Journal of Governance Risk Management Compliance and Sustainability, Vol. 4 No. 1 (2024) https://doi.org/10.31098/jgrcs.v4i1.2166

Research Paper

Moderating Role of Profitability in The Association Between Green Accounting and Firm Value

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Received : February 10, 2024	Revised : March 20, 2024	Accepted : April 19, 2024	Online : April 30, 2024

Abstract

Environmental pollution often occurs in various parts of the world, including Indonesia. Indonesia, with abundant natural resources, raises new environmental issues. Companies in the mining and coal sector cause significant environmental damage in Indonesia. Not infrequently, these companies are less aware of the importance of preserving the environment. Most companies only think about profit without paying attention to environmental sustainability. This study aims to analyze and determine the effect of green accounting implementation on firm value and profitability on moderating the interaction between green accounting and firm value. This study uses data from 14 companies engaged in mining and coal for 2020-2022 on the Indonesia Stock Exchange (IDX) website and the Proper Value Index issued by the Decree of the Ministry of Environment with a sample of 42 sample data. The test was conducted using panel data multiple linear regression analysis. This study concludes that green accounting affect firm value. Profitability has not been able to model the interaction between green accounting and firm value. This study is expected to add to the literature on financial accounting, sustainability accounting, and green accounting, especially regarding firm value and investor reaction. This research is also expected to provide attention to companies in Indonesia to improve their green sustainability. There is a need to increase the role of the government in overseeing the implementation of green accounting in companies to ensure the sustainability of the Indonesian environment.

Keywords : *Firm Value, Green Accounting, Mining Company, Proper Value Index, Profitability*

INTRODUCTION

A business must have a definite purpose for future use when it is established. In general, setting up a business aims to pursue three objectives: first, maximizing profits; second, providing prosperity for owners or shareholders; and third, maximizing firm value as reflected by the stock price (Mirnawati & Dewi, 2023). An important factor in attracting capital to develop a business is firm value. The stock market value of a company that reflects its current situation or prospects is called firm value. The company's high market value will impact investor confidence in the company now and in the future. Investors evaluate company performance on the basis of how well the company manages its resources to increase profitability. Factors that affect firm value include the application of green accounting, firm size, leverage, and profitability.

This study examines the factors that affect the value of companies in Indonesia, one of which is the application of green accounting. The application of Green Accounting in Indonesia is needed because of rampant companies exploiting natural resources in Indonesia. Geographically, Indonesia is rich in natural resources, including forests. However, challenges occur, namely deforestation. Deforestation is the reduction of forest areas due to land use agreements for infrastructure, communities, agriculture, mining, and plantations (Wahyuni & Suranto, 2021). In a study conducted by Giljum et al. (2022), with a large area of deforested area, Indonesia is the country that contributes the most, recording 58.2% of forest damage due to mining in all 26 countries investigated. Coal mining activities impact the environment through changes in land structure, decreased soil fertility, potential threats to biodiversity, decreased water and air quality, and environmental pollution due to waste generated by mining activities (Raden, 2010; Purwanto,

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2015).

The demand to integrate sustainable business practices is increasing in a modern era that is increasingly aware of environmental issues. Climate change, the sustainability of natural resources, and environmental concerns have encouraged organizations to consider the environmental impact of their operational activities. Companies are encouraged to make various efforts to conserve the environment. Furthermore, these efforts will be evaluated on the basis of the extent to which controls have been carried out and the extent to which control results have been achieved (Daromes, 2020). The Ministry of Environment and Forestry provides PROPER (Company Performance Rating Assessment Program) assessments. Environmental management performance was evaluated through assessment, and a color scale was used as a measurement instrument. One of the PROPER assessment categories is assessing the Company's compliance in reporting environmental management.

Green Accounting emerged as a solution to conflicts among business actors whose operations affect the environment (Yayu et al., 2023). Green accounting is used as a means of management communication to produce internal company decisions, focusing on quantifying environmental costs in business accounting procedures, government organizations, and communities affected by environmental activities (Yuliani & Prijanto, 2022). Environmental costs refer to costs that arise due to poor environmental quality or conditions that may occur (Mowen & Hansen, 2017). Based on this description, it can be said that environmental costs are a form of corporate responsibility for the negative environmental impact caused by its operational activities. This is in line with legitimacy theory, where sustainable companies need to ensure that their operational activities are under the norms accepted by society and acceptable to external parties (Sulistiawati & Dirgantari, 2016). The environment is one of the aspects that can affect firm value (Konar & Cohen, 2001). Generally, the value of a company is depicted through its stock price (Fitriana & Purwohandoko, 2022; Susila & Prena, 2019).

The number of impacts concerns the public regarding the environmental responsibility that companies in the mining sector have pursued. Several coal mining sub-sector companies still receive a red rating in the decision letter on the environmental management performance rating assessment findings. For example, PT Ifishdeco Tbk consecutively received a red rating from 2020 to 2022. Proper rating issued by the Ministry of Environment will affect public trust in the company. This is expressed similarly by Ekawati (2023) when a high proper value increases public trust. Good public trust will increase the profitability of the company. However, by looking at the financial statements of PT Ifishdeco from 2020 to 2022, it turns out that its profits continue to increase every year. This shows that coal mining companies still do not pay attention to environmental impacts. Another example, Gunung Raja Paksi Tb, shows that the company's value using Tobin's Q calculation approach from 2020 to 2022 tends to decrease, but the position of the Company's Proper Index at number 3 and profitability each year have increased significantly. This reflects the fact that the information disclosed by the company to the public, especially those related to the company's financial information, will affect investor responses (Firmansyah et al., 2020).

Previous research tests green accounting's effect on firm value, including through green accounting measurements in the manufacturing sector (Salsabila & Widiatmoko, 2022), in the food and beverage sector (Kelly & Henny, 2023), testing in the consumer non-cyclicals industry (Ekawati, 2023), with the proxy of Corporate Social responsibility (Maflikha & Kodir, 2022), with the proxy variable of Profitability calculation of Net Profit Margin (Yuliani & Prijanto, 2022), with the proxy variable of profitability calculation of ROE (Mardiana & Wuryani, 2019), with the proxy of foreign ownership (Soleha & Isnalita, 2022), the variable of Corporate Social responsibility (Sholichah & Puspawati, 2023; Hidayat & Aris, 2023; Melawati & Rahmawati, 2022; Erlangga et al., 2021), financial performance variables (Maesaroh et al., 2022), green accounting variables using dummies (Hidayat & Aris, 2023), Environmental Performance variables (Domineka, 2023; Gustinya, 2022), Environmental Cost variables (Domineka, 2023; Gustinya, 2022; Lestari & Khomsiyah, 2023; Nugroho, 2023), Sustainable Growth (Nizar & Mulyani, 2023), Environmental Disclosure variables (Gustinya, 2022), Sustainability Report Disclosure (Lestari & Khomsiyah, 2023), green intellectual (Lestari, 2023), company size (Nizar & Mulyani, 2023), Environmental Disclosure variables (Gustinya, 2022), Sustainability Report Disclosure (Lestari & Khomsiyah, 2023), green intellectual (Nizar & Mulyani, 2023; Lestari, 2023), company size (Hakim & Aris, 2023; Kristopeni, 2022; Soleha & Isnalita, 2022), Leverage (Hakim & Aris, 2023; Mabruroh & Anwar, 2022; Soleha & Isnalita, 2022), Material Flow Cost Accounting (Agatha & Widoretno, 2023), dividend policy (Hakim & Aris, 2023) and environmental performance dummy variables (Dianty, 2022).

The main goal of any business is to maximize its net worth, which will increase investor confidence and possibly provide substantial profits (Hakim & Aris, 2023). The most important business objective is to achieve the target price of the company determined by its shares. The company must take several steps to increase its market value to fulfill its main goal of making shareholders prosperous (Agatha & Widoretno, 2023). Firm value is obtained from public trust in the company, built over several years since its establishment. The company's value can be assessed according to the stock price development of the listed company.

Green Accounting is important in the relationship between companies, accounting, and the environment. Based on Nurafika and Sari (2019), knowledge of environmental protection in Indonesia is still underdeveloped, with most of the environmental information in the company's annual report still vague and uninformative. The application of green accounting is important for companies because environmental impacts must be managed properly (Nizar & Mulyani, 2023). Companies can benefit from increased customer attention by adopting green accounting practices (Hakim & Aris, 2023). Every year, companies that meet the requirements for implementing green industry principles are selected by the Ministry of Environment in Indonesia. In addition, the Ministry of Environment also presents the PROPER program, which evaluates how well companies implement green industry principles. The PROPER program evaluates how well businesses use environmental management practices. Methods to manage the environment. Implementing green accounting practices in a company will impact its reputation. The company's reputation will increase because it has social legitimacy and is seen as environmentally friendly by the community and government (Mirnawati & Dewi, 2023). From an economic perspective, it is expected that by documenting and disclosing the company's environmental costs, investors will consider this information when making investment decisions, complementing the information they obtain about company profits. According to Sudimas et al. (2023), Investors will respond favorably to companies that have good performance in terms of the environment, which will increase firm value by increasing its share price.

Research by Kumala et al. (2024) and Sapulette and Limba (2021) concluded that green accounting does not affect firm value. However, Yuliani and Prijanto (2022) and Erlangga et al. (2021) found that green accounting significantly affects firm value. The inconsistency in the results of previous research has resulted in green accounting research on firm value needing to be conducted again.

This study empirically examines the effect of green accounting on firm value with profitability as a moderating variable. By considering the above definition, the authors are interested in researching the application of environmentally friendly accounting in coal mining sector companies and its positive and negative effects. This study aims to determine whether green accounting impacts firm value and whether profitability can affect (by strengthening or weakening) the interaction between green accounting and firm value. It is hoped that this research will add to the literature on financial accounting, sustainability accounting, and green accounting, especially those related to firm value and investor reactions. In addition, it is hoped that this research can provide a reference for companies involved and engaged in the mining sector to improve the implementation of green accounting that is applied and used as a reference by the government to improve the Proper Index assessment policy in the implementation of corporate environmental performance.

LITERATURE REVIEW

Signaling Theory

Signaling theory states that entities convey credible and positive information to indicate business success (Bouten & Hoozée, 2013; Luo & Tang, 2014; Rahman et al., 2014). This theory assumes that managers have more knowledge than other external parties to forecast future performance, even under efficient market conditions. In addition, the theory implies that managers can improve company performance through voluntary information disclosure initiatives that are considered relevant to strengthening the company's image (Healy & Palepu, 2001). Accurate and responsible information will provide a positive image for the company. The company's image is a consideration for investors in investing (Martina & Trisnawati, 2023).

Legitimacy Theory

In addition, legitimacy theory is one of the most relevant theories in corporate information disclosure (Mahadeo et al., 2011). This theory is the basis for motivating entities to voluntarily provide social and environmental responsibility reports (Ahmad & Hossain, 2015; Luo et al., 2013). Legitimacy theory also implies that for companies to ensure their continued existence, they need to disclose their social activities to gain more acceptance from society (Daromes & Gunawan, 2020). Therefore, the coal mining sector, which has an impact on environmental damage, needs to implement green accounting as a disclosure of information on the company's efforts to maintain company legitimacy.

Green Accounting

Accounting science plays an important role in the publication of environmental information, especially in the transparency of environmental costs borne by businesses (Sapulette & Limba, 2021). Environmental accounting refers to how businesses or government organizations incorporate environmental costs into their accounting procedures (Indrayani et al., 2021).

According to several expert definitions, green accounting's main objective is to present financial, social, and environmental accounting data in an integrated manner in one accounting report so that interested parties can use it to evaluate and make decisions regarding investment, economics, management, and other fields. Indirectly, the company has social ties with the surrounding community because it is related to the environment (Hidayat & Aris, 2023). Therefore, a concept called "green accounting" discusses what might be bad for the environment and how to handle it. How can we manage and document this in financial statements (Yuliana & Sulistyawati, 2021)?

Green Accounting and Firm Value

The company's environmental performance is evaluated on the basis of its success in the PROPER program (Kumala & Priantilianingtiasari, 2024). The Decree of the Ministry of Environment states that a company is assessed based on its environmental performance and given a Proper Index Value for green accounting implementation. This study moderates profitability with the Proper index value. The decree has several levels of Proper index values, including Gold, Green, Blue, Red, and Black ratings. According to research by Sapulette and Limba (2021), the higher the Proper rating received by the company, the higher the company's value. Firm value can be explained as how investors assess and respond to the company's performance, which is reflected in the value of its shares (Daromes & Jao, 2020). The company's main goal is to maximize its value through increased profits. Maximizing firm value is an effort to improve investor welfare, which is the corporation's main goal (Soliha & Taswan, 2002). Firm value is determined by the firm's asset earning power (Modigliani & Miller, 1958). Factors affecting firm value include assets, technology, corporate structure, labor, and environmental variables (Konar & Cohen, 2001). Therefore, to influence the value of a company, it is necessary to pay attention to environmental factors in its operational activities.

H1: Green Accounting positively affects Firm Value

Profitability as a Mediator of Green Accounting on Firm Value

The company's attention to environmental factors results in the burden of allocating financial funds to implement green accounting practices. This will affect the profitability of a company. Profitability is the ability of a company to generate profits using its working capital to ensure that the business can pay off its short- and long-term debts and continue to pay dividends to its investors (Iman et al., 2021). According to Natalie and Lisiantara (2022), Companies with high profitability indicate that over a long period, the company is very efficient in generating profits using its assets. This can increase the tendency of investors to invest in the company, which in turn leads to an increase in stock prices and an increase in the company's overall value. The greater the company's profit, the greater the dividend payments to shareholders. Based on some of these studies, it can be concluded that profitability is a problem-solving process that generates profits during operations and utilizes assets efficiently in the future. ROA, or Return On Assets, can be used as an indicator of profitability ratio because ROA is one type of profitability ratio that can assess the company's potential to generate profits (Nainggolan et al., 2022).

The use of Green Accounting is shown through the results of the Proper rating issued by the government. Ekawati (2023) concluded that the higher the proper value, the lower the chances of environmental issues arising. When the Proper value is high, it will increase public trust. With massive public interest, it will increase the profitability of a company and ultimately attract investors. Companies with large profits will have a lot of money available, and it will be easier to provide environmental information (Pratiwi & Rahayu, 2018). This is consistent with the research of Nugroho (2023), who found that profitability can moderate the interaction of green accounting with firm value. However, contrary to the statement (Ekawati, 2023).

H2: Profitability strengthens the positive effect of green accounting on firm value.

RESEARCH METHOD

Research design

This study uses a quantitative methodology to assess the elements that affect the value of companies engaged in the mining and coal sector. The data used in this study are from mining and coal sector companies listed on the IDX between 2020 and 2022. Quantitative research is a strategy to test theories by studying the relationship between certain variables (Teguh et al., 2023). This method evaluates and tests research hypotheses using statistical analysis. This study aims to determine how environmental performance or the application of green accounting as an independent variable affects firm values, a dependent variable with profitability as a moderating variable for the tested hypothesis.

The objects in this study are companies engaged in mining and coal listed on the IDX from 2020 to 2022. The other variables applied in this study are leverage and firm size as control variables.

Population and Sample

According to Suriani et al. (2023), a population is a group of people or subjects in a certain location and time with certain characteristics to be observed and studied. In quantitative research, the population consists of objects and subjects with certain qualities and forms recorded by researchers to be analyzed and tested and conclusions drawn.

The research will use a sample of 14 mining and coal sector companies listed on the IDX from 2020 to 2022. The characteristics of the sample are as follows:

1. Companies operating in the mining and coal sector listed on the IDX for the period 2020-2022;
2. Companies operating in the mining and coal sector that have published consecutive financial statements for the period 2020 to 2022;
3. Companies operating in the mining and coal sector with a complete Proper Index in the Ministry of Environment Decree.

Table 1. Research Sample

Criteria	Total
Data on mining and coal industry companies listed on IDX	66
Companies that do not have a complete Proper Index Value in 2020-2022	(52)
Number of Years of Sample Data	3
Total Samples	42

Source: Data processed

Data Collection Technique

The data for this study were collected from the Financial Statements of Mining and Coal Sector Companies published on the IDX between 2020 and 2022. Secondary data in the form of financial reports of mining and coal sector companies obtained on the page www.idx.co.id and Environmental Performance Reports in the form of Proper Index Values published by the Ministry of Environment listed in the Decree of the Minister of Environment and Forestry of Indonesia.

According to Sugiyono (2016), secondary data are data that researchers can search for and collect. With limited data in the form of company financial reports published on the IDX website, researchers also obtain data from the pages of each company.

Variable Determination

This study uses five variables to determine the effect of green accounting adoption on firm value. These variables are divided into dependent, independent, control, and moderating variables. Green accounting (PROP) as an independent variable, firm size (LNAS) as a control variable, leverage (DER) serves as a control variable, profitability (ROA) serves as a moderating variable, and firm value (TOBS) as a fixed variable or dependent variable.

In previous studies, green accounting was mostly associated with environmental costs incurred by companies and environmental performance implemented by companies. In this case, previous studies used dummy values. The application of green accounting was conducted in this study using the Proper Index Value proxy issued by the Ministry of Environment. This PROPER program implements green accounting by paying attention to environmental performance. (Nugroho, 2023). Previous research also uses profitability as a moderating variable in the relationship between green accounting implementation and firm value. In this study, profitability is used to measure companies' earnings and is reflected by the return on assets (ROA). ROA can be interpreted as a tool to measure how well a company uses its assets to generate profits or to measure the overall results of funders, including creditors and investors (Kumala & Priantilianingtiasari, 2024).

This study uses leverage and company size as control variables. The leverage ratio shows how much of the company's funding comes from debt. The use of debt can affect firm value. The higher the debt financing can increase (Tarigan et al., 2022). It is important to remember that although debt can increase firm value, there is a limit to how much debt can decrease firm value.

The company's size is a general description related to the overall assets owned by the company (Tarigan et al., 2022). Size can be interpreted as how large or small an object will be assessed. From the company's point of view, this describes the size of the company's business. The level of investor confidence is also significantly influenced by company size. Investors are attracted to large companies with large overall assets because they want to put their money there (Hakim & Aris, 2023). Firm size can impact firm value because larger firms tend to have higher overall assets and more easily obtain capital. Large companies are often trustworthy, thus attracting investors and increasing the business' overall value (Kristopeni, 2022). Previous research (Mirnawati & Dewi, 2023; Hakim & Aris, 2023) stated that company size positively affects firm value.

This study uses profitability as a moderating variable. The capacity of a business to generate profits that depend on capital, assets, and sales volume is known as profitability. Profitability increases as it reflects the company's better potential in the future and will be able to influence investor perceptions (Tarigan et al., 2022). In addition to environmental performance, a high level of profitability will be essential in attracting investors who want to invest. Companies with large profits will have a lot of money available, and it will be easier to provide environmental information (Pratiwi & Rahayu, 2018). Previous research (Maria & Elisabeth, 2022; Pratiwi & Rahayu, 2018) revealed that green accounting affect firm value with profitability as a moderating variable.

Table 2. Variable, Definition, and Measurement used

No	Variable	Definition	Measurement used
1	Green Accounting	Green accounting is measured using the PROPER Index Value (Maria & Elisabeth, 2022). The government assesses the company's environmental management performance using certain indices and visuals with color codes (Salsabila & Widiatmoko, 2022).	Using the PROPER Index Value issued by the Decree of the Ministry of Environment PROPER Index Value: Gold with an index value of 5 Green with index value: 4 Blue with index value : 3 Red with index value: 2 Black with index value: 1
2	Size firm	Scale is used to determine the size of a company. Company size (LNAS) follows (Tarigan et al., 2022)	*Size firm (LNAS)* = Ln(Total Asset)
3	Leverage	A measure that describes the capital structure owned by the Company and can determine the risk of debt that is not paid (Listyawati & Kristiana, 2021).	DER $DER = \frac{Total\ debt}{Total\ Equity}$
4	Profitability	This ratio is used to evaluate management's ability to calculate company profits (Salsabila & Widiatmoko, 2022)	ROA $ROA = \frac{Net\ Profit}{Total\ Asset}$

No	Variable	Definition	Measurement used
5	Firm Value	Firm value functions as a dependent variable. Firmansyah & Purnama (2020) uses Tobin's Q ratio as a proxy for firm value.	Tobin's Q $Tobins\ Q = \frac{MVE + Total\ Debt}{Total\ Asset}$

Source: Data processed

Analysis Technique

Data testing conducted in this study used multiple linear regression analysis in the form of panel data. Ghozali (2018) stated that this model was chosen because the objective of this study was to identify the independent variables that impact the dependent variable. Three regression models can be applied to test regression estimates on panel data: the Common Effect Model (CE), Fixed Effect Model (FE), and Random Effect Model (RE). Three tests were conducted to select the most suitable regression model: the Chow test to select and compare between two models, namely CE and FE, the Haussman test to select FE or RE, and the Lagrange Multiplier test to select between CE and RE. The following is the test model used in this study.

For the test model

$$TOBS = \alpha + \beta_1 PROP_{it} + \beta_2 LNAS_{it} + \beta_3 DER_{it} + \beta_4 ROA_{it} + \beta_5 PROP^{*}ROA_{it} + \varepsilon \ldots\ldots(1)$$

Description:

α = Constant
TOBS = Company Value
PRO = Company PROPER Index Value
LNAS = Firm Size
DER = Debt to Equity Ratio
ROA = Return On Asset
B = Regression coefficient
e = Standard Error

FINDINGS AND DISCUSSION

Table 3 shows the findings of the descriptive statistical data testing conducted in this study. Table 3 shows that the Tobin's Q value of this study has a mean value of 1.3257, with a median of 1.1600 and a standard deviation of 0.6899. The maximum value of Tobin's Q is 4.8700, and the minimum value is. The value of the Proper Index has an average index of 3.5000 or an assessment in blue, a median value of 3.0000, and a standard deviation value of 0.8903. The highest value of the Proper Index is 5 (gold-colored value), and the lowest is 2 (red-colored value).

Table 3. Descriptive Statistical Test Results

Var	Observation	Mean	Median	Maximum	Minimum	Std. Dev.
TOBS	42	1.3257	1.1600	4.8700	0.6400	0.6899
PROP	42	3.5000	3.0000	5.0000	2.0000	0.8903
LNAS	42	30.2059	30.3302	32.7557	27.6407	1.4849
DER	42	1.4917	0.6900	6.1600	0.1300	1.6476
ROA	42	7.6762	4.5250	58.5200	- 11.7100	12.5991

Source: Data processed

Table 3 shows the Company Size Value with a mean or average value of 30.205, a median or middle value of 30.3302, and a standard deviation value of 1.4849. The highest value of company size is 32.7557 (Adaro Energy Indonesia) and the lowest is 27.6407 (Ifishdeco tbk). The debt-to-equity ratio averages 1.4917, with a median value of 0.6900 and a standard deviation of 1.6476. DER with the highest value of 6.1600 (Krakatau Steel (Persero) Tbk.) and the lowest value of 0.1300 (Vale Indonesia Tbk.). Return On Asset has an average value of 7.6762, a median value of 4.5250, and a standard deviation of 12.559. ROA has the highest value of 58.5200 (Mitrabara Adiperdana Tbk) and the lowest value of 11.7100 (Citra Tubindo Tbk.).

In Table 4, the appropriate model uses the Common Effect Model with the following summary.

Table 4. Summary of the Hypothesis Test Results

Variable	Coefficient	t-Statistic	Prob.	
C	1.453728	1.31746	0.098	
PROP	0.142914	1.345016	0.0935	*
LNAS	-0.023198	-0.584435	0.2813	
DER	-0.034053	-1.151172	0.12865	
ROA	0.068903	2.290932	0.01395	**
PROP*ROA	-0.015198	-2.015557	0.0257	**

Description: Significance level: ***, significance level 0.01, **, significance level 0.05, *, significance level 0.1

Based on the findings in Table 4 and the multiple regression coefficient test, the following equation can be obtained:

TOBS = 1.453728 + 0.142914 PROP -0.023198 LNAS -0.034053 DER + 0.068903 ROA -0.015198 PROPROA...............(2)

Table 4 illustrates the results of hypothesis testing, which shows that the Proper Index value positively influences firm value (the coefficient on the Proper Index value variable is 0.142914, and the prob. value is 0.0935). This test's findings align with claims (Yuliani & Prijanto, 2022), which confirm that green accounting increases firm value. The results of this test contradict the tests (Salsabila & Widiatmoko, 2022; Kelly & Henny, 2023), which state that adopting green accounting does not affect firm value. This is different from what is revealed by Kumala and Priantilianingtiasari (2024), who reveal that the adoption of green accounting does not seem to affect firm value, but the results of this test are in line with the tests conducted by Sholichah and Puspawati (2023), Lestari (2023), and Mirnawati and Dewi (2023), which state that green accounting affects firm value.

The data testing results support the research hypothesis that green accounting increases firm value. The positive results are also consistent with the use of signaling and legitimacy theory. According to legitimacy theory, an organization or a company is a part of society and must comply with society's standards. The following community standards can help companies become more credible. In addition, according to the statement (Ahmad & Hossain, 2015; Luo et al., 2013) legitimacy theory, Companies must continue to adapt to changes in society, both social and environmental, so that they have more social and environmental obligations. According to Healy and Palepu (2001), signal theory means that the owner of financial information provides a sign or code that seeks to convey relevant information that the recipient later uses. Signaling theory explains how a business communicates with parties that use financial information. In this case, the signal takes the form of information about the actions taken by the company to achieve the owner's objectives.

An organization's environmental awareness can provide significant value to the company. Thus, green accounting will hopefully address the various environmental issues that businesses face and may impact firm value. By using green accounting, companies can express their concern for the environment by disclosing their environmental costs in their environmental reports. According to Yuliani and Prijanto (2022), the company's business ethics are demonstrated by disclosure and compliance with green accounting practices. The firm's value will be influenced by its ability to maintain its societal reputation through responsible environmental management.

Moderating Effect of Profitability on the Interaction between Green Accounting and Firm Value

The hypothesis test aims to determine and assess whether the moderating variable in the form of profitability can weaken or strengthen the relationship between the use of green accounting and firm value. From the test results according to Table 5, it can be seen that profitability does not strengthen the positive effect of Green Accounting and firm value (it can be seen in Table 5 that the interaction coefficient between profitability and Green Accounting is -0.015198 with a prob. value of 0.0257).

Table 5. Summary of the Hypothesis Test Results

Variable	Coefficient	t-Statistic	Prob.	
C	1.453728	1.31746	0.098	
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DER	-0.034053	-1.151172	0.12865	
ROA	0.068903	2.290932	0.01395	**
PROP*ROA	-0.015198	-2.015557	0.0257	**
R^2	0.418232			
Adjusted R^2	0.337431			
F-stat	5.176061			
Prob.(F-stat)	0.001115			

Description: Significance level: ***, significance level 0.01, **, significance level 0.05, *, significance level 0.1

Source: Data processed

The addition of moderating variables in hypothesis testing, namely profitability, has not been moderated. The reason profitability has not moderated green accounting on firm value is that when profitability decreases, there is an opportunity caused by spending costs to maintain environmental performance. However, even with increased profitability, companies may prefer to allocate these costs to operational expenses to increase profits. This does not indicate that the company has improved its financial and environmental performance to increase investor confidence and value. As a component that affects the value of a company's shares, investors are often more interested in its profitability than its environmental performance. This suggests that because investors are not concerned with environmental performance, green accounting does not significantly impact firm value. This means that potential investors cannot base their decision solely on the availability of a Proper rating from the Ministry of Environment, which provides information on the Company's environmental performance. Therefore, legitimacy theory is not supported in this situation.

The findings of this study are in line with research by Wardani et al. (2020), Yuliani and Prijanto (2022), and Ekawati (2023), who found that profitability acts as a moderating variable for the interaction of the application of green accounting with firm value and has no significant effect. However, the results of this study are inconsistent with research by Erlangga et al. (2021) and

Nugroho (2023), which state that profitability can moderate the interaction between applying green accounting practices and firm value.

CONCLUSIONS

In this study, adopting green accounting practices by affecting firm value on firm value and profitability has no moderating effect on the interaction between green accounting and firm value. Firm value is significantly affected by the implementation of green accounting. In general, companies are more concerned with the company's profitability than with improving the implementation of green accounting. Investors believe that businesses with a high Proper index value do not always generate large profits. In other words, this suggests that since investors are not too concerned with environmental performance, applying green accounting does not have a major impact on firm value. Thus, the Proper Index Value issued by the Ministry of Environment is not the only element investors look at when making investment decisions.

LIMITATION & FURTHER RESEARCH

The limitations of this study are related to the sample's lack of a proper index value. Many companies are not included in the assessment. Future research can use a longer period to find a more comprehensive value. It is hoped that this research will add to the literature on financial accounting, sustainability accounting, and green accounting, especially those related to firm value and investor reactions. This research is also expected to provide attention to companies in Indonesia to improve their green sustainability. This study also recommends that the government's supervisory function, in this case, the Ministry of Environment, be expanded to cover all companies in Indonesia to create a good and comprehensive implementation of green accounting.

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