

# Effects of Implementation of Green Accounting and Good Corporate Governance on Firm Value, Moderated by Corporate Social Responsibility (A Study on the Mining Companies Listed on IDX in the Period 2017-2021)

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## ABSTRACT

The objective of the research is to examine the effects of Green Accounting (GA) and Good Corporate Governance (GCG) on firm value, moderated by Corporate Social Responsibility (CSR) in the mining companies listed on IDX (Indonesia Stock Exchange) in the period 2017-2021. The research employs quantitative method. The population comprises 47 companies listed on IDX, mining sector. The research takes  $19 \times 5 = 95$  sample by using probability sampling technique. The data are analyzed by using E-views software program. The result of the research shows that, partially, GA has significant effect on firm value, GCG has significant effects on firm value, and GA and GCG simultaneously have some effects on firm value. CSR is able to moderate partially the effects of X1 (GA) on firm value, CSR is able to moderate partially the effects of X2 (GCG) on firm value, and CSR is able to moderate simultaneously the effects of X1 (GA) and X2 (GCG) on firm value.

**Keywords:** Green Accounting, Good Corporate Governance, Corporate Social Responsibility, firm value

## INTRODUCTION

Global climate change is one of the negative impacts caused by various industrial activities. The Intergovernmental Panel on Climate Change (IPCC), in a 2018 report in

Incheon (South Korea), predicts that the next 12 years will determine the fate of the earth and human life with the possibility of an increase in temperature reaching 1.5 degrees Celsius which threatens food security and human health and trigger extreme disasters (Climate Change, Synthesis Report 2018).

The greenhouse effect is heating the earth's surface, satellites, and other celestial bodies caused by the conditions and structure of the atmosphere's composition. As a result, the greenhouse can cause extreme climate change, namely increasing the intensity of sea level, increasing temperature widely, causing environmental damage, and impacting social politics.

The Greenhouse Effect also affects Indonesia, namely with an increase in rainfall which can reach 377 mm in a day in 2020, even though the previous year, namely 1918, was the first occurrence of the highest rainfall, which only reached 125.5 mm per day, meaning that Indonesia was experiencing the threat of flash floods with an increase in rainfall intensity (Handayani & Maharani, 2015).

Data from the National Aeronautics and Space Administration (NASA) illustrates a graph of the global heat of the earth's surface, which continues to increase. Even

according to the instrument period 1880 - 2020, 86% probability that the hottest year will occur in 2016 (Lenssen et al., 2019).

One of the triggers for global warming is economic activity. Large growth from one of the industrial sectors will go straight or positively with increased emissions from the company's operational activities (Matsumura et al., 2011). In 2019, the Ministry of Environment and Forestry produced records of dozens of oil, gas, and mining companies carrying out activities that impacted environmental pollution for two years, namely 2017-2018.

The consequence of global warming and the greenhouse effect is that technological developments in today's modern era are faced with environmental problems such as environmental pollution, the environmental damage caused by irresponsible human activities, and a lack of awareness about the importance of protecting the environment. Poor environmental management is also often carried out by companies.

In anticipating the global warming phenomenon, the Government issued Law no. 40 of 2007, which provides arrangements regarding limited liability companies regarding the company's obligations to report environmental and social responsibility in preparing its financial reports. This means that the publication of social and environmental responsibility is an important topic to be conveyed in an actual and relevant manner to all parties concerned, including investors, the government, and society in general.

The importance of environmental management is because environmental-based investments are in great demand. Therefore, the government is serious about encouraging environmentally friendly economic growth to attract investors to the Indonesian financial market. This shows the government's concern for the environment. It is expected to motivate companies in Indonesia to start increasing their concern for the environment and realize that environmental concern is an investment in

the future and will provide positive benefits for the company.

At the 2018 International Monetary Fund (IMF)-World Bank annual meeting in Nusa Dua Bali, the Ministry of Finance is trying to increase the attractiveness of investment in green sukuk and green bonds devoted to financing various environmentally friendly projects. It aligns with the Indonesian government's commitment to implementing the Paris Agreement, which Indonesia ratified through Law Number 16 of 2016 (Kompas. id, 2018).

As a result of environmental damage that occurs on an ongoing basis, today, many companies are increasingly implementing Green Accounting. Green Accounting is a process of recognizing, measuring value, recording, summarizing, reporting, and disclosing financial, social, and environmental objects, transactions, or events in the accounting process to produce complete financial, social, and environmental accounting information integrated and relevant benefits for users in making economic and non-economic decisions and management (Lako, 2018).

Disclosure of the company's environmental sector significantly influences investor investment appraisal because environmental issues are one of the most important aspects of accounting discussion. This happens because the information from these disclosures can affect the company's reputation and sustainability in the future (Griffin & Sun, 2013)

Every company, besides wanting profit, also aims to give the company's reputation and prosperity to all members and shareholders (Puspita & Mahfud, 2013). Increasing firm value is the most important part of the expectations expected of members and shareholders because the high firm value will also indicate a high level of welfare for members and shareholders.

Companies benefit from society by fulfilling their obligations in good environmental and social activities. So that makes the company think again about continuing environmental

and social conditions to run well. Jitmaneeroj (2018), Purbawangsa et al. (2019) shows that Green Accounting influences firm value in a good or positive direction.

A good company must manage its financial and non-financial potential to maximize the firm value for its long-term survival. Maximizing the firm's value is important because it also means maximizing shareholder wealth, the company's main goal. The high corporate value will impact investor confidence in the company's current and future performance. Many factors affect the firm value, including Green Accounting, Good Governance, and Corporate Social Responsibility.

Most of the problems of environmental damage, natural exploitation, and global warming are closely related to mining companies' activities. Therefore, this research will be conducted on mining companies listed on the Indonesian Stock Exchange. The main problems in the mining sector include negative sentiment over environmental impacts, but technology and innovation are the keys to reducing carbon intensity.

Several mining companies have experienced a decrease in public trust (firm value) due to minimum Corporate Social Responsibility (CSR) following Green Accounting (GA) disclosures and a decrease in Good Corporate Governance (GCG) in recent years, as shown in the following table:

**Table 1. The Phenomenon of Decreasing Firm Value Due to Global Warming (Greenhouse Effect)**

No	Emiten Code	Mining	Firm Value		
			2019	2020	2021
1	SMMT	Coal	47.29%	43.16%	39.24%
2	TOBA	Coal	34.32%	31.18%	27.53%
3	APEX	Crude Oil & Natural Gas	51.46%	50.27%	48.53%
4	ELSA	Crude Oil & Natural Gas	57.32%	53.42%	50.16%
5	BRMS	Metals & Minerals	28.36%	32.34%	30.17%
6	TINS	Metals & Minerals	43.31%	46.22%	42.15%

Source: [www.idx.co.id](http://www.idx.co.id) and [www.pefindo.com](http://www.pefindo.com)

Table 1. shows that the average mining company experienced a decrease in firm value during the 2017-2021 period, where increasing global warming (greenhouse

effect) caused the values of Green Accounting, Good Corporate Governance, and Corporate Social Responsibility to decrease. Many companies are increasingly ignoring Corporate Social Responsibility (CSR) due to a decrease in the company's investment value.

Various cases of environmental damage on a national scale, such as the cases of mining companies PT Lapindo Brantas, PT Newmont Minahasa Raya, PT Freeport, and various other cases, are concrete evidence that the business world, especially those carrying out production activities (manufacturing companies and natural resource processing companies), tend to damage the environment.

Based on the background above, the research phenomenon is the occurrence of a decrease in the value of Green Accounting, Good Corporate Governance, and Corporate Social Responsibility due to increased global warming (greenhouse effect). One of the causes of global warming is the exploitation of nature by humans, including corporations, without accountability. The business world is one of the active actors in development that has contributed to global warming due to the excessive exploitation of nature. Poor Good Corporate Governance and low Corporate Social Responsibility have caused corporate responsibility for environmental damage to increase.

Realizing the importance of improving corporate governance, mining companies continue to improve mine management according to good mining practices, one of which is using more environmentally friendly technology.

Starting from global warming and environmental damage, researchers plan to conduct research titled " Effects Of Implementation Of Green Accounting And Good Corporate Governance On Firm Value, Moderated By Corporate Social Responsibility (A Study on the Mining Companies Listed on IDX in the Period 2017-2021).

The reason for choosing CSR as a moderating variable is because CSR is a form of company concern in helping environmental damage due to global warming, which is expected to increase firm value. Increasing environmental disclosure (GA) and improving corporate governance (Good Corporate Governance) will increase corporate value. Thus, the existence of CSR is expected to enhance further the role of GA and GCG in increasing corporate value.

## **LITERATURE REVIEW**

### **Firm Value**

According to Husnan & Pudjiastuti (2013), firm value is the price prospective buyers are willing to pay if the company sells. The higher the firm value, the greater the prosperity the company owner will receive. Firm Value is a condition that has been achieved by a company as an illustration of public trust in the company after going through a process of activity for several years, namely since the company was founded until now.

This study measures firm value using Tobin's Q indicator developed by James Tobin. Tobin's Q is calculated by comparing the ratio of the company's stock market value to the book value of the company's equity (Weston & Copeland, 2016). The Q ratio is superior to the market value to book value ratio because it focuses on how much a company is worth today relative to how much it would cost to replace it today.

$$Tobin's Q = \frac{Stock Price + Debt}{Total Assets}$$

### **Green Accounting**

According to Risal et al. (2020), Green Accounting or Environmental Accounting is the process of including environmental costs (environmental costs) in preparing accounting reports for companies, organizations, or institutions. Environmental costs are financial and non-financial aspects that must be borne due to company activities that affect

environmental quality.

According to Ikhsan (2019), environmental accounting aims to increase the amount of relevant information for those who need or can use it. The success of environmental accounting depends not only on the accuracy in classifying all costs made by the company. However, the company's accounting data's ability and accuracy suppress the environmental impact arising from the company's activities.

In environmental accounting, several financing components must be calculated (Handayani, 2021):

1. Business operational costs consist of depreciation costs for environmental facilities, repairing environmental facilities, services, or contract fees for environmental management activities, labor costs for operating environmental management facilities, and contract costs for waste management (recycling).
2. Cost of waste recycling.
3. Research and development costs consist of the total costs for materials, experts, and other workers for developing environmentally friendly materials, products, and production facilities.

Green Accounting measurements use PROPER results because the PROPER rating is quite reliable as a measure of a company's environmental performance and because of its compatibility with international certification in the environmental field of ISO 14001.

The company's environmental performance is measured by the achievements of the companies participating in the PROPER program, which is one of the efforts made by the Ministry of Environment (KLH) to encourage company management in environmental management through information instruments. The PROPER award is based on the performance appraisal of the person in charge of the

business in:

1. Prevention of pollution and environmental damage.
2. Prevention of environmental pollution and damage.
3. Recovery of environmental pollution and damage.

The PROPER assessment criteria that the Ministry of Environment has determined can be seen in Table 2 below:

**Table 2. Proper Assessment Criteria**

<b>PROPER RATING CRITERIA</b>	
1	<p><b>Environmental Document Requirements and Reporting.</b> A company is considered to meet this criterion if all its activities have been covered in environmental management documents in the form of documents on Environmental Impact Analysis (AMDAL), Environmental Quality Management and Monitoring Documents (UKL/UPL), or other relevant management documents. Furthermore, an assessment is made of the company's compliance in reporting on environmental management required in the AMDAL and UKL/UPL.</p>
2	<p><b>Water Pollution Control.</b> In principle, compliance with water pollution control is assessed based on the provision that all wastewater discharges into the environment must have a permit. Wastewater discharged into the environment must pass through a predetermined compliance point. At the point of compliance, the quality standards for wastewater quality that are permitted to be discharged into the environment apply. To ensure that the wastewater discharged at any time does not exceed the quality standard, the company must monitor the frequency and parameters by the applicable permit or quality standard.</p>
3	<p><b>Air Pollution Control.</b> Compliance with air pollution control is based on the principle that all emission sources must be identified and monitored to ensure that emissions discharged into the environment do not exceed the established quality standards. The monitored frequency and parameters must also meet the provisions in the regulations. The sampling infrastructure must comply with regulatory requirements to ensure that the monitoring process is carried out safely and scientifically valid.</p>
4	<p><b>Management of hazardous wastes and toxic.</b> Compliance with B3 waste management is assessed by collecting data on its type and volume. After data collection is carried out, further management is carried out. A B3 waste management permit must accompany further management. Compliance with the provisions of the B3 waste management permit is the main component for assessing company compliance.</p>
5	<p><b>Sea Water Pollution Control</b> For this aspect, the primary compliance is seen from the completeness of the permit for the disposal of wastewater and compliance with the disposal of wastewater by the provisions in the permit.</p>
6	<p><b>Land Damage Potential.</b> Criteria for potential land damage are only used for mining activities. This criterion is the implementation of best mining practices, such as the suitability of implementing activities with the mining plan, so that unmanaged land clearing can be avoided. Adjust the height and slope of the slope/level to be stable. The reference is slope stability. Identify the potential for forming Acid Mine Water for each type of rock and develop overburden management strategies. Create and maintain erosion control facilities. Create a good drainage system so that wastewater quality meets quality standards.</p>

Through PROPER, a company's environmental performance is measured using colors, starting from the best gold, green, blue, and red to the worst black, which is then announced regularly to the public so that the public can find out the level of environmental management at the company by just looking at the existing colors.

More complete PROPER assessment criteria can be seen in the Regulation of the State Minister for the Environment No. 5 of 2011 concerning the Company Performance Rating Program in Environmental Management. In general, the PROPER performance rating is divided into five colors with the following meanings:

**Table 3. PROPER Performance Rating**

<b>Colour</b>	<b>Score</b>
Gold	5
Green	4
Blue	3
Red	2
Black	1

Wardyanto (2019) stated that the application of Green Accounting, share ownership, and CSR publications significantly influence firm value. Financial performance is proven to moderate the effect of implementing Green Accounting, share ownership, and CSR publication on firm value.

### **Good Corporate Governance**

Good and high corporate value is how public trust has been built in the company for the excellent performance and impact given to the public. The public trust that has been built is also a factor in investor confidence to invest in excellent and high-value companies. Even though the funds invested are not small, they feel comparable to the guarantee of the existing public trust. Therefore the firm value can be defined as the selling value of a company that is formed more than,

less than, or comparable to the existing and inherent value of the company, which is assessed on the performance and management of the organization by the public. To achieve this, a company must operate with good management, which can be achieved through good corporate governance. GCG is needed because it functions as a medium to balance different interests between management, shareholders, and other stakeholders.

Ramadhan (2019) proves that board size and environmental performance positively affect firm value. The size of the board of directors and audit committee affects the firm value.

$$\text{Institutional Ownership} = \frac{\text{Number of Institutional Shares}}{\text{Number of Shares Outstanding}}$$

### Corporate Social Responsibility (CSR)

In this study, CSR is used as a moderating variable. CSR is a business commitment to act ethically, operate legally, and contribute to improving the quality of life of employees and their families, the local community, and the wider community. CSR involves partnership responsibilities between the government, companies, and local communities that are active and dynamic (Marnelly, 2012). Companies implementing CSR programs will provide distinct benefits for the company. As Eka Tjipta Foundation said, CSR will be an inherent business strategy to maintain or increase competitiveness through reputation, product brand loyalty (loyalty), and corporate image.

According to Hamdani (2016), corporate social responsibility is a program that provides added value to all stakeholders and a sense of trust in the company. According to Chen & Lee (2017), the wider the disclosure of corporate social responsibility, the greater the firm value. This is proven based on research by Dewi & Narayana (2020), namely the CSR variable has a significant positive effect

on firm value.

GCG in Indonesia itself became known during the 1997 monetary crisis. A prolonged crisis was suspected of being the result of irresponsible management of companies and the many practices of corruption, collusion, and nepotism. Rapid global developments not only make business competition increasingly fierce but damage and changes in environmental conditions that are increasingly damaged and climate change are expected to cause death.

Due to environmental damage that continues to occur, in recent years, companies are aggressively implementing Green Accounting. Misutari (2020) proves that Good Corporate Governance has succeeded in moderating the influence of Corporate social responsibility and Green Accounting on financial performance.

In this study, CSR will be calculated using the following formula:

$$\text{CSR Cost} = \frac{\text{Environmental Program Fees}}{\text{Net Profit After Tax}}$$

### Framework

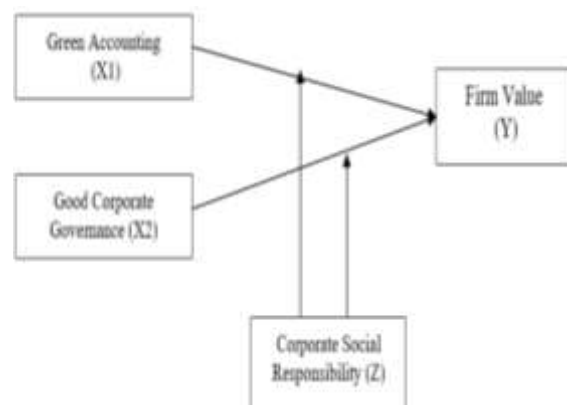


Figure 1. Framework

H1: Green Accounting has a positive and significant effect on firm value.

H2: Good Corporate Governance positively and significantly affects firm value.

H3: Corporate social responsibility (CSR) can moderate Green Accounting and

positively and significantly affect firm value.

H4: Corporate social responsibility (CSR) can moderate Good Corporate Governance and positively and significantly affect firm value.

## MATERIALS & METHODS

This research is causal research. This design helps analyze the relationship between one variable and another. The independent variables used in this study are Green Accounting and Good Corporate Governance. The dependent variable in this study is Firm Value and Corporate Social Responsibility as a moderating variable.

According to Sugiyono (2016), Population is a generalized area of objects/subjects with certain qualities and characteristics determined by researchers to be studied and then conclusions drawn. In this study, the population was all companies listed in the IDX mining sector, totaling 47 companies.

The sample is part of the number and characteristics possessed by the population (Sugiyono, 2017). Sampling used the Purposive Sampling method so that there were several criteria as sampling requirements, namely:

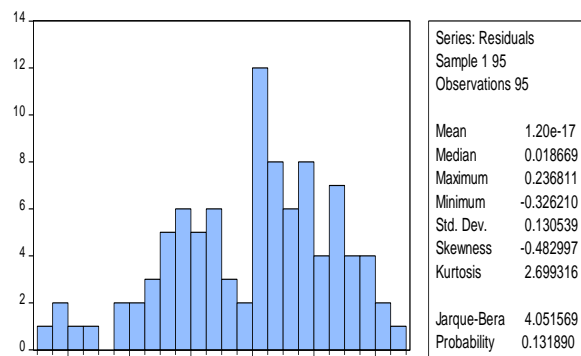
1. Indonesian Stock Exchange mining sector companies from 2017 to 2021.
2. Has published a sustainability report from 2017 to 2021.
3. Have and present financial reports that can be accessed through IDX.
4. Companies that are still listed from 2017 to 2021.
5. Do not change the type of business during the research period.

Based on the above criteria, companies that meet the criteria are 19 companies x 5 = 95 samples. The data in this study is sourced from the official IDX website via [www.idx.co.id](http://www.idx.co.id).

## RESULT

### A. Classic Assumption Test

#### 1. Normality Test



Source: Processed with EViews  
Figure 2. Normality Test Result

The picture above shows that the probability value JB = 0.13, greater than 0.05, so it can be concluded that the data is normally distributed.

#### 2. Multicollinearity Test

Table 4. Multicollinearity Test Results

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.001802	9.727699	NA
X1	0.006194	9.646680	1.134021
X2	0.000447	2.631889	1.053413
Z	0.003619	2.229400	1.190352

Source: Processed with EViews

Table 4 above shows that the VIF values of the three independent variables are less than 10, so it can be concluded that the research data is free of multicollinearity symptoms.

#### 3. Heteroscedasticity Test

Table 5. Heteroscedasticity Test Result

##### Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.105953	Prob. F(3,91)	0.3509
Obs*R-squared	3.341855	Prob. Chi-Square(3)	0.3419
Scaled explained SS	2.605357	Prob. Chi-Square(3)	0.4566

Source: Processed with EViews

Table 4 above shows that the Chi-square =  $0.45 > 0.05$ , so it can be concluded that the research data is symptom-free of heteroscedasticity.

#### 4. Autocorrelation Test Results

**Table 6. Autocorrelation Test Result**  
Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.504725	Prob. F(2,89)	0.0874
Obs*R-squared	5.062234	Prob. Chi-Square(2)	0.0796

Source: Processed with EViews

Table 6 above shows that the probability value of chi-square =  $0.079$ , greater than  $0.05$ , so it can be concluded that the study data did not contain autocorrelation symptoms.

#### 5. Linearity Test

**Table 7. Linearity Test Results**

Ramsey RESET Test  
Equation: UNTITLED  
Specification: Y C X1 X2 Z  
Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	3.111113	90	0.0025
F-statistic	9.679026	(1, 90)	0.25
Likelihood ratio	9.703833	1	0.18

Source: Processed with EViews

Table 7 above shows that the probability value of the F-statistic =  $0.25$ , greater than  $0.05$ , so it can be concluded that there is a linear relationship between the independent variable and the dependent variable Y.

### B. Best Model Test Results

#### 1. Chow Test

Chow test was conducted to select the best model between CEM (Common Effect Model) and FEM (Fixed Effect Model).

**Table 8. Chow Test Results**

Redundant Fixed Effects Tests  
Equation: Untitled  
Test period fixed effects

Effects Test	Statistic	d.f.	Prob.
Period F	1.168869	(4,87)	0.3302
Period Chi-square	4.972946	4	0.2901

Source: Processed with EViews

Table 8 above shows that the probability value of Cross-section Chi-square =  $0.29$ , greater than  $0.05$ , so the correct model is CEM (Common Effect Model).

#### 2. Hausman Test

Hausman test is a test to choose FEM (Fixed Effect Model) or REM (Random Effect).

**Table 9. Hausman Test Results**

Correlated Random Effects - Hausman Test  
Equation: Untitled  
Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	4.504218	3	0.2119

Variable	Fixed	Random	Var (Diff.)	Prob.
X1	0.180323	0.177824	0.000141	0.8335
X2	0.112275	0.112327	0.000004	0.9795
Z	0.357336	0.344321	0.000124	0.2421

Source: Processed with EViews

Table 9 shows that the probability value  $F = 0.21$  is greater than  $0.05$ , so the Fixed Effect Model (the correct model).

#### 3. Lagrange Test Results

The multiplier Lagrange test is used to compare the best model between REM (Random Effect Model) and CEM (Common Effect Model) with the condition that if the Breusch-Pagan probability value is  $< 0.05$ , then the best model is REM.

**Table 10. Lagrange Test Result**

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	2.737741 (0.0980)	0.005032 (0.9435)	2.742772 (0.0977)
Honda	-1.854612	-0.070933	-1.220145
King-Wu	-1.854612	-0.070933	-0.769691
Standardized Honda	-1.515233	0.235622 (0.4069)	-5.005087
Standardized King-Wu	-1.515233	0.235622 (0.4069)	-3.802931
Gourieroux, et al.*	--	--	0.000000 ( $>= 0.10$ )

Source: Processed with EViews

Table 10 above shows that the t-calculated BP value is  $2.74$  with a probability value =  $0.09$ , greater than  $0.05$ , so the best model is the CEM (Common Effect Model).



### C. Hypothesis Test Results

#### 1. Partial Test

Partially, the influence of X1 (GA) and X2 (GCG) on firm value in the mining sector listed on the Indonesia Stock Exchange for the 2017-2021 period shows the following results:

**Table 11. Partial Test Results**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.363509	0.049084	7.405817	0.0000
X1 (GA)	0.330953	0.085842	3.855382	0.0002
X2 (GCG)	0.138797	0.023916	5.803641	0.0000

*Source: Processed with EViews*

Based on the table above, it can be concluded that X1 (GA) and X2 (GCG) have a partial effect on Y (FV).

#### 2. Simultaneous Test

**Table 12. Simultaneous Test Results**

Parameter	Coefficient
F-statistic	<b>25.56</b>
Prob(F-statistic)	<b>0.000</b>

*Source: Processed with EViews*

Based on the table above, the conclusion is that X1 (GA) and X2 (GCG) have a simultaneous influence on Y (FV).

#### 3. Moderation Test

**Table 13. The ability of CSR to Partially Moderate the Effect of GA on FV**

CSR Coefficient	Sig-p	Increase in R-square Value	Conclusion
0.41	0.000	Increased from 0.12 to 0.38	CSR partially moderates GA to FV

*Source: Processed with EViews*

Table 13 above shows that the CSR coefficient is 0.41, the sig-p value = 0.000 is less than 0.05, and there is an increase in the R-square value from 0.12 to 0.38. This means that the CSR variable can partially

moderate the effect of X1 (GA) on firm value.

**Table 14. The ability of CSR to Partially Moderate the Effect of GCG on FV**

CSR Coefficient	Sig-p	Increase in R-square Value	Conclusion
0.39	0.000	Increased from 0.25 to 0.50	CSR partially moderates GCG to FV

*Source: Processed with EViews*

Table 14 above shows that the CSR coefficient is 0.39, the sig-p value = 0.000 is less than 0.05, and there is an increase in the R-square value from 0.25 to 0.50. This means that the CSR variable can partially moderate the effect of X2 (GCG) on firm value.

**Table 15. CSR Ability to Moderate Simultaneously**

CSR Coefficient	Sig-p	Increase in R-square Value	Conclusion
0.34	0.000	Increased from 0.34 to 0.51	CSR moderates simultaneously

*Source: Processed with EViews*

Table 15 above shows that the CSR coefficient is 0.34, the sig-p value = 0.000 is less than 0.05, and there is an increase in the R-square value from 0.34 to 0.50. This means that the CSR variable can simultaneously moderate the effect of X1 (GA) and X2 (GCG) on firm value.

#### 4. R Determination Test

**Table 16. R Determination Test Results**

Variable	Coefficient
Adjusted R-squared	<b>0.3432</b>

*Source: Processed with EViews*

The results of the R determination test in Table 16 show that the adjusted R-square value = 0.3432. This means that the influence of the two independent variables on the dependent variable Y is 0.3432 x 100% = 34.32%. This means that the two independent variables can explain 34.32% of the firm value variable, while the rest

(65.78%) is explained by other factors not examined.

### 5. Panel Data Regression Equation

Based on the coefficient value of each independent variable, the panel data regression equation can be explained as follows:

Table 17. R Determination Test Results

Variable	Coefficient
C	0.382793
X1	0.177824
X2	0.112327
Z	0.344321

Source: Processed with EViews

Based on the table above, the equations of this study are:

$$Y = a + b1X1 + b2X2 + ZX e$$

$$Y = 0.36 + 0.33X1 + 0.0.13 + 0.34Z + e$$

### CONCLUSION

The results of this study provide several conclusions that can be drawn based on the discussion of the problems that have been carried out. The following are the conclusions that the author has summarized in this study:

1. Green Accounting (GA) significantly influences firm value. This is indicated by the t-count X1(3.85) > t-table (1.98) and sig-p (0.0002) < 0.05. Thus, every increase in GA can increase the firm value.
2. Good Corporate Governance (GCG) significantly influences firm value. This is indicated by the t-count X2 (5.80) > t-table (1.98) and sig-p (0.0000) < 0.05. Thus, every increase in GCG can increase the firm value.
3. Corporate Social Responsibility (CSR) can moderate the effect of X1 Green Accounting (GA) on firm value. This is indicated by an increase in the r-square value from 0.12 to 0.38.
4. Corporate Social Responsibility (CSR)

can moderate the effect of X2 Good Corporate Governance (GCG) on firm value. This is indicated by an increase in the r-square value from 0.25 to 0.50.

### SUGGESTION

Based on the results of the research and the explanations presented above, some suggestions can be made as follows:

1. For mining sector companies listed on the IDX for the 2017-2021 period, it is recommended to pay more attention to the factors that affect the intrinsic value of shares to maximize the intrinsic value of shares.
2. To the Indonesian Stock Exchange, it is suggested to publish financial reports more transparently so that researchers can obtain the expected data more efficiently.
3. To other researchers, conducting similar research on a broader scale is suggested to obtain more complete and reliable research results.

### Declaration by Authors

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