, so it can be concluded that H_0 was accepted and H_a was rejected. The results of this study are in line with previous research conducted by Wulandari et al (2021) which stated that partially the variables DER, ROE, Sales Growth, CR, NPM have no influence on the company value (PBV) variables in consumer goods industry sector companies listed on the IDX.

Net Profit Margin (NPM) is defined as a ratio used to determine the size of net profit generated from sales (Munawir 2008). NPM is used as a benchmark for profit obtained on the comparison of profit after interest and tax with sales (Kasmir 2009). According to Mulyadi et al (2020), Net Profit Margin (NPM) can also be used to measure the net profit generated from each sale obtained from the total distribution of net profit after tax with net sales which aims to determine the ability of a company to generate net profit.

Net Profit Margin (NPM) is indeed an important indicator to measure the efficiency of a company in generating profits from every rupiah sold. However, NPM does not

always have a direct correlation with the company's value as measured by Price to Book Value (PBV). This is because PBV reflects the market's expectations for the company's future growth. Companies with high NPMs do not necessarily have good growth prospects if they do not reinvest their profits or if they have a cost structure that does not support growth. In addition, non-financial factors such as brand strength, innovation, and management quality also greatly affect PBV. Thus, while NPMs provide an overview of current profitability, investors need to consider a variety of other factors, including growth, risk, and non-financial factors, to comprehensively assess the value of a company.

The results of this study are in line with research from Ningsih et al (2022) which states that NPM has no influence on company value. So based on the data processing and support from previous research, it shows that NPM has no effect on the company's value. The same research was also conducted by Supriyadi (2021) who stated that the relationship between Net Profit Margin and Company Value based on the regression coefficient shows a negative direction. The higher the Net Profit Margin, the lower the Company Value.

The Effect of ROE and NPM Financial Performance on the Company's Value Moderated by CSR on Coal Mining Sector Companies Listed on the IDX in 2021-2023

In this study, the corporate social responsibility (CSR) variable is a moderation variable. Based on the table above, the results of the moderated regression analysis (MRA) test which tests the interaction between ROE and CSR and NPM and CSR, revealed that the probability value of ROE to CSR is lower than the significant value of 0.05 with a coefficient value of 12.11201 while the probability value of NPM with CSR is 0.8430 and the coefficient value is 0.729830 This means that CSR is able to moderate the influence of financial performance measured by ROE on the company's value. However, CSR has not been able to moderate the influence of financial performance measured by NPM on the company's value in the coal mining sector in 2021-2023.

CSR is a social activity that benefits the company through non-profit activities or the core of the company's production activities. Currently, CSR is no longer considered a burden for companies. Currently, CSR is considered a long-term investment that provides benefits to the company. CSR provides enormous benefits in improving people's welfare and preserving the surrounding environment, as well as a form of investment for companies that do so. Investment for the company can be in the form of guaranteeing the sustainability of the company's operations and the formation of a positive image of the company. A good corporate image will increase the value of the company in the eyes of investors.

Theoretically, the findings of this study reveal that stakeholder theory is a relevant theoretical basis to explain the importance of CSR disclosure, especially in developing countries. The results of the study have proven that CSR manifests corporate commitment and social responsibility to stakeholders. CSR disclosure is evidence provided by the company's management to all stakeholders, including potential investors, regarding the company's prospects.

Based on the results of the study, it supports the stakeholder theory which shows that if a company accommodates the interests of stakeholders related to its social and environmental affairs which is implemented through corporate social responsibility activities, it will improve the company's image so that the value of the company increases. So it can be concluded that CSR is able to moderate ROE on the company's value

CSR Moderation on The Impact of Financial Performance on The Firm Value of Coal Mining Companies Listed on The IDX

This research is in line with research from Anggraini and Asyik (2023) who said that the disclosure of corporate social activities has an effect on the profits obtained by the company. Corporate social responsibility disclosure can be a consideration for investors to invest in the company. In addition, CSR disclosure can be a consideration for companies to continue carrying out corporate social activities. The same research was also conducted by Khuong & Anh (2022) which revealed that CSR can moderate ROE on company value, Sari and Ridwan (2020), and Setyadewi and Retnani (2017). The same research was also conducted by (Guo et al., 2020) which obtained the results of CSR research moderating the relationship between financial indicators (including ROE) and company value, especially in Chinese companies. CSR can amplify the positive influence of ROE on a company's value, depending on the company's financial flexibility and R&D investment

Furthermore, the measurement of financial performance uses NPM against the company's value. Net Profit Margin (NPM) does not have a significant impact on the value of a company. This means that changes in the rate of net profit per sale do not substantially affect the market's valuation of the company's value. Investors or analysts may be more likely to consider other metrics or factors in valuing a company, as NPM is not considered to be a key variable or does not make a significant contribution.

The size of the company's NPM is not based on the company's CSR. This indicates that a company that has a large financial performance value or a company that has a good image in the eyes of the public, is not necessarily able to reveal the company's ability to fulfill its future obligations that fund the company's operational activities well. Hu et al (2018) in their research said that research conducted in China shows that advertising intensity, as one of the moderating factors, can reduce the positive effects of CSR on company value. Companies with high advertising intensity may be seen as doing CSR only for promotion, so CSR does not play an effective role as a moderator in the relationship between NPM and company values.

In the analysis of the influence of CSR on company value, it shows that there is no influence of NPM on the value of companies moderated by CSR. The main reason why CSR is not always able to moderate the influence of NPM on company value is that the concept of CSR itself is still diverse and difficult to measure uniformly, the definition of CSR is very broad and includes a wide range of activities, from philanthropy to sustainable business practices. This variation in definition makes it difficult to compare CSR levels between companies. Second, the measurement of CSR performance is often subjective and depends on the method used by each company. This can lead to discrepancies in the assessment of CSR performance, making it difficult to draw consistent conclusions. This is in line with research from Wardani and Wahdiyansyah (2023) which showed that CSR was unable to moderate the influence of financial performance on company value. Meanwhile, research from Raharja (2014) revealed that CSR negatively moderates the influence of financial performance on company value.

Conclusion

The research concludes that financial performance, as measured by Return on Equity (ROE), positively impacts company value, indicating that a higher ROE leads to a higher company value. Conversely, financial performance measured by Net Profit Margin (NPM) does not affect company value, implying that fluctuations in NPM do not influence the company's value. Corporate Social Responsibility (CSR) is found to moderate the relationship between ROE and company value, demonstrating that the extent of CSR disclosure can strengthen or weaken this relationship. However, CSR does not moderate the relationship between NPM and company value, indicating that the level of CSR disclosure does not affect the influence of NPM on the company's value.

References

- Agustina, C., & Ardiansari, A. (2015). Pengaruh faktor ekonomi makro dan kinerja keuangan terhadap nilai perusahaan. *Management Analysis Journal*, 4(1).
- Chen, R. C. Y., & Lee, C.-H. (2017). The influence of CSR on firm value: an application of panel smooth transition regression on Taiwan. *Applied Economics*, 49(34), 3422–3434.
- Guo, Z., Hou, S., & Li, Q. (2020). Corporate social responsibility and firm value: the moderating effects of financial flexibility and R&D investment. *Sustainability*, 12(20), 8452.
- Ichsani, S., Zaenudin, A. I. N., Damayanti, G. N., TRESIA, V., & PUTRI, V. A. (2021). The Effect of Financial Ratio on Firm Value: Empirical Evidence from Listed Firms in the IDX30 Index. *The Journal of Asian Finance, Economics and Business*, 8(6), 103–112.
- Khuong, N. V., Anh, L. H. T., & Van, N. T. H. (2022). Firm life cycle and earnings management: The moderating role of state ownership. *Cogent Economics & Finance*, 10(1), 2085260.
- Lesmana, T., Iskandar, Y., & Heliani, H. (2020). Pengaruh kinerja keuangan terhadap nilai perusahaan pada perusahaan rokok yang terdaftar di bursa efek Indonesia. *Jurnal Proaksi*, 7(2), 25–34.
- Lestari, I. D., Anggraeni, Y. P., & Octavia, A. N. (2023). Pengaruh Return On Assets, Return On Equity dan Ukuran Perusahaan Terhadap Nilai Perusahaan. *Solusi*, 21(2), 153–165.
- Lu, H.-F. (2024). Can Fulfilling Sports Corporate Social Responsibility Serve as an Immunity During the COVID-19 Pandemic? A Perspective From Social Capital and Corporate Financial Performance. *SAGE Open*, 14(4), 21582440241296790.
- Mahayati, F., Fatonah, S., & Meilisa, R. (2021). Pengaruh return on equity (ROE) dan debt to equity ratio (DER) terhadap nilai perusahaan (PBV) pada perusahaan manufaktur sub sektor logam dan sejenisnya yang terdaftar di BEI. *Jurnal Valuasi: Jurnal Ilmiah Ilmu Manajemen Dan Kewirausahaan*, 1(1), 258–267.
- Ningsih, I. W., Malik, D., Nurfadillah, M., & Fauziah, F. (2022). Pengaruh DER dan NPM terhadap Nilai Perusahaan pada Perusahaan Properti dan Real Estate yang terdaftar di BEI. *RJABM (Research Journal of Accounting and Business Management)*, 5(2), 100–112.
- Pasaribu, M. A., & Hariani, S. (2022). Good corporate governance, pengungkapan corporate social responsibility dan ukuran perusahaan terhadap nilai perusahaan. *Jurnal Riset Manajemen dan Bisnis*, 7(2), 67–80.
- Puspita, S. L., & Kurnia, K. (2018). Pengaruh Corporate Social Responsibility Terhadap Nilai Perusahaan dengan Profitabilitas Sebagai Variabel Moderating. *Jurnal Ilmu dan Riset Akuntansi (JIRA)*, 7(1).
- Ramadhan, F., Mauliza, P., Dewi, N. P., & Fachrudin, K. R. (2023). The Effect Of Der, Company Size, And Roe On The Firm Value Of Manufacturing Companies In The Automotive Sub-Sector And Its Components. *International Journal Of Management Research And Economics*, 1(2), 73–84.
- Rini, R. S., Sudarmawanti, E., & Barkowa, M. K. (2023). Pengaruh Current Ratio (CR), Debt To Equity Ratio (DER), dan Return On Equity (ROE) Terhadap Nilai Perusahaan. *Journal of Accounting and Finance*, 2(1).
- Sadiq, M., Yousaf, S. U., Anser, M. K., Sriyanto, S., Zaman, K., Van Tu, D., & Anis, S. N. M. (2023). The role of debt financing in the relationship between capital

- structure, firm's value, and macroeconomic factors: To throw caution to the wind. *The Quarterly Review of Economics and Finance*, 87, 212–223.
- Simanullang, C. D., Edward, Y. R., Ginting, R. R., & Simorangkir, E. N. (2021). The effect of return on assets (roa) and return on equity (roe) on company value with capital structure as moderating variables in banking companies listed on the indonesia stock exchange. *International Journal of Business, Economics and Law*, 24(6), 129–134.
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif Dan R&D*. Alfabeta.
- Supriyadi, T., & Terbuka, U. (2021). Effect of return on assets (ROA), return on equity (ROE), and net profit margin (NPM) on the company's value in manufacturing companies listed on the exchange Indonesia securities year 2016-2019. *International Journal of Economics, Business and Management Research*, 5(04), 2021.
- Surachmad, R., & Khourouh, U. (2020). Corporate Social Responsibility, Good Corporate Governance, dan Nilai Perusahaan: Kinerja Keuangan sebagai Mediator. *Jurnal Bisnis dan Manajemen*, 7(2), 161–170.
- Sutama, D., & Lisa, E. (2018). Pengaruh leverage dan profitabilitas terhadap nilai perusahaan. *JSMA (Jurnal Sains Manajemen Dan Akuntansi)*, 10(1), 21–39.
- Sutomo, H., & Budiharjo, R. (2019). The effect of dividend policy and return on equity on firm value. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 9(3), 211–220.