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# Carbon Emission Disclosure, Corporate Social Responsibility, Green Accounting : Firm Value Moderated by Profitability

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**ABSTRACT**

Firm value, as used in accounting, is the value derived from the market and represented by stock prices. Among the elements that influence firm value are carbon disclosure, CSR, and green accounting. By applying profitability as a control variable, this study examines how carbon disclosure, CSR, and green accounting impact firm value. A total of 186 energy and basic materials companies listed on the Indonesia Stock Exchange were the subjects of the study. The sample for this study includes 14 companies from the energy & basic materials sector that regularly publish sustainability reports and annual reports with regard to profitability between 2021 and 2023. The sample for this study consists of 14 companies from the energy and basic materials sector that regularly release sustainability reports and annual reports for the years 2021-2023 with regard to profitability. In this study, Eviews 12 software was used to conduct panel data regression analysis and modified regression analysis (MRA). The findings show that although carbon disclosure and green accounting have no impact on firm value, corporate social responsibility (CSR) significantly affects it. Furthermore, corporate profitability does not increase or decrease the impact of CSR, carbon disclosure, and green accounting on firm value.

**Keywords**: Carbon Emission Disclosure, Corporate Social Responsibility, Green Accounting, Firm Value, Profitability

## INTRODUCTION

Global warming is now a phenomenon that requires serious attention from the entire world community. This phenomenon arises as a result of human activities, such as the use of fossil fuels, burning waste, using motorized vehicles, and utilizing natural gas. If not addressed immediately, global warming can cause significant negative impacts on future generations. To address this problem, various countries have formulated the concept of sustainable economic development which is realized through international amendments, namely the Kyoto Protocol, an update concerning the United Nations Framework Convention on Climate Change (Abdullah et al., 2020).

The goal of the Kyoto Protocol is to keep greenhouse gas concentrations in the atmosphere from increasing & threatening the planet's climate. Three ways to reduce greenhouse gas emissions are provided by this Protocol: Clean Development Mechanism (CDM), Emissions Trading (ET), and Joint Implementation (JI) (United Nations Framework Convention on Climate Change, 1997). The goal of the three mechanisms is a form of effort to reduce greenhouse gas emissions in various developed countries by 5% between 2008 & 2012 compared to emission levels in 1990 (Hariadi & Nurwanda, 2024).

In addition to playing a role in addressing environmental issues, companies that are committed to running their businesses by considering environmental aspects are increasingly attractive to investors to invest in. For investors and stakeholders, companies that increase transparency regarding environmental issues and demonstrate social responsibility are usually considered to have higher value, because they show concern for the environment and business sustainability (Marini & Herawaty, 2024).

The ability of management to implement shareholder directives is reflected in the value of the company (Suteja et al., 2023). In general, stock prices reflect the value of the company. Many factors influence stock price fluctuations; in the case of PT Freeport Indonesia, company issues can cause stock prices to fall. In accordance with the agreement with the local government through the Decree of the Governor of Irian Jaya Province No. 540 (2002), PT Freeport currently dumps mining waste and tailings into several rivers in Papua Province, including the Agawagun, Otomona, Azikwa, and Minagelvi Rivers, according to the Ministry of Environment and Forestry (KLHK). The rivers listed below are now free. Mimika Regency Regional Regulation No. 4 of 2005 concerning the Designation & Use of the Agawagon, Otomona, Azikwa, and Minagelvi Rivers in Mimika Regency, and Mimika Regent Decree No. 540 of 2002 concerning the Granting of Permits to Use the Agawagon, Otomona, Azikwa, and Minagelvi Rivers for Mining Waste Disposal.

Despite having an official permit, PT Freeport's mining waste disposal into the river has been confirmed to worsen the environmental conditions and impact the lives of the surrounding community. Based on data from the NGO Wahana Lingkungan Hidup (Walhi) in 2006, PT Freeport Indonesia (PTFI) dumped tailings containing toxic and hazardous materials (B3) into the Ajkwa River, with total suspended solid (TSS) levels exceeding the standard limits set in Indonesian regulations. As a result, PT Freeport Indonesia's stock price fell from US$ 18.81 per share to US$ 16.08 per share. This decline was caused by the government's statement that PT Freeport's operations were not in accordance with the Environmental Monitoring and Management Plan (RKLRPL), where the company was deemed to have failed to control pollution in the air, sea, rivers, and forests caused by B3 waste (Center for State Financial Accountability Studies, Expertise Agency of the Indonesian House of Representatives). This case shows that a company's negligence in managing the environmental impact of its operations can trigger a decline in stock prices.

Basically, in achieving its goals, companies need to implement programs and strategies related to human and natural resources involved in operations. One of the company's steps in increasing value is through information disclosure. CSR is an important element that is closely related to long-term success and sustainable growth (Ferdous & Moyeen, 2022). CSR emphasizes that companies are not only responsible to shareholders, but also to other stakeholders (Sulbahri, 2021). This is in line with the contemporary accounting theory, Triple Bottom Line (3P), presented by Elkington. This idea emphasizes that companies must operate by considering profit, environmental responsibility, and community welfare (Apriliani et al., 2024).

In addition to CED and CSR, green accounting is also a factor that impacts company value. Green accounting is a form of accounting strategy that integrates environmental aspects into financial statements (Hariadi & Nurwanda, 2024). This approach reflects the environmental impact of a company's production activities (Gonzalez & Peña-Vinces, 2023). Investors tend to appreciate the implementation of green accounting because companies that implement it are considered capable of managing financial potential well, which can provide profit for investors (Hadiwibowo et al., 2023). Therefore, green accounting is very important for companies to increase their company value.

Profitability serves as a moderating variable in this study, meaning it can increase or decrease the impact of the independent variable on the dependent variable. Since profitability is a metric to measure how well a business is performing, profitability is chosen. A high level of profitability indicates that a business can effectively manage its resources to generate profits (Marini & Herawaty, 2024). In addition, investors usually consider businesses with high profitability to be more attractive (Kalbuana et al., 2022).

This study is a development of the previous study by Hariadi & Nurwanda (2024), with the difference in the use of profitability as a moderating variable. Although there are several studies on the effect of CED disclosure, corporate social responsibility & green accounting on firm value, previous results still show inconsistencies, so further research is needed to fill this knowledge gap.

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## LITERATUR STUDY

### Signaling Theory

Originally expressed by Spence in 1973 through his research entitled Job Market Signaling. This theory consists of two components: internal, which acts as a signal sender & external, which acts as a signal receiver, such as investors (Bahriansyah & Ginting, 2022). According to Spence, management provides signals with the aim of conveying useful information to investors, so that investors can make decisions based on their interpretation of the signal.

### Stakeholder Theory

Freeman first proposed this theory in 1994. According to stakeholder theory, companies must consider the interests of other stakeholders, including shareholders, creditors, suppliers, customers, government, society & analysts, in addition to their own financial gain. Companies must adapt to stakeholder and environmental demands because stakeholder support is critical to the sustainability of the company. Social media disclosure, for example, is considered a means to foster communication between companies and stakeholders.

### Legitimacy Theory

According to the legitimacy theory put forward by Dowling & Pfeffer in 1975, one of the most important elements in a company's ability to survive is its legitimacy. According to this theory, in order for a business to survive in the long term, stakeholders, investors, and the community must support it. The legitimacy theory emphasizes the rights of the community around the business in addition to the rights of stakeholders.

### Hypotheses Development

#### The Effect of Carbon Emission Disclosure on Firm Value

Firm value and emissions are explained by legitimacy theory and signaling theory. Providing information on how a company's operations affect the environment will provide legitimacy in this situation. When a company gains legitimacy, its corporate value increases and it usually enjoys a better reputation and image among its stakeholders. Signaling theory states that successful business operations are revealed by the dissemination of corporate information. Disclosure of carbon information has an impact on corporate value, which is consistent with previous studies by Trimuliani & Febrianto, (2023), Alfayerds & Setiawan (2021), and Hardianti & Mulyani (2023). The following theory can be developed based on previous theories and research findings.
H1: Carbon Emission Disclosure has an effect on Firm Value

#### The Effect of Corporate Social Responsibility on Firm Value

Stakeholder theory suggests that businesses care about more than just their own financial gain. Businesses should be useful to all stakeholders, including shareholders, creditors, customers, suppliers, government, society, & analysts (Rasyid et al., 2022). According to Hariadi & Nurwanda (2024), corporate value is influenced by CSR. This is in line with the belief that companies can only achieve long-term economic stability and prosperity if they fulfill their social obligations to society (Karina & Setiadi, 2020). Based on this perspective, the following research hypotheses are developed:
H2: Corporate Social Responsibility has an effect on Firm Value

#### The Effect of Green Accounting on Firm Value

Among the small actions that businesses can take to reduce their negative impact on the environment is to use green accounting. Companies that are able to disclose their environmental costs will be viewed favorably by the public and given credibility as environmentally conscious companies. Studies by Fini & Astuti (2024) and Lestari & Khomsiyah (2023) prove that green accounting increases company value by meeting stakeholder demands for environmental impact transparency. This allows the formulation of the following research hypothesis:
H3: Green Accountign has an effect on Firm Value

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**The Effect of Carbon Emission Disclosure on Firm Value with Profitability as a Moderating Variable**

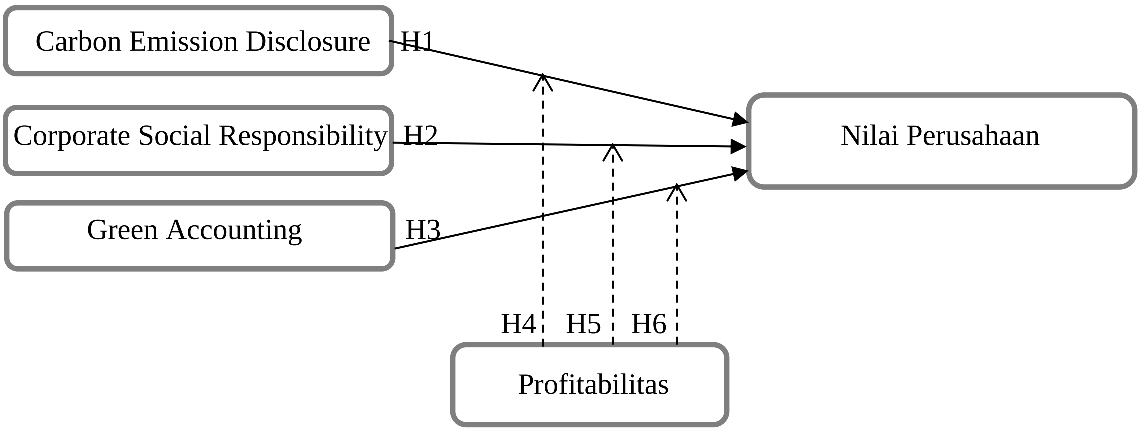
Profitability reflects an organization's capability in processing income from its assets and activities. Successful businesses can set aside funds for environmental projects such as reducing carbon emissions. By demonstrating continued dedication to sustainability, such actions can optimize the company's legitimacy or credibility in the eyes of all stakeholders. As a result, increased investor interest can increase the company's stock market value (Hardiyansah et al., 2021). This allows us to develop the following research hypothesis:
H4: Profitability moderated the effect of Carbon Emission Disclosure on Firm Value

**The Effect of Corporate Social Responsibility on Firm Value with Profitability as a Moderating Variable**

Stakeholder theory states that business is a framework consisting of various interest groups. Companies that have high profitability are generally seen as more credible when they engage in CSR initiatives. This is because profitability reflects how successful the company is in carrying out its main activities and therefore CSR activities are not just an image but also a sincerity. In the research of Narayana & Wirakusuma (2021), the more CSR activities are disclosed, the more the company's value increases, especially profitability. This study proves that the company's company value increases along with its profitability stage. The following research hypothesis can be developed based on previous research theories and findings.
H5: Profitability moderated the effect of Corporate Social Responsibility on Firm Value

**The Effect of Green Accounting on Firm Value with Profitability as a Moderating Variable**

Companies with high profitability gain a stronger long-term view and understand the importance of environmental sustainability for business continuity. Thus, profitable companies tend to invest in green accounting as a form of future investment. In this context, green accounting serves as a signal of the company's commitment to environmental sustainability. However, this signal is more credible if it comes from a company that has stable financial performance. A high level of profitability increases the credibility of the green accounting signal, so that investors and other stakeholders feel more confident that the company is serious about implementing sustainable practices. The results of research by Kelly & Henny (2023) support that profitability strengthens the positive impact of green accounting. Based on the theory & findings of previous research, here is the research hypothesis formula:
H6: Profitability moderated the effect of Green Accounting on Firm Value




*Picture 1 Conceptual Framework*
Source : Data Processed by Researchers (2024)

## METHOD

This study uses a quantitative approach with a descriptive design. The aim is to test the effect of independent variables, namely carbon emission disclosure, corporate social responsibility, and green accounting, on firm value as the dependent variable, with profitability as a moderating variable. The research objects include the energy and basic materials sectors listed on the Indonesia Stock Exchange during the 2021-2023 period. The data used are secondary data in the form of cross-sectional and time series from 2021 to 2023. Data collection was carried out through documentation techniques from trusted sources, such as the official IDX website (www.idx.id) and the official websites of each company.

**Population and Sample**

There are 186 businesses in the primary and energy sectors that are the research population. A total of 42 companies are the sample, which were selected intentionally to collect information that meets the agreed criteria. Energy & basic materials sector companies listed on the stock exchange at the observation stage, consistently publishing sustainability reports and annual reports, showing profitability, and reporting environmental costs for 2021-2023 are some of the benchmarks used to sort the sample.

**Operational Definition of Variables**

**Firm Value**

Market value is measured by the value of the company, which increases along with the company's stock price to increase shareholder wealth (Rasyid et al., 2022). Tobin's Q ratio is applied in this study to assess the value of the company. According to Aydoğmuş et al. (2022) is the ratio of the company's market value to its intrinsic value.

$$\text{Tobin's Q} = \frac{\text{MVE + Debt}}{\text{Total asset}}$$

**Carbon Emission Disclosure**

Carbon emission disclosure is a company's strategy to reduce the amount of carbon emissions produced (Putri & Agustin, 2023). In this study, carbon emission disclosure was measured using the Carbon Disclosure Project (CDP), which was adapted from the study of Bae Choi et al. (2013). Here's how to calculate carbon emissions:

$$\text{CED} = \frac{\sum \text{Score (Number of items reported)}}{\sum \text{Max Total Score (Amount to be reported according to CDP)}}$$

**Corporate Social Responsibility**

It is a series of integrated commitments that must be fulfilled by the company to meet the ethical, legal, economic, and philanthropic expectations of society (Oduro et al., 2024). In this study, CSR is measured through the use of the Global Reporting Initiative G4 index consisting of 91 indicators, with the following formula:

$$\text{CSRIj} = \frac{\sum \text{Xij}}{\text{Nij}}$$

**Green Accounting**

Green accounting is a method of financial reporting and national welfare that considers environmental costs and benefits (Sukmadilaga et al., 2023). In this study, the measurement of green accounting variables uses a dummy approach, where a value of 1 is given if the company has the element in the annual report and a value of 0 is given if it does not.

**Profitability**

According to Erlisa et al. (2024) profitability is a measure of the operational success of a business and its capacity to generate profits in the future. The following formula is used to determine profitability:

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$$ROE = \frac{\text{Earning After Interest and Tax}}{\text{Equity}}$$

**Data Analysis Technique**

In this study, panel data regression analysis & modal regression analysis were used. Techniques that integrate cross-sectional & time series data, measure the impact of independent & dependent variables, including moderator variables. Partial t-test, coefficient of determination (R-squared), and moderated regression analysis (MRA) using random effect modeling techniques were also included in the regression analysis. Before using the random effects model, model selection tests such as Chow, Hausman, and Lagrange multipliers were performed. Since the random effects model uses the generalized least squares (GLS) method, which is considered the best linear unbiased estimator (BLUE) (Gujarati, 2009), it does not rely on conventional hypothesis testing: In this study, panel data regression analysis and modal regression analysis were used. Techniques that integrate cross-sectional & time series data, measure the impact of independent and dependent variables, including moderator variables. Partial t-test, coefficient of determination (R-squared), and moderated regression analysis (MRA) using random effects modeling techniques were also included in the regression analysis. Before using the random effects model, model selection tests such as the Chow, Hausman, and Lagrange multiplier tests were performed. Since the random effects model uses the generalized least squares (GLS) method, which is considered the best linear unbiased estimator (BLUE) (Gujarati, 2009), it does not rely on conventional hypothesis testing:

$$Y = \alpha + \beta 1X1it + \beta 2X2it + \beta 3X3it + \beta 4X1\ X2\ X3it + e$$

The moderated regression analysis equation is as follows:

$$Y = \alpha + \beta 1X1it + \beta 2X2it + \beta 3X3it + \beta 4X1Zit + \beta 5X2Zit + \beta 6X3Zi + e$$

## RESULT

**Descriptive Statistic**

Table 1 Descriptive Statistic

| | Firm Value | Carbon Emission Disclosure | Corporate Social Responsibility | Green Accounting | Profitability |
|---|---|---|---|---|---|
| Mean | 1,148333 | 0,467542 | 0,445317 | 0,809524 | 0,137463 |
| Median | 1,150000 | 0,463982 | 0,472514 | 1,000000 | 0,093583 |
| Maximum | 1,920000 | 0,722222 | 0,725275 | 1,000000 | 0,614960 |
| Minimum | 0,650000 | 0,166667 | 0,076923 | 0,000000 | 0,005465 |
| Std. Dev. | 0,314495 | 0,157562 | 0,153737 | 0,397437 | 0,131084 |
| Skewness | 0,455703 | -0,195078 | -0,613775 | -1,576482 | 1,709354 |
| Kurtosis | 2,543016 | 3,447009 | 3,447009 | 3,485294 | 5,935739 |

*Source : Data Processed by Researchers with e-views 12 software (2024)*

Based on Table 1, descriptive statistics are used to gain an understanding of the distribution and characteristics of data related to carbon emission disclosure, corporate social responsibility, green accounting, and firm value and profitability in the energy and basic materials sector for 2021-2023.

**Model Selection Tests**

**Chow Test**

Applied to decide whether Fixed Effect Model/Common Effect Model is more relevant to estimate panel data. In Chow test there are 2 hypotheses: H0 assumes Common Effect and H1 assumes Fixed Effect.

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Table 2 Chow Test

| Effects Test | Statistic | d.f. | Prob. |
|---|---|---|---|
| Cross-section F | 6,918040 | (13,25) | 0,0000 |
| Cross-section Chi-square | 64,070445 | 13 | 0,0000 |

*Source : Data Processed by Researchers with e-views 12 software (2024)*

The probability value of F-statistic is 0.0000, which is smaller than 0.05. Therefore, H1 is accepted, which proves that the Fixed Effect Model is superior to the Common Effect Model.

### Hausman Test

The Hausman test is applied to decide whether the Fixed Effect Model or Random Effect Model is more appropriate to predict panel data. In the Hausman test there are 2 hypotheses: H0 assumes a Random Effect Model, while H1 assumes a Fixed Effect Model.

Table 3 Hausman Test

| Test Summary | Chi-Sq. Statictic | Chi-Sq. d.f. | Prob |
|---|---|---|---|
| Cross-section random | 4,259647 | 3 | 0,2348 |

*Source : Data Processed by Researchers with e-views 12 software (2024)*

The random cross-section probability value is 0.2348, greater than 0.05. Therefore, H0 is accepted, which indicates that the Random Effect Model is better than the Fixed Effect Model.

### Lagrange Multiplier Test

This test is to decide whether the Random Effect Model or the Common Effect Model is more appropriate in estimating panel data. In the Lagrange Multiplier test, there are 2 hypotheses: H0 assumes the Common Effect Model, while H1 assumes the Random Effect Model. In this study, the Breusch-Pagan method is used.

Table 4 Lagrange Multiplier Test

| | Cross-section | Test Hypothesis is Time | Both |
|---|---|---|---|
| Breusch-Pagan | 14,65212 (0,0001) | 1,167473 (0,2799) | 15,81959 (0,0001) |
| Honda | 3,827809 (0,0001) | -1,080497 (0,8600) | 1,942643 (0,0260) |

*Source : Data Processed by Researchers with e-views 12 software (2024)*

Based on Table 4, the Breusch-Pagan probability value is 0.0001, which is smaller than 0.05. Therefore, H1 is accepted, proving that the Random Effect Model is better than the Common Effect Model.

### Hypotheses Testing
### Partial Significance Test (t-Test)

This test is applied to test the individual impact of each independent variable on the dependent variable.

Table 5 Partial Significance Test (t-Test)

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 1,140145 | 0,212645 | 5,361718 | 0,0000 |
| X1 | 0,601293 | 0,420024 | 1,431568 | 0,1604 |
| X2 | -0,834180 | 0,377833 | -2,207799 | 0,0334 |
| X3 | 0,121718 | 0,163073 | 0,746403 | 0,4600 |

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*Source : Data Processed by Researchers with e-views 12 software (2024)*

Based on Table 5, the results of the partial significance test (t-test) show::

1. Carbon Emission Disclosure has a t-Statistic value of 1.431568 with a significance value (Prob.) of 0.1604, which is greater than 0.05, indicating no significant effect on firm value.
2. Corporate Social Responsibility has a t-Statistic value of -2.207799 with a significance value (Prob.) of 0.0334, which is less than 0.05, proving a significant effect on firm value.
3. Green Accounting has a t-Statistic value of 0.746403 with a significance value (Prob.) of 0.4600, which is greater than 0.05, indicating no effect on firm value.

**Coefficient of Determination ($R^2$)**

The determination coefficient test is applied to explain if the independent variable can describe the dependent variable. This test applies R-Squared, which is a coefficient that describes the relationship between independent and dependent variables in the regression model (Basuki & Prawoto, 2016).

Table 7 Coefficient of Determination ($R^2$)

| | | | |
|---|---|---|---|
| R-squared | 0,111837 | Mean dependent var | 0,399202 |
| Adjusted R-squared | 0,041719 | S.D. dependent var | 0,189099 |

*Source : Data Processed by Researchers with e-views 12 software (2024)*

The Adjusted R-Square value obtained is 0.041719, which shows that Carbon Emission Disclosure, Corporate Social Responsibility, and Green Accounting can explain the firm value by 4.1719%, while the remaining 95.8281% is explained by other variables.

**Moderated Regression Analysis**

Moderation variables are included in the relationship modeling process in moderated regression analysis. The ability of the moderation variables to strengthen/weaken the relationship between independent and dependent variables is assessed using this analysis.

Table 8 Moderated Regression Analysis

| Variabel | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 1,081654 | 0,280139 | 3,861140 | 0,0005 |
| X1 | 0,639176 | 0,616807 | 1,036265 | 0,3074 |
| X2 | -0,871941 | 0,744450 | -1,171256 | 0,2496 |
| X3 | 0,052856 | 0,318024 | 0,166202 | 0,8690 |
| Z | 1,107618 | 2,780907 | 0,398294 | 0,6929 |
| X1Z | -1,094631 | 3,093917 | -0,353801 | 0,7257 |
| X2Z | 0,537758 | 3,565263 | 0,150833 | 0,8810 |
| X3Z | 0,023033 | 3,303436 | 0,006972 | 0,9945 |

*Source : Data Processed by Researchers with e-views 12 software (2024)*

Based on Table 8, the results of the Moderated Regression Analysis show:

1. The interaction variable between Carbon Emission Disclosure and Profitability has a t-Statistic value of -0.353801 with a relevance value (Prob.) of 0.7257, indicating that profitability does not act as a moderator in the influence of carbon emission disclosure on the value owned.
2. The interaction variable between Corporate Social Responsibility and Profitability has a t-Statistic value of 0.150833 with a relevance value (Prob.) of 0.8810, indicating that profitability does not function as a moderator with the impact of corporate social responsibility on the value owned.

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3. The interaction variable between Green Accounting and Profitability has a t-Statistic value of 0.006972 with a relevance value (Prob.) of 0.9945, indicating that profitability cannot update the influence of green accounting on the value owned.

## DISCUSSION

### The Effect of Carbon Emission Disclosure on Firm Value

The first hypothesis test indicates that carbon emission disclosure does not have a significant impact on firm value. Although the information is conveyed as a positive signal reflecting the company's success in running its operations, the results of this partial test show that the carbon emission disclosure variable is not strong enough to influence firm value, especially in the energy and basic materials sector. This is likely due to a lack of investor attention to environmental aspects or the presence of other factors that are more dominant in determining firm value in this sector. This finding is consistent with research from Hariadi & Nurwanda (2024), Gunawan & Berliyanda (2024), Dianti & Puspitasari (2024), Sakina et al. (2024), Fini & Astuti (2024), and Marini & Herawaty (2024), which show that carbon emission disclosure has no impact on firm value.

### The Effect of Corporate Social Responsibility on Firm Value

The second hypothesis test proves that corporate social responsibility has good and big implications for the firm value. Companies that not only focus on profit but also care about the welfare of society and the social environment tend to be viewed positively by various parties. This is due to the company's commitment to contribute to society and the surrounding environment, so that it does not only prioritize its own interests. Thus, CSR can increase the firm value in the eyes of investors and the public. This finding is consistent with the research of Hariadi & Nurwanda (2024), Sulbahri (2021), and Karina & Setiadi (2020).

### The Effect of Green Accounting on Firm Value

The third hypothesis test proves that the implementation of green accounting does not have a significant impact on firm value. Although the company has reported environmental costs and gained legitimacy as an environmentally conscious entity in the eyes of the public, the results of the partial test indicate that the green accounting variable is not strong enough to influence firm value, especially in the energy and basic materials sector. It is possible that other more dominant factors still play a role in determining firm value in this sector, so that reporting environmental costs has not become a top priority for investors. This finding is in line with research by Hariadi & Nurwanda (2024), Hadiwibowo et al. (2023),) Gunawan & Berliyanda (2024), Sapulette & Limba (2021), and Sakina et al. (2024).

### Profitability Moderates The Effect of Carbon Emission Disclosure on Firm Value

This study proves that profitability cannot moderate the impact of carbon emission disclosure on firm value. This does not support stakeholder theory, signaling theory, or legitimacy theory, which states that carbon emission disclosure accompanied by profitability should be able to affect firm value, especially in the energy and basic materials sector. This finding suggests that investors tend to consider other factors in their investment decisions, which may be more relevant or have a significant impact on the valuation of companies in this sector.

### Profitability Moderates The Effect of Corporate Social Responsibility on Firm Value

This study proves that the influence of CSR on company value is not reduced by profitability. This finding contradicts the legitimacy theory, signaling, and stakeholder theory, which state that CSR should affect company value in addition to profitability, especially in the basic materials & energy sector. According to this study, investors are more likely to consider other more relevant factors when making investment decisions, which are capable of giving a significant effect on company valuation.

### Profitability Moderates The Effect of Green Accounting on Firm Value

This study proves that profitability cannot moderate the impact of green accounting on firm value. This finding is contrary to stakeholder theory, signaling theory, and legitimacy theory, which state that green accounting disclosure accompanied by profitability should be able to affect firm value, especially in the energy and basic materials sector. The results of this study indicate that investors tend to consider other factors in their investment decisions, which may be more relevant or have a greater impact on the valuation of companies in this sector.

## CONCLUSION

This study concludes that CSR has a significant impact on firm value, while carbon emission disclosure and green accounting do not have a significant effect. Profitability also does not moderate the relationship between carbon emission disclosure, CSR, and green accounting on firm value. This study is limited to the primary and energy sectors, and faces constraints of limited data, because sustainability reporting in Indonesia is optional. Further research is expected to expand the scope of data and variables so that the findings are more generally applicable.

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