

The Effect of Profitability in Improving Sustainability Performance with Good Corporate Governance as a Moderating Variable: A Study on Mining Companies

Astiana Masayu Asmara Gita¹, Januar Eko Prasetyo^{2*}

Accounting Department, UPN "Veteran" Yogyakarta^{1,2}
Padjajaran street 104 Condongcatur Sleman, Indonesia

Corresponding Author: januar_ep@upnyk.ac.id²
ORCID ID: <https://orcid.org/0000-0002-2161-4998>²

ARTICLE INFORMATION

Publication information

Research article

HOW TO CITE

Gita, A. M. A., & Prasetyo, J. E. (2024). The listed on the Indonesia Stock Exchange effect of profitability in improving (IDX) for the period 2020-2023. GCG in this sustainability performance with good study is proxied by the number of board corporate governance as a moderating directors' meetings and the number of audit variable: A study on mining companies. committee meetings. By using a purposive *International Journal of Applied Business and International Management*, 9(3), 349-366.

DOI:

<https://doi.org/10.32535/ijabim.v9i3.3557>

Copyright@ 2024 owned by Author(s).
Published by IJABIM



This is an open-access article.

License:

Attribution-Noncommercial-Share Alike (CC BY-NC-SA)

Received: 18 October 2024

Accepted: 19 November 2024

Published: 20 December 2024

ABSTRACT

The objective of this study is whether profitability affects sustainability performance with Good Corporate Governance (GCG) as a moderating variable in energy sector mining companies. The data analysis technique used in descriptive statistical analysis, classical assumption test, linear regression analysis, and Moderated Regression Analysis (MRA). The results of this study indicate that profitability has no effect on sustainability performance in energy sector mining companies listed on the IDX, while GCG is able to moderate or strengthen the relationship between profitability on sustainability performance. This research provides insight for companies and stakeholders to pay attention to the role of GCG in improving corporate sustainability.

Keywords: Good Corporate Governance; Indonesia Stock Exchange; Mining Companies; Profitability; Sustainability Performance

INTRODUCTION

The mining sector in Indonesia, especially those in the energy sub-sector, plays an important role in supporting the national economy. Companies in this sector contribute to the country's income through the export of natural resources and the provision of energy. However, operations in the mining sector often have major impacts on the environment, such as causing land degradation and water pollution. In this context, companies need to pay attention to sustainability performance aspects. Companies committed to sustainability not only manage negative operational impacts but also improve practices that support community welfare and protect the environment in every stage of the production process (Senjaya et al., 2020).

In the last decade, the concept of sustainability has become one of the main issues in business and industry. Nowadays, sustainability not only focuses on aspects of social and environmental responsibility but also involves economic dimensions that are interrelated for the long term. The issue of sustainability is increasingly becoming a significant global concern. Companies are required to not only maximize profits but also maintain environmental balance and pay attention to human welfare (Farisyi et al., 2022). Based on the Triple Bottom Line (TBL) theory, the company's success is not only measured by the amount of profit generated but also by its contribution to society (people) and the environment (planet) (Elkington, 2013). One way to apply the 3P concept (Profit, People, and Planet) and implement the concept of sustainable development is by conducting sustainability reporting.

Based on research conducted by Fitri and Yuliandari (2018), sustainability reports can help companies demonstrate their commitment to social and environmental responsibility and serve as a medium of information for internal and external stakeholders, the implementation of sustainability reports provides various benefits for companies. The report provides comprehensive information on the environmental, social, and economic impacts of the company's operations, which plays a role in reducing the information gap between the company and its stakeholders. With this report, companies can also increase transparency regarding their sustainability activities. A higher level of transparency can help investors better analyze companies, so they can more easily shift investments to companies that are considered to have a positive impact on sustainability (Millenia & Raharjo, 2024). In addition, companies that provide sustainability reports can increase their competitiveness in the market, as they are perceived as more responsible entities, have a positive image, and are more trusted by consumers and other stakeholders, which in turn can increase their profits and position in the industry.

Research conducted by Farisyi et al. (2022) shows that the level of sustainability reporting in developing countries is still relatively low. Most of the existing studies focus more on developed countries or on a global scope. However, the results of these studies may not be fully applicable to developing countries due to differences in the underlying legal and institutional aspects (Millenia & Raharjo, 2024). In developing countries, the application of laws related to environmental protection or human rights tends to experience greater gaps than in developed countries. In addition, the influence of stakeholders, such as civil society organizations, media, consumers, and activists, is usually weaker, making it less effective in encouraging sustainability reporting practices in developing countries than in developed countries. Therefore, research on PSAR practices in developing countries is important to contribute to this growing literature (Kiliç & Kuzey, 2016).

In Indonesia, the application of sustainability reports is still limited. Based on research by Laskar et al. in Millenia and Raharjo (2024), the level of openness of Indonesian

companies in disclosing sustainability information is still low. Other research conducted by Siregar and Napitu (2021) also revealed that Indonesia has the lowest position when compared to other countries in terms of the level and quality of sustainability reports prepared. This shows that companies in Indonesia have not fully implemented sustainability reporting optimally. Some of the factors that may influence this include the lack of regulations requiring sustainability reports or the weak push from stakeholders for transparency in social and environmental aspects. Regulations in Indonesia, as stated in Regulation according to Financial Services Authority (OJK, n.d.) No. 51/POJK.03/2017 that companies have the obligation to prepare and submit sustainability reports to the OJK. With this obligation, companies are expected to be more transparent about the social, environmental, and economic impacts of their activities. This policy aims to improve corporate accountability, reduce reputational risks, and encourage more responsible business practices across various industry sectors.

The mining industry, particularly the energy sub-sector, plays an important role in supporting the global economy. However, it is often highlighted as a major contributor to environmental degradation. Intensive natural resource exploitation activities in this industry pose various sustainability challenges, including waste management issues, ecosystem destruction, and increased greenhouse gas emissions. Companies in this sector are closely monitored by various stakeholders, such as governments, investors, and the international community, which increasingly emphasize the importance of strict Environmental, Social, and Governance (ESG) implementation (Khan et al., 2016). Therefore, any effort to improve sustainability performance in the mining industry must consider the financial aspects of the company, especially profitability, which is instrumental in supporting investment in sustainability initiatives.

Profitability is the ability of a company to generate profit or profit, which simply reflects the level of business success in carrying out its operations. Profitability is one of the most significant financial indicators used by companies, investors, and other stakeholders in evaluating company performance. According to research conducted by Tanujaya et al. in Ananda (2017), several factors can affect firm value, including profitability and capital structure. Iriani et al. (2019) identified that profitability, along with asset structure, affects the company's capital structure. Companies with high levels of profitability tend to have lower levels of leverage because these companies tend to rely more on internal funding sources than external funding.

Profitability is often considered a leading indicator of a company's good financial performance, which can increase its capacity to invest in sustainability programs. However, the impact of profitability on corporate sustainability performance is not always direct or linear. Companies with high profitability may not necessarily have optimal sustainability performance if they are not supported by strong governance. Research conducted by Putri and Trisnainingsih (2021) shows that good governance allows companies to manage sustainability risks more efficiently and ensure that company profits are distributed responsibly, especially in industries with high social and environmental risks such as the mining sector.

A recent phenomenon in the energy sub-sector is the increasing global pressure on energy companies in Indonesia to meet ESG standards. For example, research by Hidayati et al. (2024) explained that PT Adaro Energy Tbk one of Indonesia's largest mining companies, is facing international pressure to transition to clean energy. By 2023, the company faced with the challenge of balancing profitability and sustainability. It is a challenge for ADRO to maintain the profitability of its core coal business while meeting the expectations of its stakeholders to shift to greener energy sources.

Research shows that profitability often influences management policies in terms of Corporate Social Responsibility (CSR) disclosure, which reflects the company's commitment to the welfare of society and the environment. For instance, research conducted by Putra et al. (2022) found that a high level of profitability encourages companies to be more active in disclosing CSR activities, which in turn can strengthen the image and increase company value.

In addition, previous research found that profitability has a positive influence on firm value, but this impact becomes more significant if supported by good CSR disclosure (Wahyuni et al., 2018). Putri and Trisnaningsih (2021) also found that in the structure of Good Corporate Governance (GCG), institutional ownership has a significant influence on firm value through profitability, while managerial ownership and the presence of independent commissioners have a relatively weaker effect. However, the effect of profitability on sustainability performance has not received sufficient attention, especially regarding GCG as a factor that moderates this relationship. A study conducted by Sudiyatno et al. (2021) revealed that profitability is one of the key elements in increasing firm value, but the study has not specifically discussed how profitability can support sustainability performance.

Research on the effect of profitability on sustainability performance with GCG as a moderating variable shows some important gaps that are relevant for further research. Most existing studies focus on the direct relationship between GCG and corporate financial performance, without providing an in-depth study on the role of GCG as a moderating variable in strengthening the relationship between profitability and sustainability performance. Research conducted by KN et al. (2023) shows the relevance of GCG in improving sustainability performance in other or non-energy sectors, but its specific contribution to the sustainability performance of energy sector mining companies in Indonesia is still limited.

The objective of this study is to investigate the influence of profitability on sustainability performance among mining companies, with GCG acting as a moderating factor. This research is taken in the period 2020-2023 which is influenced by the challenges of the COVID-19 pandemic and the implementation of new regulations because it reflects how companies respond to external and internal environmental dynamics, such as changes in government policies that emphasize sustainability, as well as increasing stakeholder expectations of social and environmental responsibility. Therefore, this study has the potential to make a significant contribution by examining more deeply how GCG can moderate the relationship between profitability and sustainability performance in the energy sector. This research also provides more specific insights into the role of GCG in ensuring that companies not only focus on profitability but also on achieving sustainability goals.

LITERATURE REVIEW

Profitability

Profitability is defined as the company's ability to generate profits from its business operations. It is an important indicator that shows how efficient a company is in using its assets and resources to generate profits. According to Kasmir in Wijaya (2019), profitability can be measured through various financial ratios such as Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). Profitability plays an important role in attracting investor interest and building the company's reputation in the market because high profits are often associated with effective company management and good financial stability (Wahyuni et al., 2018).

Corporate profitability correlates with the ability to invest in innovation and sustainability strategies. Research by Wijaya and Wirawati (2019) found that companies that have a good level of profitability are more able to allocate resources for investment in environmentally friendly technology and CSR programs. Profitability is also associated with the ability of companies to be more transparent in reporting their environmental impacts. This suggests that profitability supports companies in meeting stakeholder expectations and ensuring better sustainability practices in company operations (Arifiyanto, 2016). This suggests that profitability is not only important in the context of financial performance but can also have a positive impact on corporate sustainability.

However, a study conducted by Gunawan and Sjarief (2022) shows that companies with high profitability often focus more on increasing profits than allocating or investing in sustainability programs. Waddock and Graves (1997) mentioned that companies often prioritize short-term profits over long-term sustainability, especially if there is pressure from shareholders who are more oriented toward quick profits.

Sustainability Performance

Sustainability performance refers to a company's ability to operate in a way that is not only economically beneficial but also positively impacts the environment and society. This concept is often measured by ESG indicators, which include performance in environmental, social responsibility, and corporate governance aspects. According to Elkington (2013) in the TBL concept, the success of a company is measured from three dimensions: profit, people, and planet (3P). In other words, sustainability requires companies to balance economic, social, and environmental interests in the long term. In the modern business world, sustainability performance has become one of the important indicators to assess the extent to which a company is responsible to society and the planet by ensuring that companies not only pursue financial profit but also pay attention to social welfare and environmental protection in the long term.

Economic

Sustainability performance focuses on achieving sustainable financial goals, such as operational efficiency, high profitability, and optimal resource management to support growth. High profitability, for example, enables companies to invest in social programs and environmentally friendly technologies, which increase the value of the company while supporting the achievement of sustainability.

Social

Deals with the social impact of business actions, which includes relationships with stakeholders such as employees, customers, local communities, and the general public. A company can be considered to have good social performance if it defends human rights, provides decent employment opportunities, and takes part in activities that support social development. Companies that pay attention to their workers' rights and provide decent working conditions can be considered to have good social performance. In addition, social sustainability is determined by company actions that help communities or support social programs.

Environment

Involves how a business addresses its environmental impacts, such as energy use, greenhouse gas emissions, and waste management. A sustainable company will implement environmentally friendly policies and practices, such as the use of renewable energy, reduction of carbon emissions, and efficient waste management. The goal is to reduce the company's ecological impact and help preserve the environment for the next generation.

In the mining industry, which has a significant impact on the environment, the implementation of sustainability performance is becoming increasingly crucial. Dewi et al. (2024) in their research on mining companies in Indonesia revealed that companies committed to sustainability tend to have a better reputation and face fewer long-term operational risks. Sustainability performance in this sector not only refers to reducing emissions or waste management but also to social responsibility towards communities around the mining area.

Khan et al. (2016) highlighted that in the mining industry, sustainability is often faced with major challenges due to the intensive exploitation of natural resources, which has the potential to damage the environment and affect surrounding communities. Therefore, companies in this sector are required to have a strong CSR strategy as well as a commitment to ESG to ensure long-term sustainability.

Hypotheses Development

Relationship Between Profitability and Sustainability Performance

Profitability and sustainability performance have a close relationship. According to research by Tristanto et al. (2021), profitable companies are more likely to have the capacity to allocate resources to programs that support sustainability. Quoting from Abas et al. (2020), the higher the liquidity of the company, the better the company's profitability. Investments in environmental innovation, social responsibility, and good governance can be financed more easily by companies that have stable profits.

Sustainability performance, which includes social, environmental, and economic aspects, has now become an important benchmark for companies that want to maintain long-term value. Research conducted by Gami (2020) shows that companies with good financial performance and strict implementation of GCG are more likely to disclose information that includes aspects of the TBL (social, environmental, economic), which can increase the positive perception of stakeholders towards the company and strengthen the company's overall image and value. Hence, the hypothesis can be formulated as follows:

H1: Profitability has a positive influence on sustainability performance.

The Role of Good Corporate Governance (GCG)

GCG is a system that ensures the company is managed transparently, accountable, responsible for every decision, and focuses on the interests of all stakeholders. Novitasari (2022) explains that good GCG implementation is not only important for maintaining company integrity but also plays an important role in strengthening the company's sustainability performance. Research conducted by Alkhairani et al. (2020) states that GCG has a significant influence on firm value, through its impact on profitability and the implementation of CSR. With the implementation of GCG, companies can be more responsible in using their resources, including profits, to support sustainability programs. Quoting from Lestari et al. (2024), GCG means where the company follows rules and procedures that ensure its operations remain organized and efficient. This allows the company to generate profits while complying with applicable laws and regulations. Key principles in GCG include transparency, accountability, responsibility, independence, fairness, and equality.

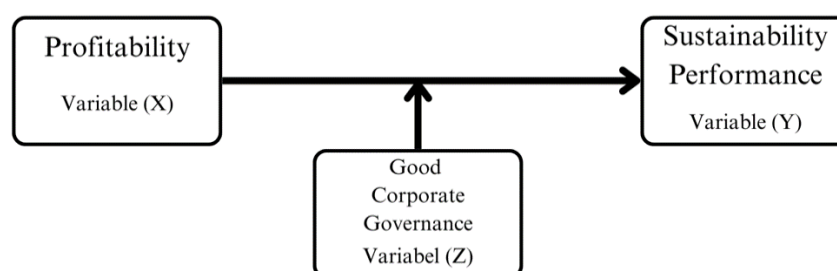
Research by Sulistiyanti and Nugraha (2019) emphasizes that GCG can moderate the relationship between profitability and sustainability performance. In this context, companies that implement strong GCG principles are more likely to use their profitability to support sustainability initiatives, compared to companies that do not have good governance.

However, in the context of industries that have significant environmental impacts, such as mining, high profitability does not necessarily mean that companies will invest those profits to support sustainability. Sudiyatno et al. (2021) state that the relationship between profitability and sustainability performance needs further research, especially by considering the role of GCG as a factor that moderates the relationship. Good GCG can help companies ensure that the profitability generated is also used to support sustainability performance. Based on this, the hypothesis is formulated as follows:

H2: GCG moderates the relationship between profitability and sustainability performance.

Conceptual Framework

Figure 1. Conceptual Framework



Based on the drawn conceptual framework in Figure 1, profitability (X) has a direct influence on sustainability performance (Y), indicating that companies with higher levels of profitability tend to achieve more optimal sustainability performance. In addition, GCG (Z) acts as an intervening variable or mediator, which serves to strengthen or modify the relationship between profitability and sustainability performance. This indicates that effective corporate governance is a key factor in ensuring that profits earned by companies are strategically utilized to support sustainability initiatives and practices, both in social, environmental, and economic aspects.

RESEARCH METHOD

This study uses quantitative methods, which aim to test the hypothesis regarding the effect of profitability on sustainability performance with GCG as a moderating variable. This quantitative method is an approach used to explain the cause-and-effect relationship between variables through numerical data analysis and hypothesis testing. The use of multiple linear regression and Moderated Regression Analysis (MRA) as an analytical technique helps in understanding the role of moderating variables (GCG) in the relationship between the independent variable (profitability) and the dependent variable (sustainability performance).

Quantitative research methods are systematic approaches that aim to collect and analyze data in numerical format. This method can be used to test hypotheses, determine relationships between variables, or make predictions based on facts that can be statistically examined. Quantitative research, according to Sugiyono (2022), focuses on objective analysis and statistical analysis of data collected through surveys, questionnaires, or experiments. Therefore, quantitative research is objective and well-structured, with the aim of producing generalizations or predictions for larger populations.

Quantitative methods allow the use of historical data, such as financial reports and company sustainability data within a certain time span. With this approach or method,

the complex relationship between financial and governance variables can be analyzed systematically and supported by empirical data, resulting in more valid and reliable conclusions (Sugiyono, 2022)

In this study, numerical data such as ROA is processed to see the impact of profitability on corporate sustainability. Sustainability performance is measured based on corporate sustainability reports, such as social and environmental responsibility disclosures in accordance with the Global Reporting Initiative (GRI) standards. GCG is measured through elements of CSR such as the independent board of commissioners and the audit committee, which are indicators of GCG implementation (Fatoni, 2020). By analyzing how its role as moderation in strengthening or weakening the relationship between profitability and sustainability performance.

This study uses secondary data taken from sources that are already available. The secondary data in this study consists of the Annual Report and Sustainability Report of mining companies in the energy sector listed on the Indonesia Stock Exchange (IDX) for the period 2020-2023. The Annual Report and Sustainability Report can be accessed through the official website of the IDX, as well as through the official websites of each related company.

Table 1. Research Sample Criteria

Description	Total
Number of mining companies listed on the IDX	81
Total company sample	10
Total observation time in the study	4
Companies that do not publish Sustainability Report consistently	3
Total observation data	37

Source: IDX, data processed by researchers (2024)

Based on the data presented in Table 1, there are a total of 81 energy sector mining companies listed on the IDX. From these, only 10 companies were selected as research samples. The observation period in this study covers a period of 4 years. However, 3 companies from the selected sample did not consistently report sustainability reports, so the total observation data that could be used in this study amounted to 37.

The data analysis technique used is moderation regression with interaction between independent variable (profitability) and moderation variable (GCG). To test this hypothesis, the following research model is used:

$$\gamma = \alpha + \beta_1 X_1 + \beta_2 M_1 + \beta_3 M_2 + \beta_4 (X_1.M_1) + \beta_5 (X_1.M_2) + \varepsilon$$

Description:

γ	: Sustainability performance
α	: Constant
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$: Regression coefficient
X_1	: Profitability
M_1	: GCG (Directions)
M_2	: GCG (Audit Committee)
$X_1 \times M_1$: Interaction between Profitability and GCG (BOD)
$X_1 \times M_2$: Interaction between Profitability and GCG (Audit Committee)
ε	: Error

Sustainability Performance

Sustainability performance measurement uses the GRI G4 standard which includes an evaluation of the economic, environmental, and social aspects of the company's activities. The use of GRI G4 in sustainability reports helps companies assess and report sustainability impacts transparently, as well as provide information to stakeholders on the company's commitment to sustainable development. Calculated by assigning a value of 1 for each GRI G4 indicator disclosed and a value of 0 for those not disclosed. The total value obtained is divided by the total number of indicators used in the report to get the percentage of company compliance with GRI G4 standards (Pratiwi et al., 2022).

Profitability

Profitability in this study is proxied by ROA. ROA shows how effective the company is in generating profits or profits from its total assets. ROA is calculated with the following formula

$$ROA = \frac{EAT}{TA}$$

Description:

ROA : Return on Assets

EAT : Earnings After Tax

TA : Total Asset

ROA is useful for comparing profitability between companies in the same industry, as it focuses more on the effectiveness of asset utilization.

Good Corporate Governance (GCG)

GCG as measured by the number of board of directors meetings and the number of audit committee meetings is often used as an indicator in measuring the effectiveness, supervision, and transparency of the company. Jimantoro et al. (2023) found that the frequency of board meetings has a positive impact on the disclosure of information about ESG sustainability. The more often the board of directors meets or holds meetings, the more transparent the company is in ESG disclosure.

RESULTS

Descriptive Statistics

Descriptive analysis is a method used to provide an overview and explain the results of each variable studied, including the amount of data (N), minimum value (lowest), maximum value (highest), average value (mean), and standard deviation. The purpose of this analysis is to provide a comprehensive understanding of all the variables used in the study. In this study, the variables analyzed include the independent variable (X), namely Profitability, which is evaluated through the ROA value contained in the company's Annual Report. The dependent variable (Y) is Sustainability Performance, which is measured based on indicators covering three main aspects known as ESG which are evaluated using the GRI Index with indicators used GRI G4 contained in the Sustainability Report on the company, and the moderating variable (Z) GCG seen from the audit committee and board of directors measured by the number of meetings of the audit committee and board of directors contained in the Annual Report on the company.

Based on the results of descriptive statistical analysis test research from each variable listed in energy sector companies for the period (2020-2023), the following results are obtained.

Table 1. Descriptive Statistics (N = 37)

Construct	Min.	Max.	Mean	SD
Profitability (X)	-984	6,176	1,508.97	1,929.788
Directors (Z1)	6	73	23.62	18.65
Audit Committee (Z2)	4	60	12.41	11.112
Sustainability Performance (Y)	32,967,033	703,296,703	406,029,106.14	168,316,038.841

Note: M = Mean, SD = Standard Deviation.

Based on the results in [Table 2](#), the number of valid data points (N) is 37. The Profitability (X) variable has an N of 37, with a minimum value of -984 and a maximum value of 6,176. The average value is 1,508.97, and the standard deviation is 1,929.788. The Board of Directors (Z1) variable also has an N of 37, with a minimum value of 6 and a maximum value of 73. The average value is 23.62, and the standard deviation is 18.65. The Audit Committee (Z2) variable has an N of 37, with a minimum value of 4 and a maximum value of 60. The average value is 12.41, and the standard deviation is 11.112. Sustainability Performance (Y) has an N of 37, with a minimum value of 32,967,033 and a maximum value of 703,296,703. The average value is 406,029,106.14, and the standard deviation is 168,316,038.841.

Classical Assumption Test

The classical assumption tests used in linear regression include Normality, Multicollinearity, Heteroscedasticity, and Autocorrelation tests. In this study, all classical assumption tests were carried out, the results were as follows.

Normality Test

Table 2. Normality Test Results

N		37
Normal Parameters	Mean	0.000
	Std. Deviation	162,190,334.79
	Absolute	0.090
	Positive	0.076
	Negative	-0.090
Test Statistic		0.090
Asymp. Sig. (2-tailed)		0.200

Source: SPSS Data Processing Results (2024)

Based on the normality test results shown in [Table 3](#), the Asymp. Sig. (2-tailed) value is 0.200, which is greater than 0.05. Therefore, it can be concluded that the data is normally distributed, as the significance value exceeds the threshold of 0.05.

Multicollinearity Test

Table 3. Multicollinearity Test Results

Model	Collinearity Statistics	
	Tolerance	VIF
Profitability (X)	0.988	1.012
Directors (Z1)	0.741	1.350
Audit Committee (Z2)	0.748	1.337

Source: SPSS Data Processing Results (2024)

Based on the results of the multicollinearity test in Table 4, the tolerance value is greater than the specified requirements or greater than (>0.100) and VIF is less than (<10.00). It is concluded that there is no multicollinearity between the independent variables in the regression.

Autocorrelation Test (Runs Test)

Table 4. Autocorrelation Test Results (Runs Test)

Test Value	-13,277,189.08
Cases < Test Value	18
Cases \geq Test Value	19
Total Cases	37
Number of Runs	17
Z	-0.663
Asymp. Sig. (2-tailed)	0.507

Source: SPSS Data Processing Results (2024)

Based on the autocorrelation test results shown in Table 5, the Asymp. Sig. (2-tailed) value is 0.507, which is greater than 0.05. Therefore, it can be concluded that there is no autocorrelation in the data.

Heteroscedasticity Test

Table 6. Heteroscedasticity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	36,410	0.806	-	45.153	0.000
Profitability	-0.000005982	0.000	-0.005	-0.027	0.978
Directors	0.003	0.026	0.024	0.121	0.904
Audit Committee	0.004	0.044	0.019	0.093	0.926

Source: SPSS Data Processing Results (2024)

From the results of heteroscedasticity testing in Table 6, it can be seen that the significant value of profitability is 0.978, the significant value of the board of directors is 0.904, and the significant value of the audit committee is 0.926. In this test, each variable has a significant value greater than 0.05, so it concludes that there is no heteroscedasticity.

Linear Regression Test

Table 7. Linear Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	420,159,802.85	35,604,590.73	-	11.8	0.000
Profitability	-9,364.45	14,657.64	-0.107	-0.639	0.527

Source: SPSS Data Processing Results (2024)

The first model's regression analysis in Table 7 shows that profitability has a significance value of 0.527, which is greater than 0.05. This indicates that profitability does not have a significant effect on sustainability performance.

Moderated Regression Analysis (MRA)

Table 8. MRA Results

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

	B	Std. Error	Beta		
(Constant)	284,040,203.74	79,669,727.11	-	3.565	0.001
Profitability	20,793.23	35,466.59	0.238	0.586	0.562
Directors	-1,717,183.87	2,634,457.05	-0.190	-0.652	0.519
Audit Committee	15,127,605.17	7,663,705.31	0.999	1.974	0.057
Profitability* Directors	5,330.65	2,467.57	1.116	2.160	0.039
Profitability* Audit Committee	-12,652.47	4,809.33	-1.870	-2.631	0.013

Source: SPSS Data Processing Results (2024)

Based on the results of the MRA in [Table 8](#), the interaction between the independent variable (profitability) and the moderating variable (GCG), represented by the Board of Directors, has a significance value of 0.039, which is less than 0.05. Therefore, it can be concluded that the GCG variable, with the Board of Directors as its proxy, effectively moderates the relationship between profitability and sustainability performance. The significance value for the interaction between profitability and GCG, represented by the Audit Committee, is 0.013, which is less than 0.05. Therefore, it can be concluded that the GCG variable, with the Audit Committee as its proxy, effectively moderates the relationship between profitability and sustainability performance.

R Square

Table 9. R Square Test Results

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.503	0.253	0.132	156,789,462.79

Source: SPSS Data Processing Results (2024)

The R Square value in [Table 9](#) is 0.253, or 25.3%. This indicates that GCG, represented by the Board of Directors and the Audit Committee, can moderate the relationship between profitability and sustainability performance. In other words, GCG significantly influences how strongly profitability is related to sustainability performance, highlighting its important moderating role in this relationship.

DISCUSSION

The Effect of Profitability on Sustainability Performance

High profitability allows companies to allocate more resources to sustainability programs. With high revenues, companies have the ease to invest in various environmentally friendly programs and technologies and increase their social responsibility. Research conducted by [Meilan et al. \(2023\)](#) revealed that a high level of profitability supports companies in implementing environmental management accounting more effectively. This implementation plays an important role in monitoring and managing the impact of company operations on the environment, which can help companies achieve sustainability goals.

In this study, the results of the first linear regression show that profitability does not have a positive effect on sustainability performance, which leads to the rejection of H1. Quoting from research by [Darma et al. \(2022\)](#), there is a significant difference between the period before the pandemic and when the pandemic occurred, but this is only observed in the ROA ratio. This shows that profitability does not solely affect the sustainability performance of mining companies as measured by ROA. [Eccles et al. \(2014\)](#) in their research state that the achievement of sustainable performance is not

always determined by the level of company profitability, but is more influenced by how the company organizes its organizational structure and the long-term strategy set because long-term strategy has an important role in improving sustainability performance. The trade-off between increasing profitability and investing in sustainability activities occurs when companies must choose between focusing on short-term profits or investing in practices that support long-term sustainability.

Trade-off theory is the idea of how a firm should choose how much equity and debt to use to balance costs and benefits. The theory assumes that a manager places a target debt ratio to trade off the costs (bankruptcy costs) and benefits (tax advantages) when they borrow debt (Glover & Hambusch, 2014).

GCG Strengthens the Effect of Profitability on Sustainability Performance

Research conducted by Matiin et al. (2018) shows that GCG has an important role as a moderating variable in the relationship between investment decisions and profitability on firm value. Effective GCG can direct profitability to strategies that support long-term sustainability, including the allocation of funds for environmental and social-focused programs.

In this study, the results of the MRA test show that the GCG variable can strengthen the influence of the relationship between profitability and sustainability performance in energy sector mining companies listed on the IDX for the period 2020-2023, which confirms H2. This study in GCG uses 2 (two) proxies, namely the number of board of directors meetings and the number of audit committee meetings. GCG acts as a company management mechanism that ensures that the company is well-managed, considering the interests of all stakeholders, such as shareholders, employees, communities, and the environment is well-managed. Good implementation of GCG allows companies to strengthen the relationship between profitability and sustainability performance. Research by Biswas et al. (2018) states that the composition of the board of directors and committees plays an important role in improving the company's social and environmental performance. Companies will be more effective in prioritizing and managing sustainability initiatives. This makes it possible to enhance reputation and manage corporate socio-economic responsibility in a more planned and structured manner.

Research conducted by Mujiani and Rohmawati (2022) revealed that the existence of an independent board of directors and audit committee has a positive influence on the quality of corporate sustainability reporting. In this case, company profitability can be utilized more effectively to strengthen sustainability strategies if it is supported by a strong supervisory mechanism through GCG. This rigorous oversight ensures that profits earned by the company are not only used for short-term profits but also allocated for sustainable purposes, which can improve the company's reputation and reduce potential environmental risks.

CONCLUSION

Based on the results of research and discussion, it is concluded that profitability does not have a significant influence on sustainability performance in energy sector mining companies listed on the IDX for the period 2020-2023. Even though the company makes a profit, profitability does not directly encourage an increase in sustainability performance. This shows that profitability factors alone are not enough to motivate companies to make long-term investments in sustainability initiatives.

However, in this study, GCG is able to strengthen the relationship between profitability and sustainability performance in energy sector mining companies listed on the IDX for the period 2020-2023. With the effective implementation of GCG through an independent board of directors, a strong audit committee, and transparency in decision-making, companies can focus more on sustainability efforts despite fluctuations in profitability. GCG ensures that the company remains committed to sustainability initiatives that are integrated with long-term strategies, thereby improving the company's overall sustainability performance.

LIMITATION

In this study, there are limitations, namely only on energy sector mining companies, so the results of this study may not fully describe the conditions or characteristics in other industrial sectors. Profitability using the ROA proxy provides a specific perspective, but may not cover all dimensions of company profitability. Sustainability performance assessment using indicators according to the GRI standard is limited to companies that report data according to this standard.

Future researchers are advised to expand the sample coverage by involving companies from other industrial sectors, in order to get a picture of the conditions or characteristics of other industrial sectors. Future researchers can also add other variables such as company leverage or the quality of sustainability reports to provide deeper insight into how internal and external factors affect the implementation of sustainability practices in companies.

ACKNOWLEDGMENT

N/A

DECLARATION OF CONFLICTING INTERESTS

The authors declare no potential conflicts of interest.

REFERENCES

- Abas, H., Kawatu, F. S., & Kewo, C. L. (2020). Analysis of profit growth of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for 2013-2017 period. *International Journal of Applied Business and International Management*, 72-78. <http://doi.org/10.32535/ijabim.v0i0.878>
- Alkhairani, A., Kamaliah, K., & Rokhmawati, A. (2020). Analisis pengaruh Good Corporate Governance (GCG) dan Corporate Social Responsibility (CSR) terhadap nilai perusahaan dengan profitabilitas sebagai variabel intervening pada perusahaan pertambangan yang terdaftar di Bursa Efek Indonesia [Analysis of the influence of Good Corporate Governance (GCG) and Corporate Social Responsibility (CSR) on company value with profitability as an intervening variable in mining companies listed on the Indonesia Stock Exchange]. *Jurnal Ekonomi Kiat*, 31(2), 10-25. [https://doi.org/10.25299/kiat.2020.vol31\(2\).2783](https://doi.org/10.25299/kiat.2020.vol31(2).2783)
- Ananda, N. A. (2017). The effects of profitability and capital structure on the value of firm. *Jurnal Ekonomi dan Bisnis Indonesia*, 25, 25-31.
- Arifiyanto, E. N. (2016). The effect of financial performance on environmental disclosure of mining sector companies listed on IDX. *The Indonesian Accounting Review*, 6(2), 144-158. <https://doi.org/10.14414/tiar.v6i1.681>
- Biswas, P. K., Mansi, M., & Pandey, R. (2018). Board composition, sustainability committee and corporate social and environmental performance in Australia. *Pacific Accounting Review*, 30(4), 517-540. <https://doi.org/10.1108/PAR-12-2017-0107>

- Darma, P. E., Bailusy, M. N., & Buamonabot, I. (2022). Impact of the Covid-19 pandemic on profitability of companies incorporated in IDX30 (studies before and during the pandemic took place). *International Journal of Applied Business and International Management*, 7(2), 116–125. <https://doi.org/10.32535/ijabim.v7i2.1663>
- Dewi, A. P., Widyastuti, T., Maidani, M., & Nilasari, P. (2024). Pengaruh kinerja keuangan dan mekanisme good corporate governance terhadap pengungkapan sustainability report pada perusahaan sektor perbankan yang terdaftar di Bursa Efek Indonesia [The influence of financial performance and good corporate governance mechanisms on sustainability report disclosure in banking sector companies listed on the Indonesia Stock Exchange]. *SENTRI: Jurnal Riset Ilmiah*, 3(2), 782-797. <https://doi.org/10.55681/sentri.v3i2.2325>
- Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), 2835-2857. <https://doi.org/10.1287/mnsc.2014.1984>
- Elkington, J. (2013). Enter the triple bottom line. In *The Triple Bottom Line* (pp. 1-16). Routledge.
- Farisyi, S., Musadieg, M. A., Utami, H. N., & Damayanti, C. R. (2022). A systematic literature review: Determinants of sustainability reporting in developing countries. *Sustainability*, 14(16), 10222. <https://doi.org/10.3390/su141610222>
- Fatoni, H. (2020). *Pengaruh Good Corporate Governance Terhadap Nilai Perusahaan Dengan Profitabilitas Sebagai Variabel Mediasi (Studi Pada Perusahaan BUMN yang Terdaftar di Bursa Efek Indonesia Periode Tahun 2016-2018)* [The Influence of Good Corporate Governance on Company Value with Profitability as a Mediating Variable (Study on State-Owned Companies Listed on the Indonesia Stock Exchange for the Period 2016-2018)] [Undegraduate thesis, State Islamic University of Maulana Malik Ibrahim Malang]. Etheses UIN Malang. <http://etheses.uin-malang.ac.id/19235/>
- Financial Services Authority (OJK). (n.d.). *Peraturan OJK tentang Penerapan Keuangan Berkelanjutan bagi Lembaga Jasa Keuangan, Emiten, dan Perusahaan Publik* [OJK Regulation on the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies]. Otoritas Jasa Keuangan. <https://ojk.go.id/id/regulasi/Pages/Penerapan-Kuangan-Berkelanjutan-bagi-Lembaga-Jasa-Kuangan,-Emiten,-dan-Perusahaan-Publik.aspx>
- Fitri, A. A., & Yuliandari, W. S. (2018). Pengaruh kinerja keuangan terhadap pengungkapan sustainability report (studi empiris pada perusahaan yang terdaftar di Bursa Efek Indonesia tahun 2014-2016) [The influence of financial performance on sustainability report disclosure (empirical study on companies listed on the Indonesia Stock Exchange in 2014-2016)]. *eProceedings of Management*, 5(2).
- Gami, E. R. P. (2020). Pengaruh kinerja keuangan dan Good Corporate Governance terhadap peluang pengungkapan triple bottom line pada sektor pertambangan yang terdaftar di Bursa Efek Indonesia [The influence of financial performance and Good Corporate Governance on the opportunity for triple bottom line disclosure in the mining sector listed on the Indonesia Stock Exchange]. *Jurnal Riset Akuntansi dan Bisnis*, 20(1), 67-73. <https://doi.org/10.30596/jrab.v20i1.4952>
- Glover, K. J., & Hambusch, G. (2014). The trade-off theory revisited: On the effect of operating leverage. *International Journal of Managerial Finance*, 10(1), 2-22.
- Gunawan, V., & Sjarief, J. (2022). Analisis pengaruh profitabilitas, leverage, dan ukuran perusahaan terhadap pengungkapan sustainability report [Analysis of the influence of profitability, leverage, and company size on sustainability report disclosure]. *BALANCE: Jurnal Akuntansi, Auditing Dan Keuangan*, 19(1), 22-41. <https://doi.org/10.25170/balance.v19i1>

- Hidayati, S. N., Rahayu, P., & Pandin, M. Y. R. (2024). Tantangan dan peluang inovasi keuangan dalam mendukung transisi ke ekonomi hijau pada PT Adaro Energy Indonesia [Challenges and opportunities for financial innovation in supporting the transition to a green economy at PT Adaro Energy Indonesia]. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi dan Perbankan Syariah*, 9(3). <https://doi.org/10.30651/jms.v9i3.22853>
- Iriani, H. P., Ali, A., & Ruma, Z. (2019). Pengaruh struktur aktiva dan profitabilitas terhadap struktur modal pada perusahaan subsektor makanan dan minuman yang terdaftar di Bursa Efek Indonesia [The influence of asset structure and profitability on capital structure in food and beverage sub-sector companies listed on the Indonesia Stock Exchange]. *Jurnal Manajemen*, 2(1), 1-9. <https://doi.org/10.26858/jm.v2i1.31613>
- Jimantoro, C., Maria, K. A., & Rachmawati, D. (2023). Mekanisme tata kelola dan pengungkapan environmental, social, governance [Environmental, social, governance governance and disclosure mechanisms]. *Jurnal Riset Akuntansi dan Keuangan*, 19(1), 31-52. <https://doi.org/10.21460/jrak.2023.191.440>
- Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. *The Accounting Review*, 91(6), 1697-1724. <https://doi.org/10.2308/accr-51383>
- KN, T. K., Nasution, A., & . S. (2023). The influence of profitability, firm size, dividend policy, and intellectual capital on firm value with good corporate governance as a moderating variable in the food and beverage sub-sector of manufacturing companies listed on the Indonesia Stock Exchange period 2011-2020. *International Journal of Research and Review*, 10(3), 184-195. <https://doi.org/10.52403/ijrr.20230322>
- Kılıç, M., & Kuzey, C. (2016). The effect of board gender diversity on firm performance: Evidence from Turkey. *Gender in Management: An International Journal*, 31(7), 434-455. <https://doi.org/10.1108/GM-10-2015-0088>
- Lestari, K. A. N. S., Lestari, E. P., & Astuty, S. (2024). The influence of the principles of good corporate governance, corporate social responsibility, and financial literacy on the financial performance of village credit institutions in the Negara District of Jembrana. *International Journal of Applied Business and International Management*, 9(1), 62–74. <https://doi.org/10.32535/ijabim.v9i1.2915>
- Matiin, N., Ratnawati, T., & Riyadi, S. (2018). The influence of investment decisions, funding decisions, risk of strategy, to efficiency, finance performance, value of firm, good corporate governance as moderating variable in the mining company coal sub sector go public in Indonesia Stock Exchange. *Archives of Business Research*, 6(6), 374-382. <https://doi.org/10.14738/abr.66.4717>
- Meilan, R., Ekmarinda, E. Y., & Hakim, I. (2023). Profitability as a moderator in the implementation of environmental management accounting for corporate sustainability. *Wiga: Jurnal Penelitian Ilmu Ekonomi*, 13(2), 307-315. <https://doi.org/10.30741/wiga.v13i2.1113>
- Millenia, D. R. A., & Raharjo, T. P. (2024). Pengaruh profitabilitas, pendidikan direksi, dan corporate posture terhadap pengungkapan kinerja keberlanjutan perusahaan [The influence of profitability, board of directors' education, and corporate posture on corporate sustainability performance disclosure]. *Jurnal Ekonomi Trisakti*, 4(2), 579-586. <https://doi.org/10.25105/v4i2.20807>
- Mujiani, S., & Rohmawati, S. S. (2022). Good Corporate Governance's impact on sustainability reporting disclosure. *Jurnal Online Insan Akuntan*, 7(1), 103-114. <https://doi.org/10.51211/joia.v7i1.1762>
- Novitasari, D. (2022). Pengaruh Good Corporate Governance terhadap konservatisme akuntansi [The influence of Good Corporate Governance on accounting conservatism]. *Jurnal Syntax Admiration*, 3(10), 1264-1289.

- Pratiwi, A., Laila, K. Z., & Anondo, D. (2022). Pengaruh pengungkapan sustainability report terhadap kinerja keuangan perusahaan perbankan di Indonesia [The influence of sustainability report disclosure on the financial performance of banking companies in Indonesia]. *Jurnal Akuntansi Terapan Dan Bisnis*, 2(1), 60-71. <https://doi.org/10.25047/asersi.v2i1.3313>
- Putra, A. D., Ahmad, G. N., & Dalimunthe, S. (2022). Pengaruh profitabilitas, firm age, dan corporate governance terhadap Corporate Social Responsibility dengan ukuran perusahaan sebagai variabel moderasi [The influence of profitability, firm age, and corporate governance on Corporate Social Responsibility with company size as a moderating variable]. *Jurnal Bisnis, Manajemen, dan Keuangan*, 3(1), 270-283. <https://doi.org/10.21009/jbmk.0301.20>
- Putri, R. A. D., & Trisnarningsih, S. (2021). Pengaruh Good Corporate Governance terhadap nilai perusahaan dengan profitabilitas sebagai variabel intervening [The influence of Good Corporate Governance on company value with profitability as an intervening variable]. *Prosiding SENAPAN*, 1(1), 142-153. <https://doi.org/10.33005/senapan.v1i1.235>
- Senjaya, A., Sule, E. T., Effendi, N., & Cahyandito, M. F. (2020). Effect of corporate governance and risk management against corporate sustainability at the coal mining industry in Indonesia. *Academy of Strategic Management Journal*, 19(2), 1-12.
- Siregar, N. Y., & Napitu, K. T. P. (2021). Slack resources, komite audit, feminisme dewan terhadap kualitas pengungkapan tanggung jawab sosial perusahaan [Slack resources, audit committee, board feminism on corporate social responsibility disclosure quality]. *Jurnal Riset Terapan Akuntansi*, 5(1), 27-39. <https://doi.org/10.5281/zenodo.4735780>
- Sudiyatno, B., Puspitasari, E., Nurhayati, I., & Rijanti, T. (2021). The relationship between profitability and firm value: Evidence from manufacturing industry in Indonesia. *International Journal of Financial Research*, 12(3), 466. <https://doi.org/10.5430/ijfr.v12n3p466>
- Sugiyono, S. (2022). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D [Quantitative, Qualitative, and R&D Research Methods]*. CV Alfabeta.
- Sulistiyanti, U., & Nugraha, R. A. Z. (2019). Corporate ownership, karakteristik eksekutif, dan intensitas aset tetap terhadap penghindaran pajak [Corporate ownership, executive characteristics, and fixed asset intensity on tax avoidance]. *Profita: Komunikasi Ilmiah Dan Perpajakan*, 12(3), 361-377. <https://doi.org/10.22441/profita.2019.v12.03.001>
- Trisanto, T. A., & Fatwara, M. D. (2021). Pengaruh kinerja keberlanjutan terhadap profitabilitas perusahaan Badan Usaha Milik Negara (klaster industri jasa keuangan) [The influence of sustainability performance on the profitability of state-owned enterprises (financial services industry cluster)]. *Mediastima*, 27(2), 140-152.
- Waddock, S. A., & Graves, S. B. (1997). The corporate social performance–financial performance link. *Strategic Management Journal*, 18(4), 303-319. [https://doi.org/10.1002/\(SICI\)1097-0266\(199704\)18:4%3C303::AID-SMJ869%3E3.0.CO;2-G](https://doi.org/10.1002/(SICI)1097-0266(199704)18:4%3C303::AID-SMJ869%3E3.0.CO;2-G)
- Wahyuni, W., AP, I. N. N., & Hidayati, S. A. (2018). Pengaruh profitabilitas terhadap nilai perusahaan dengan pengungkapan Corporate Social Responsibility (CSR) sebagai variabel pemoderasi (studi empiris pada perusahaan pertambangan yang terdaftar di Jakarta Islamic Index Periode 2010–2017) [The effect of profitability on company value with Corporate Social Responsibility (CSR) disclosure as a moderating variable (empirical study on mining companies listed on the Jakarta Islamic Index for the period 2010–2017)]. *JMM UNRAM-Master of Management Journal*, 7(2), 72-85. <https://doi.org/10.29303/jmm.v7i2.319>

- Wijaya, I. P. I., & Wirawati, N. G. P. (2019). Good Corporate Governance sebagai pemoderasi pengaruh profitabilitas dan corporate social responsibility pada nilai perusahaan [Good Corporate Governance as a moderator of the influence of profitability and corporate social responsibility on company value]. *E-Jurnal Akuntansi*, 1436. <http://dx.doi.org/10.24843/EJA.2019.v26.i02.p22>
- Wijaya, R. (2019). Analisis perkembangan return on assets (ROA) dan return on equity (ROE) untuk mengukur kinerja keuangan [Analysis of the development of return on assets (ROA) and return on equity (ROE) to measure financial performance]. *Jurnal Ilmu Manajemen*, 9(1), 40-51. <https://doi.org/10.32502/jimn.v9i1.2115>

ABOUT THE AUTHOR(S)

1st Author

Astiana Masayu Asmara Gita is currently pursuing a degree in Accounting at the Faculty of Economics and Business at UPN "Veteran" Yogyakarta. You can reach her via email at astiana03@gmail.com.

2nd Author

Januar Eko Prasetyo is a faculty member in the Faculty of Economics and Business at UPN "Veteran" Yogyakarta. He holds a doctorate in Accounting and teaches courses in the same field. You can find his ORCID profile at <https://orcid.org/0000-0002-2161-4998> and reach him via email at januar_ep@upnyk.ac.id.