Research Paper

Unveiling The Impact of Green Accounting and Sustainability Disclosure On The Firm Value

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Abstract

This study examined the impact of green accounting and sustainability disclosure on firm value in the Indonesian palm oil industry. The objective was to empirically assess how environmental performance measured by PROPER and sustainability reports affects firm value. Using quantitative research methods, the study analyzed data from 124 palm oil company observations listed on the Indonesia Stock Exchange from 2018 to 2022. The research variables included firm value proxied by Tobin's Q, green accounting proxied by PROPER scores, and sustainability disclosure indexed from the companies' sustainability reports. The study also included profitability, firm size, and leverage as control variables. The results indicated that green accounting had a negative impact on firm value, suggesting that environmental compliance imposes short-term financial burdens on companies. However, sustainability disclosure did not significantly influence firm value, indicating that investors in the palm oil industry may prioritize short-term financial performance over long-term sustainability considerations. These findings contribute to the literature on corporate governance and sustainability, particularly in industries with high environmental impact, like palm oil.

Keywords: *Green Accounting; Firm Value; Sustainability Disclosure; PROPER; Palm Oil Industry*

INTRODUCTION

Indonesia is the world's largest palm oil producer, contributing 59% of global palm oil production (United States Department of Agriculture, 2024). Palm oil production is supported by an expansive 14.66 million hectares of plantations, a significant increase from 9.10 million hectares in 2011. This rapid expansion has been driven by the rising global demand for palm oil and its derivatives, which include cooking oil, margarine, detergent, cosmetics, and biofuels (Purnomo et al., 2020). The palm oil industry is crucial to Indonesia's economy, contributing to job creation, domestic economic growth, and export revenues (Teng et al., 2020). However, despite these financial benefits, the industry has caused serious environmental and social problems. These issues include deforestation (Austin et al., 2017), biodiversity loss, greenhouse gas emissions, water pollution, and other environmental degradation (Nurfahmi & Anis, 2022). Social issues such as poor working conditions and land disputes further complicate the sector's impact (Dhiaulhaq et al., 2015).

These challenges reveal a significant lack of awareness among stakeholders regarding the importance of environmental sustainability in the palm oil industry (Lestari & Restuningdiah, 2021). Environmental degradation and social issues arising from palm oil production suggest the need for collective action to address these concerns (Nugroho, 2023). The Triple Bottom Line concept, introduced by Elkington (1997), argues that businesses must balance financial (profit), environmental (planet), and social (people) objectives. This framework is highly relevant to the palm oil sector, where economic activities intersect with critical environmental and social dimensions.

In response to the growing demand for sustainability, green accounting has emerged as a critical tool for improving transparency. Green accounting incorporates environmental and social factors into traditional financial reporting, enabling companies to account for their contributions

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to environmental conservation, economic prosperity, and societal welfare (Maama & Appiah, 2019). In Indonesia, green accounting practices are supported by the Public Disclosure Program for Environmental Compliance (PROPER), administered by the Ministry of Environment and Forestry. PROPER assesses companies' environmental management based on various sustainability criteria, including energy efficiency, emission reduction, waste management, and biodiversity conservation (Astuti & Juwenah, 2017). This program provides a mechanism for publicly recognizing companies committed to environmental stewardship, and its assessments are reflected in corporate sustainability reports.

Given the growing demand for corporate transparency and environmental responsibility, green accounting is expected to be crucial in enhancing firm value. By improving transparency in environmental reporting, green accounting helps build stakeholder trust and strengthens market perception. Prabowo and Anggoro (2024) highlighted the importance of comprehensive disclosures, emphasizing that selective reporting or greenwashing, providing misleading information about a company's environmental efforts, can damage corporate reputation. To avoid this, companies must commit to full transparency and provide detailed disclosures that meet stakeholder expectations. Gunawan et al. (2023) argued that companies that adopt transparent sustainability reporting practices, especially those aligned with global standards like the Sustainable Fitch Index, are more likely to enhance their environmental performance and market reputation. This is particularly important for the palm oil sector, which faces intense scrutiny from global stakeholders because of its environmental footprint.

However, despite potential benefits, the relationship between green accounting and firm value has yielded mixed results in previous empirical studies. Fernando et al. (2024) found that adopting green accounting practices has not consistently improved firm value in Southeast Asia's mining and agricultural sectors, including Indonesia. This may be attributed to the voluntary nature of sustainability disclosures, where transparency varies significantly between companies. Sukmadilaga et al. (2023) also noted that while certain elements of environmental disclosure, such as emission reductions, positively impact firm value, other factors, such as water and energy use disclosures, may lead to negative investor perceptions depending on how these practices are interpreted. The complexity of environmental disclosures and the diverse ways investors interpret them can lead to inconsistent firm value outcomes.

The quality of environmental sustainability assurance also plays a significant role in shaping investor perceptions. Khaireddine et al. (2024) demonstrated that companies with higher-quality environmental certifications, such as ISO 14001, tend to experience stronger positive impacts on firm value. This is because credible certifications serve as a trusted validation of a company's sustainability practices, which enhances investor confidence. Hazmi et al. (2024) similarly found that profitability moderates the relationship between green accounting and firm value. Companies with greater profitability are better equipped to invest in green initiatives, which enable them to leverage these investments to enhance firm value. Financial capacity is therefore a critical factor in determining whether green accounting practices translate into improved financial performance.

In addition to profitability, the structure of a company's financing influences the effectiveness of green accounting. Chang et al. (2024) found that companies with greater reliance on equity financing tend to disclose more environmental information because equity investors typically value transparency. Conversely, companies that heavily rely on debt financing may be more reluctant to disclose detailed sustainability information because of concerns about increased scrutiny from creditors. This reluctance to disclose can negatively affect firm value because investors may interpret a lack of transparency as a red flag regarding a company's environmental performance.

Sustainability disclosure is a related but distinct concept that involves broader reporting of

a company's environmental, social, and governance (ESG) performance. Comprehensive sustainability disclosures provide transparency regarding a company's long-term strategies for addressing environmental and social challenges. Sreepriya et al. (2023) found that adherence to international standards, such as the Global Reporting Initiative (GRI), positively moderates the relationship between sustainability disclosure and firm value. Companies that align their disclosures with GRI standards are more likely to experience increased firm value because these standards signal a firm's solid commitment to sustainability and transparency. It is especially crucial for industries like palm oil, which operate under intense global scrutiny.

In green finance and carbon accounting, Wu (2024) found that companies investing in green projects, such as renewable energy, tend to see improvements in both market reputation and firm value. This research underscores the importance of integrating financial strategies with sustainability goals. Arduini et al. (2024) similarly explored how aligning green accounting practices with strategic sustainability objectives, such as improving operational efficiency and reducing environmental impact, can significantly enhance firm value. Their findings indicate that embedding sustainability within a company's broader strategic framework is essential for realizing long-term financial and environmental benefits.

Pumiviset and Suttipun (2024) added that proactive environmental management, supported by robust accounting frameworks such as strategic management accounting, helps companies address environmental challenges and maintain their competitive advantage. This is particularly relevant in the palm oil industry, where sustainability is increasingly linked to economic performance. As sustainability becomes a critical component of a company's value proposition, proactive management of environmental risks through comprehensive disclosure is essential for long-term success.

This study empirically tests the effect of green accounting and sustainability disclosure on firm value in Indonesia's palm oil sector. By examining the relationship between environmental practices and market outcomes, this research seeks to provide a clearer understanding of how transparency and sustainability affect firm value. The findings are expected to contribute to the existing literature on sustainability accounting and corporate governance, particularly within high-impact industries like palm oil. Additionally, this research has significant implications for regulators, particularly the Financial Services Authority (OJK). Strengthening regulations around sustainability disclosures could help mitigate the risks of selective reporting and greenwashing, improve investor confidence and promote a more sustainable capital market. Mandating full transparency in environmental reporting will ensure that companies in the palm oil sector will adopt genuine sustainability practices, enhancing both firm value and environmental stewardship.

LITERATURE REVIEW

Green accounting integrates environmental factors into traditional financial reporting, allowing companies to account for environmental impacts and responsibilities. It provides a framework for measuring and disclosing a company's efforts to conserve resources, reduce emissions, and minimize waste. Environmental performance, which refers to how effectively a company manages its environmental responsibilities, is a core element of green accounting. Integrating environmental performance into financial reports through green accounting enhances transparency and helps companies align with societal and regulatory expectations regarding sustainability. It has the potential to directly impact the company's reputation and firm value (Maama & Appiah, 2019).

The PROPER (Public Disclosure Program for Environmental Compliance) program is critical for assessing and ensuring corporate environmental performance in Indonesia. Overseen by the Ministry of Environment and Forestry, PROPER evaluates companies' adherence to environmental

regulations using a five-color grading system (gold, green, blue, red, black). Companies with higher PROPER ratings, which indicate better environmental performance, are seen more favorably by investors because these ratings serve as a reliable indicator of the company's commitment to environmental responsibility (Astuti & Juwenah, 2017). Lestari and Restuningdiah (2021) highlighted that companies with strong PROPER ratings typically attract more investor interest, thus enhancing market value. This connection between environmental performance and firm value underscores the role of green accounting in facilitating the disclosure of such performance, thereby reinforcing the company's market position.

Green accounting acts as a mechanism for disclosing environmental performance and offers stakeholders, particularly investors, a clear picture of how well a company manages its environmental risks. Dhar et al. (2022) argued that companies that demonstrate strong environmental performance through disclosures, such as PROPER ratings, are more transparent, thus building credibility and trust with investors and other stakeholders. Transparency is crucial in today's investment climate, where stakeholders increasingly prioritize environmental sustainability. Sapulette and Limba (2021) also emphasized that transparency in environmental performance helps boost stakeholder confidence, leading to a more favorable investment environment. Dewi and Narayana (2020) supported this, suggesting that firms demonstrating good environmental performance, particularly through programs like PROPER, are better positioned to improve their market value because investors reward transparency and responsible environmental management.

The stakeholder theory, proposed by Freeman et al. (2021), reinforced the importance of addressing the concerns of all stakeholders, including those related to environmental performance. Companies that actively manage their environmental responsibilities and disclose their performance through green accounting practices meet the expectations of increasingly environmentally conscious stakeholders. This alignment between corporate behavior and stakeholder expectations builds reputation and trust, ultimately improving firm value. Wang et al. (2017) further supported this, noting that companies with good environmental practices tend to build greater trust with their stakeholders, which in turn increases firm value. By integrating environmental performance into financial reports through green accounting, companies can enhance their long-term value by maintaining strong stakeholder relationships.

However, the relationship between environmental performance and firm value is not always straightforward. Zulhaimi (2015) found that the market does not always respond immediately to improvements in environmental performance, indicating that short-term market reactions may not fully capture the long-term benefits of green accounting. Despite this, Lestari and Restuningdiah (2021) found that firms with superior environmental performance, particularly when validated by PROPER ratings, tend to experience long-term value creation as investors gradually recognize their commitment to sustainability. This finding highlights the potential of green accounting to positively affect firm value through sustained environmental performance and transparency.

In addition, the quality of disclosure and mechanisms through which environmental performance is communicated are critical. Ihsani et al. (2021) found that companies that perform well in PROPER and disclose their environmental performance transparently significantly influence investor behavior. Companies that excel in PROPER signal to the market that they are effectively managing their environmental risks can attract long-term investors who seek companies with a strong sustainability profile.

Moreover, Prabowo and Anggoro (2024) argued that companies with strong environmental performance are less likely to engage in greenwashing because their high PROPER ratings provide real, measurable outcomes that can be substantiated. It builds investor trust and can further enhance firm value. Greenwashing, or misleading stakeholders about a company's environmental

efforts, is less likely when environmental performance is transparently disclosed through mechanisms such as PROPER, reinforcing the role of green accounting in ensuring accountability and transparency.

The alignment with international standards further strengthens the relationship between green accounting and firm value. Gunawan et al. (2023) demonstrated that companies adhering to globally recognized standards, such as those reflected in PROPER, are likely to see improved market performance and enhanced reputation. The alignment with these standards assures investors that the company is committed to maintaining high environmental performance and making green accounting a reporting tool and strategic approach to sustaining firm value.

Thus, green accounting is intrinsically linked to environmental performance, providing a structured method for companies to disclose their environmental responsibilities. When environmental performance is strong, particularly when assessed through transparent programs like PROPER, it enhances a company's reputation, builds stakeholder trust, and positively affects firm value. Green accounting ensures that environmental achievements are communicated effectively to the market, providing investors and other stakeholders with the information needed to make informed decisions.

H_1: Green accounting positively affects firm value.

Sustainability disclosure involves reporting a company's performance across environmental, social, and governance (ESG) dimensions. Such disclosures offer transparency regarding how companies address sustainability challenges and their long-term strategies. Comprehensive sustainability disclosures allow firms to communicate their efforts to meet stakeholder expectations and demonstrate accountability. Dhar et al. (2022) argued that sustainability disclosures improve transparency and investor confidence by revealing a company's commitment to long-term value creation. Sapulette and Limba (2021) also highlighted the role of sustainability disclosures in helping investors understand a company's environmental and social performance, which influences investment decisions.

Freeman et al. (2021), using stakeholder theory, suggested that companies that disclose sustainability information are better positioned to meet stakeholder demands, including those from investors, customers, and employees. By providing clear and comprehensive sustainability reports, companies can build stronger relationships with stakeholders that are increasingly concerned about sustainability issues. Wang et al. (2017) also demonstrated that CSR activities, including sustainability disclosures, improve a company's reputation and trustworthiness, directly contributing to higher firm value.

Dewi and Narayana (2020) reinforced this notion by noting that transparency in sustainability disclosures creates a favorable investment climate. Stakeholders, particularly investors, are likelier to invest in transparent companies that demonstrate sustainability efforts. Chandra and Augustine (2019) added that sustainability reports are crucial for engaging with a broader range of stakeholders and providing the necessary information to evaluate a company's commitment to sustainable development.

However, the impact of sustainability disclosure on firm value is not always straightforward. Zulhaimi (2015) found that the market response to sustainability disclosures can be muted in the short term, suggesting that investors may require more time to assess the value of these disclosures. In contrast, Lestari and Restuningdiah (2021) found that companies with comprehensive sustainability reports tend to experience increased firm value over time because these disclosures align with the preferences of socially responsible investors.

Ihsani et al. (2021) further highlighted that sustainability disclosures significantly impact

investor sentiment. By revealing detailed information about their environmental and social initiatives, companies signal their commitment to long-term sustainability and attract investors who prioritize responsible investment practices. Anggita et al. (2022) argued that firms participating in sustainability programs, such as the PROPER initiative in Indonesia, benefit from improved market valuations because of positive perceptions of their sustainability efforts. The PROPER program provides a mechanism for companies to demonstrate environmental and social performance, which positively influences investors' perceptions of a firm's long-term viability. (Suryani & Jumaida, 2022) supported this by stating that companies excelling in sustainability programs often see improvements in public perception, which strengthens stakeholder trust. (Zharfpeykan & Akroyd, 2023) emphasized that sustainability disclosures that are aligned with international standards, such as the Global Reporting Initiative (GRI), help firms align their strategies with stakeholder interests and facilitate long-term value creation.

Hermuningsih (2018) and Loh et al. (2017) found that sustainability disclosures improve a company's market value by increasing investor confidence in a firm's commitment to responsible business practices. Qureshi et al. (2020) argued that companies that engage in sustainability reporting are more likely to attract long-term investors because these disclosures demonstrate a company's focus on sustainable growth and ethical practices. Laskar and Maji (2018) and Murpradana (2015) further asserted that sustainability disclosures reflect a company's dedication to balancing economic, social, and environmental responsibilities, which enhances its overall market reputation and firm value. Thus, comprehensive sustainability disclosures that provide transparency and accountability help firms build trust with stakeholders and improve firm value by attracting responsible investors and enhancing a company's long-term reputation.

H_2: Sustainability disclosure positively affects firm value.

RESEARCH METHOD

This quantitative research was conducted on palm oil companies. The research method tests theories by measuring research variables using statistical data analysis to test the established hypotheses. In this study, there are three types of variables: dependent, independent, and control. The dependent variable is firm value proxied by Tobin's Q (TOBINSQ). The independent variables are green accounting (proxied by PROPER) and sustainability disclosure (proxied by Sustainability Disclosure (SD). Meanwhile, the control variables are profitability, proxied by Return on Assets (ROA). Leverage is proxied by the debt-to-assets ratio (DAR), and firm size is proxied by SIZE.

This research used secondary data from the financial reports of palm oil companies listed on the Indonesia Stock Exchange until 2022, with data adapted from www.idx.co.id. Additionally, data on the results of the PROPER assessment from 2018 to 2022 were obtained through the Decree of the Minister of Environment and Forestry. Sustainability reports were also collected from each company's website. The sample in this study was selected using the purposive sampling method, which involves selecting samples based on specific criteria relevant to the research objectives. This approach ensures that the data used are appropriate for testing the hypotheses. The sample selection details are presented in Table 1.

The data analysis process began by collecting secondary data from the above sources and then processing the data using statistical software to test the relationships between the independent, dependent, and control variables. The results of these tests were then used to interpret the relationship between green accounting, sustainability disclosure, and firm value, as well as the influence of other factors, such as profitability, leverage, and firm size, on the outcomes.

Table 1. Sample Selection

Criteria	Quantity
Agricultural sector companies listed on the BEI	35
Companies that are not in the plantation subsector	(4)
Companies that are not in the palm oil plantation sector	(3)
Palm oil companies that IPO after 1 January 2022	(2)
Total Companies	**26**
5-year period (2018 – 2022)	130
Corporate status is suspended	(6)
Total sample	**124**

Firm value as a dependent variable is proxied by Tobin's Q. According to Firmansyah and Purnama (2020) and Ihsani et al. (2021), Tobin's Q results are obtained through the following formulation:

$$\text{Tobin's Q} = \frac{\text{Market Capitalization} + \text{Total Debt}}{\text{Total Assets}} \ldots(1)$$

This research included two independent variables: green accounting and sustainability disclosure. Green accounting was measured using the PROPER assessment results as a proxy, which assigns five color certifications (gold, green, blue, red, and black) based on a company's environmental performance. In this study, the implementation of green accounting was quantified by assigning a score ranging from 0 to 5, following the methodology used in Firmansyah and Estutik (2020) and Lestari and Restuningdiah (2021).

Table 2. Corporate Score based on the PROPER Certificate

Score	Information
5	Companies that obtain PROPER certificates are in the form of gold
4	Companies that obtain a PROPER certificate are green.
3	Companies that obtain a PROPER certificate are blue.
2	Companies that obtain a PROPER certificate are red.
1	Companies that obtain a PROPER certificate are black.
0	Companies that do not obtain a PROPER certificate

The second independent variable is sustainability disclosure. This variable was evaluated using a score index that measures the performance of sustainability reports across different dimensions (Tarigan & Semuel, 2014). The assessment was conducted by assigning a score of one for each item disclosed in the report and 0 for items not disclosed. Once all items were scored, the totals were summed to produce an overall score for each dimension. The formula used to calculate the score index for each dimension is as follows:

$$\text{SD} = \frac{\text{n}}{\text{k}} \ldots(2)$$

The sustainability disclosure score index (SD) is calculated by dividing the number of items disclosed (n) by the total number of items expected to be disclosed, which in this case is 148 items (k). In this research, control variables were used to ensure that the results remained accurate, reliable, and capable of identifying the true impact of the variables being studied. These control variables were selected based on the methodology of Lestari and Restuningdiah (2021). Profitability was measured using the Return on Assets (ROA) proxy, as explained by Ramdhani et al., and the ROA calculation can be performed using the following formula:

$$\text{ROA} = \frac{\text{Net profit}}{\text{Total Asset}} \ldots(3)$$

The following control variable is firm size (SIZE), which serves as a scale to classify the size of a corporation (Japlani, 2015). SIZE is measured using the following formula:

$$\text{SIZE} = \text{Ln Total Asset} \ldots(4)$$

The final control variable is leverage, which represents a company's use of loans to finance its operations (Brigham & Houston, 2019). Leverage was calculated using the Debt to Assets Ratio (DAR) with the following formula:

$$\text{DAR} = \frac{\text{Total Debt}}{\text{Total Asset}} \ldots(5)$$

This research employed multiple linear regression analysis to determine the relationship between green accounting, sustainability disclosure, and firm value. Multiple linear regression was deemed suitable for this study because it allows for the simultaneous assessment of the influence of numerous independent variables on the dependent variable. This method is commonly used in studies analyzing corporate performance and financial data. The regression equation model used in this study is as follows:

$$\text{TOBINSQit} = \beta_0 + \beta_1\text{PROPERit} + \beta_2\text{SDit} + \beta_3\text{ROAit} + \beta_4\text{SIZEit} + \beta_5\text{DARit} + \varepsilon\text{it} \ldots(6)$$

The variables used in this study are defined as follows: TOBINSQ represents firm value; PROPER is used as a proxy for green accounting; SD refers to sustainability disclosure; ROA indicates profitability; SIZE represents firm size; and DAR denotes leverage.

FINDINGS AND DISCUSSION

Statistical analysis was conducted to provide an overview of the data used in the research. Key measures, such as the average value (mean), middle value (median), minimum value, maximum value, and standard deviation, were calculated for the dependent, independent, and control variables.

Table 3. Descriptive Statistical Analysis

Variable	Mean	Med.	Max.	Min.	Std. Dev.	Obs.
PROPER	1,7903	3,0000	5,0000	0,0000	1,5316	124
SD	0,4769	0,4800	0,7838	0,0100	0,1357	124
ROA	0,0215	0,0255	0,4930	-0,2970	0,0873	124
SIZE	28,9008	29,6800	31,3829	0,0000	3,0779	124
DAR	0,3362	0,3000	2,1400	0,0004	0,2406	124
TOBINSQ	0,9380	0,5544	1,2024	0,0017	1,5942	124

The descriptive statistics provide insight into the data used in this study, highlighting substantial variability across several key variables. PROPER (green accounting) has a mean of 1.7903 and a median of 3, indicating a generally moderate level of environmental compliance among companies, although some firms achieved the highest score of 5, while others scored as low as 0. Sustainability disclosure (SD) has a mean of 0.4769 and a median of 0.4800, indicating that most firms are moderately transparent in disclosing sustainability practices, with relatively low variation (standard deviation of 0.1357). Return on Assets (ROA) indicates low overall profitability, with a mean of 0.0215 and a significant range, as the maximum value is 0.4930 and the minimum is -0.2970, reflecting considerable differences in company performance.

In terms of size, companies demonstrate substantial variability, as reflected by the mean SIZE

of 28.9008 and its wide range from 0 to 31.3829, indicating that some firms are much larger than others. Debt to Asset Ratio (DAR) shows moderate leverage with a mean of 0.3362 and a standard deviation of 0.2406, highlighting some firms with very high or low debt levels. Tobin's Q, with a mean of 0.9380, suggests that most firms are slightly undervalued in the market compared to their asset replacement cost, although the standard deviation of 1.5942 indicates significant variability in market valuations, ranging from a minimum of 0.0017 to a maximum of 1.2024. Overall, the data reflect a diverse set of firms in terms of environmental performance, financial health, and market valuation.

The normality test in this study showed a probability value of 0.00, indicating that the residuals were not normally distributed; however, this can be ignored because the sample size exceeded 30 (Ajija et al., 2010). The multicollinearity test revealed that all variables passed because the absolute correlation values between variables were less than 0.80, indicating no multicollinearity issues. Using the Breusch-Pagan LM approach, the heteroscedasticity test resulted in a probability value of 0.1850, which was more significant than 0.05, indicating no heteroscedasticity in the model. The significance level set for the tests was set to 5%. Overall, the model satisfied the assumptions of multicollinearity and heteroscedasticity.

The hypothesis analysis in this research used a simultaneous significance test (F-test) to determine whether the independent variables collectively influenced the dependent variable. If the F-statistic probability value is lower than the 0.05 significance level, the independent variables have a significant simultaneous impact. If the value was higher, no significant joint effect was present. Then, a partial significance test (t-test) was applied to evaluate the individual impact of each independent variable. At a 5% significance level, a p-value less than 0.05 indicated a significant individual impact, and the coefficient was used to assess whether the relationship was positive or negative.

Table 4. Regression Test Results

Variable	Coefficient	t-Statistic	Prob.
PROPER	-0.3057	-3.0535	0.0014
SD	-0.2564	-0.2270	0.4104
ROA	1.3297	0.7865	0.2166
SIZE	0.0115	0.2449	0.4035
DAR	0.4076	0.6528	0.2576
C	1.1095	0.8007	0.2125
R^2		0.0966	
Adj. R^2		0.0583	
F-stat.		2.5224	
Prob (F-stat.)		0.0330	

The effect of green accounting on firm value

The finding that green accounting negatively influences firm value aligns with several studies but contrasts with others. This result is consistent with Zulhaimi (2015), who found that green accounting practices did not significantly improve stock prices, particularly in industries like palm oil, where environmental compliance can entail substantial costs. Similarly, Sukmadilaga et al., (2023) argued that while certain aspects of environmental disclosure, such as emission reductions, may have positive effects, other factors, like resource conservation and energy use, may incur costs that negatively impact short-term financial performance. It is expected particularly true for palm oil companies, where environmental issues such as deforestation and pollution require costly interventions.

On the other hand, this finding contradicts the results of Lestari and Restuningdiah (2021)

and Wang et al. (2017), who found a positive relationship between environmental practices and firm value, particularly in sectors where the market rewards sustainability. These studies suggest that green accounting enhances corporate reputation and investor trust, providing long-term financial benefits. According to Wang et al. (2017), companies that demonstrate strong environmental stewardship tend to attract more environmentally conscious investors, which boosts their share demand and ultimately increases firm value. This discrepancy might be explained by investors in the palm oil sector viewing environmental risks as more immediate and substantial, overshadowing any potential long-term benefits.

The stakeholder theory proposed by Freeman et al. (2021) provides a useful framework for interpreting these results. This theory posits that companies should focus on maximizing shareholder value while considering the interests of all stakeholders, including employees, customers, governments, and the environment. From this perspective, green accounting allows companies to address the environmental concerns of stakeholders by making their environmental practices more transparent. However, in the palm oil industry, where environmental damage has historically been a major issue, such transparency may also expose the extent of the environmental risks the company faces, leading investors to reassess their long-term growth potential.

The negative effect of green accounting on firm value, as seen in this study, suggests that although companies attempt to address the needs of stakeholders concerned with environmental sustainability, these efforts may raise concerns among investors about the costs and risks associated with such practices. As Dhar et al. (2022) noted, although strong environmental performance disclosures can increase transparency, they can also reveal potential risks that might deter investors who are cautious about a company's long-term financial outlook. This aligns with stakeholder theory, which emphasizes balancing different stakeholder groups' often-competiting interests. In this case, although companies may meet environmental advocates' expectations, they may simultaneously raise concerns among financial stakeholders about profitability and growth. Thus, green accounting in the palm oil industry underscores the complexity of satisfying diverse stakeholder interests. Although it addresses environmental concerns, it may also lead to lower short-term profitability and increased investor skepticism, ultimately reducing firm value in the short term. The balance between environmental responsibility and financial performance is a major challenge for industries with substantial environmental impacts.

The effect of sustainability disclosure on firm value

The finding that sustainability disclosure did not significantly influence firm value suggests that, despite the intention of sustainability reports to provide stakeholders with transparency and insights into how a company manages sustainability issues, such disclosures may not always be regarded as crucial by the market in assessing firm value. This aligns with the idea that investors, especially in industries like palm oil, may prioritize short-term financial performance over long-term sustainability. Immediate financial metrics, such as earnings and revenue, often dominate investment decisions, leaving sustainability disclosure as a secondary factor in firm valuation.

This result is consistent with Zulhaimi (2015), who argued that while sustainability initiatives reflect corporate responsibility, they may not always lead to immediate financial gains that can be reflected in stock prices or firm value. Dewi and Narayana (2020) similarly noted that short-term profitability directly impacts investor decisions, overshadowing the potential long-term benefits of sustainability disclosure. In industries like palm oil, where the focus often remains on immediate financial performance, sustainability reports may not substantially influence market perceptions in the short run.

Furthermore, sustainability disclosure may not give companies a significant competitive

advantage in highly competitive sectors like palm oil, where many firms engage in similar sustainability reporting practices. Sapulette and Limba (2021) pointed out that when sustainability practices become standardized across industries, such disclosures may no longer serve as differentiating factors, thus reducing their influence on firm value. As many firms adhere to industry norms and regulations, sustainability reporting may not offer the uniqueness or competitive edge required to significantly influence investor behavior.

On the other hand, studies such as Lestari and Restuningdiah (2021) and Wang et al. (2017) found that sustainability disclosure can positively impact firm value, particularly when it highlights a company's commitment to environmental and social issues. These studies suggest that firms with robust sustainability practices are more likely to attract socially conscious investors who value long-term sustainability over short-term financial metrics. However, the findings of this study suggest that in the palm oil industry, where environmental controversies are prevalent, sustainability disclosures alone may not be enough to influence investor sentiment or boost firm value, particularly if investors remain skeptical about the long-term effectiveness of these initiatives.

The stakeholder theory proposed by Freeman et al. (2021) provides a framework for understanding the role of sustainability disclosure. This theory emphasizes the need for companies to address the interests of a broad range of stakeholders, including investors, customers, employees, and regulators. Sustainability disclosures are a tool for communicating a company's efforts to meet stakeholders' environmental and social expectations. However, in industries like palm oil, where environmental and social impacts are often viewed critically, the market may not fully recognize the value of such disclosures unless they are paired with demonstrable actions and outcomes that reassure investors of the company's long-term commitment to sustainability.

Additionally, Chandra and Augustine (2019) argued that the impact of sustainability disclosure on firm value depends on the effectiveness of communication and the information's perceived credibility. If stakeholders view sustainability reports as mere formalities or question the authenticity of the disclosed information, the reports are less likely to have a significant positive impact on firm value. This highlights the importance of providing sustainability information and ensuring that the market sees these disclosures as credible and impactful. In line with this, Ihsani et al. (2021) found that market reactions to sustainability disclosures can vary depending on the industry and the perceived relevance of environmental and social issues. In industries such as palm oil, where environmental risks are high, the market may discount the value of sustainability disclosures unless they are accompanied by clear actions demonstrating the company's environmental responsibility.

Thus, while sustainability disclosure is intended to enhance transparency and build stakeholder confidence, its limited effect on firm value in this study suggests that investors in the palm oil industry continue to prioritize short-term financial performance over long-term sustainability considerations. Furthermore, the widespread adoption of similar sustainability reporting practices across the industry reduces the potential for such disclosures to differentiate firms or drive firm value significantly. This underscores the challenge for companies in environmentally sensitive industries to balance sustainability efforts with financial performance and ensure that their sustainability disclosures are credible and meaningful to the market.

CONCLUSIONS

This study empirically examines the impact of green accounting and sustainability disclosure on firm value in the Indonesian palm oil industry. The findings reveal that green accounting, measured by PROPER, has a negative effect on firm value, whereas sustainability disclosure does not significantly influence firm value. These results indicate that, in the short term, the costs

associated with implementing green accounting practices may outweigh the perceived benefits in investors' eyes, particularly in industries with high environmental impact, like palm oil. Meanwhile, the lack of a significant impact from sustainability disclosure suggests that investors in this sector may prioritize short-term financial performance over non-financial reporting, such as sustainability efforts.

This study contributes to the growing body of literature on sustainability accounting by demonstrating that the relationship between green accounting and firm value can vary based on the sector, particularly in industries where environmental compliance is costly. This research aligns with stakeholder theory and confirms that although green accounting practices are essential for addressing stakeholder concerns, they may not immediately translate into increased firm value. Furthermore, it offers insights into the ongoing debate about the role of sustainability disclosure in enhancing firm value and shows that the relationship between these variables may not be uniform across industries.

For OJK, the results of this study highlight the importance of encouraging more comprehensive and standardized sustainability disclosures within the palm oil sector. Although sustainability reporting is voluntary, the findings suggest that enhanced transparency in sustainability practices can drive long-term firm value by improving investor confidence. The OJK should consider implementing stricter regulations that mandate sustainability disclosure across industries, particularly in sectors like palm oil, which have significant environmental impacts. This will increase market confidence and support investors in making more informed decisions about companies' sustainability practices. Furthermore, OJK can encourage financial institutions to offer incentives for companies that adopt robust sustainability practices, thus aligning financial systems with environmental goals. The findings of the Ministry of Environment and Forestry, the findings emphasize the critical role of PROPER in promoting green accounting practices. However, as green accounting currently has a negative impact on firm value due to the immediate costs of compliance, the Ministry could provide technical support and incentives to help companies, especially in high-impact industries like palm oil, transition to more sustainable practices without experiencing financial strain. This can include subsidies for adopting environmentally friendly technologies or recognition programs highlighting the long-term sustainability benefits for corporate reputation. Additionally, the Ministry can collaborate with the OJK to ensure that sustainability disclosure frameworks align with environmental regulations, further encouraging companies to integrate environmental performance and transparent reporting into their core business strategies. By jointly working on policy improvements, OJK and Ministry of Environment and Forestry can enhance the integration of environmental sustainability into corporate governance and financial reporting, ultimately promoting a more sustainable and transparent market environment.

The novelty of this study lies in its specific focus on the palm oil industry, which faces unique environmental challenges. By examining the effects of green accounting and sustainability disclosure in this high-impact industry, this research provides fresh insights into how investors perceive sustainability practices in sectors heavily scrutinized for their environmental impact. Furthermore, this study contributes to the limited empirical research on the effects of green accounting and sustainability disclosure on firm value in developing countries like Indonesia, offering a nuanced understanding of how these practices interact with firm performance in a critical industry.

LIMITATION & FURTHER RESEARCH

The influence of green accounting and sustainability disclosure on firm value is contextual and can vary across companies and industrial sectors. Therefore, a more in-depth analysis and

further research are needed to more accurately measure the extent to which green accounting and sustainability disclosure contributes to changes in firm value in various contexts. Future research should increase the number of samples and extend the research period, allowing for more comprehensive results that better reflect a broader scope. Additionally, examining other sectors with significant negative environmental externalities would provide valuable insights into how such practices impact firm value across industries.

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