JDA | Jurnal Dinamika Akuntansi
Vol. 17, No. 1, 2025, pp.50-64

p-ISSN 2085-4277 | e-ISSN 2502-6224
https://journal.unnes.ac.id/journals/jda

Enhancing Firm Value through Green Accounting and Environmental Performance: The Mediating Effect of Profitability

Sayu Made Anggreni[1] ✉, Eka Ardhani Sisdiyani[2], I Dewa Nyoman Badera[3]

[1,2,3,4]Department of Accounting, Faculty of Economics and Business, Universitas Udayana, Denpasar, Indonesia

DOI: http://dx.doi.org/10.15294/jda.v17i1.10242

Submitted: July 22nd, 2024 Revised: October 23rd, 2024 Accepted: April 15th, 2025 Published: April 21st, 2025

Abstract

Purposes: With profitability acting as the mediating variable, the study's objective is to evaluate the impact of implementing green accounting and its environmental implications on firm value in manufacturing companies listed on the Indonesia Stock Exchange between 2020 and 2022.

Methods: The approach used in this study is a quantitative approach. The research sample was 171 cases. Data analysis was performed using path analysis using Eviews 10, and the Sobel test was used to conduct the mediation test.

Findings: This study indicates that green accounting and environmental performance impact can enhance firms' value. Employing green accounting practices and improving environmental performance impact enhances profitability. The greater the profit, the higher the firm's value. Profitability may play a role in determining the effect of green accounting and environmental performance impact on firm value.

Novelty: This research supports the idea that profitability can be a mediator in understanding the effect of green accounting and environmental performance impact on the firm value of Indonesian industries listed on stock exchanges. Profitability as a mediating variable requires further investigation, as green accounting practices and improved environmental performance impact can increase operational efficiency, reduce costs, and ultimately improve a business's profitability. Increased profit makes a company more valuable to investors and other stakeholders.

Keywords*:* Environmental Performance, Firm Value, Green Accounting, Profitability.

How to cite (APA 7th Style)

Anggreni, S. M., Sisdiyani, E. A., and Badera, I. D. M.(2025). Enhancing firm value through green accounting and environmental performance: the mediating effect of profitability. *Jurnal Dinamika Akuntansi, 17*(1), 50-64. http://dx.doi.org/10.15294/jda.v17i1.10242

INTRODUCTION

Firm value reflects the business's current stock market price and future growth prospects (Nugroho, 2023). Investors regard firm value as a measure of success, often reflected in stock price performance (Purbawangsa et al., 2019). A significant firm value is reflected in high stock prices, which benefit shareholders by increasing their returns. Additionally, rising stock prices boost market confidence in the business's prospects and its current success (Damayanthi, 2019). Thus, maximizing firm value is a primary goal for companies, aligning with their overall objectives (Riadi, 2017).

Corresponding Author (✉)
E-mail: sayumadeanggraini@gmail.com

This study focuses on manufacturing companies due to their broad representation of various industries and their important environmental impact. Manufacturing processes often involve using natural resources, emissions, and waste generation. For investors, firm value is a benchmark for evaluating a corporation's effectiveness in utilizing its materials, as reflected in its market price. A decline in stock prices among certain manufacturing companies indirectly influences investor perceptions, ultimately influencing firm value.

To enhance firm value, companies must adopt innovative management strategies prioritizing sustainable growth, efficient resource utilization, and long-term point creation (Ali et al., 2021; Nogueira et al., 2023). One prominent framework addressing these objectives is the Triple Bottom Line concept emphasized by Elkington (1997). This concept emphasizes a holistic approach to corporate performance, encompassing financial gains (profit), environmental stewardship (planet), and social responsibility (people). This framework aligns well with contemporary stakeholder expectations, making it increasingly relevant for businesses seeking sustainable competitive advantages (Kanzari et al., 2022).

In this context, green accounting and environmental performance impact are pivotal tools for integrating sustainability into corporate strategies. Green accounting is an advanced accounting method that incorporates environmental and social dimensions into financial reporting (Lako, 2018). It reviews costs associated with environmental impacts, including waste management, recycling, and other sustainability initiatives. By adopting green accounting, firms achieve compliance and enhance transparency, fostering stakeholder trust and improving corporate reputation. It aligns with stakeholder theory, which emphasizes the importance of corporate accountability in addressing environmental impacts. Adequate environmental cost disclosure raises a business's credibility with investors and stakeholders by demonstrating its responsibility for environmental preservation.

Environmental performance assesses a business's dedication to environmental stewardship, demonstrating its commitment by aligning operational practices with sustainability goals and regulatory requirements. Stakeholder theory suggests that a business's longevity is closely tied to its capacity to foster healthy relationships with stakeholders by meeting their expectations and needs (Fadhilah et al., 2021). One impactful method for strengthening these relationships is releasing sustainability reports, which offer insights into a business's environmental, social, and economic performance. The PROPER program from KLHK. Exemplifies how a structured assessment of environmental performance can enhance accountability. Companies that excel in this area not only build trust with investors and other stakeholders but also gain a competitive advantage, thereby fortifying their position in the market.

This study explores stakeholder theory, which posits that a company must deliver benefits to its stakeholders. These benefits can be achieved by implementing corporate social responsibility (CSR) programs and allocating funds for these initiatives in financial statements to ensure long-term sustainability. These programs are designed to enhance the well-being of the staff, customers, and the local community, fostering positive relationships between the company and its environment. By doing so, the company not only solidifies its position but also aligns with the interests of its owners. Alignment encourages managers to transparently disclose environmental responsibilities, including environmental costs, in their reporting.

According to studies by Nugroho (2023), Erlangga et al. (2021), and Dewi and Narayana (2020), using green accounting can increase a business's worth. Businesses using green accounting techniques will likely raise their value by developing a positive reputation and boosting stakeholder trust in their sustainability initiatives. Then again, Melawati and Rahmawati (2022) argue that green accounting has no discernible impact on corporate value. Furthermore, Cho et al. (2019) found a favorable relationship between corporate social responsibility (CSR) performance and several financial performance indicators, such as corporate stability and total asset growth. Tobin's Q, a crucial measure of company value, was found to correlate positively with social contributions and business stability.

According to empirical research by Rusmana and Purnaman (2020) and Sudimas et al. (2023), a business's overall worth is positively impacted by its environmental performance. Businesses participating in the PROPER program are seen as ecologically conscious, supporting their sustainability initiatives and raising their market value. However, studies by Kelly and Henny (2023) and El-Mohr et al. (2021) show that environmental performance has no discernible impact on financial returns as measured by cumulative return.

Pratiwi and Hidayah (2023), Wardianda and Wiyono (2023), and Yulianingsih and Wahyuni (2023) are among the other studies that show how green accounting improves a business's financial performance. However, research by Tjoa et al. (2022), Kusuma and Anggraini (2023), and Faizah (2020) shows that green accounting does not affect business profitability. Furthermore, Riyadh et al. (2020) research indicates a negative correlation between financial performance and expenses related to green accounting.

The study conducted by Cahyani and Puspitasari (2023), Kalash (2021), and Prastiwi (2021) demonstrates that a business's financial performance is positively influenced by its environmental performance. Conversely, Sudimas et al. (2023) observed that financial performance does not mediate the relationship between green accounting, environmental performance, and firm value. In contrast, Nugroho (2023) argued that profitability can mediate the relationship between green accounting and firm value, as companies are inclined to communicate positive information to investors and integrate environmental costs into their financial reports. Furthermore, Elisabeth and Maria and Elisabeth (2022) confirmed an important benefit of green impact on stock prices, which is facilitated by company profitability.

Businesses that follow environmental ethics increase profits in addition to their total worth. These businesses use corporate social responsibility tactics that encourage ecologically friendly production methods from waste management to design. The sales and pricing of eco-friendly products rise due to these efforts, which also help build a positive reputation, especially among consumers who care about the environment (Han et al., 2019). Profit-driven businesses prioritize increasing profits before considering other goals, such as disclosing green accounting methods. Profitability thus serves as a mediator between corporate value, green accounting, and environmental performance. PROPER ratings and other external legitimacy measures can be used to review the impact of effective environmental performance. Superior environmental management, which lowers possible environmental risks related to operating activities, is reflected in higher PROPER ratings. Effective environmental management improves a business's reputation and increases firm value by influencing stakeholder views.

Maximizing profit is the primary goal for profit-driven businesses. Following the accomplishment of this aim, other objectives are pursued in line with it, such as the disclosure of green accounting procedures. Profitability may, therefore, act as a mediator between green accounting practices and the firm's value total worth. External legitimacy indicators, like the PROPER rating, can be used to assess the efficacy and efficiency of environmental performance. A company with a higher PROPER score has strong environmental management capabilities, which reduces the possibility that its operations could cause environmental problems. By influencing stakeholders' opinions, effective environmental management enhances the business's reputation and increases firm value.

A business's ability to earn a profit from its assets is shown by profitability, which is frequently measured using return on assets (ROA) (Kasmir, 2014) Since the adoption of green accounting techniques and improved environmental performance can result in increased operational efficiency, cost reductions, and profit, it is imperative to examine profitability as a mediating element. This increased profitability raises the business's perceived worth among stakeholders and investors.

According to Stakeholder Theory, businesses must build strong bonds with their stakeholders and attend to their informational needs to maintain long-term sustainability. Green accounting disclosure is helpful since it shows the business's commitment to environmental stewardship and financial success. By giving stakeholders access to green accounting data, businesses provide them with the tools they need to make decisions, which fosters support and trust. This openness adds to the organization's overall worth and improves its reputation. Legitimacy theory further supports this idea, which shows that businesses aim for social legitimacy by integrating their operations with societal norms and values. As a result, through society's acceptability, good green accounting disclosure improves the organization's reputation and significantly increases business worth. Green accounting is positively associated with firm value, according to research by Dewi and Narayana (2020), Erlangga et al. (2021), Lestari and Khomsiyah (2023), and Nugroho (2023). Businesses that use green accounting techniques are dedicated to maximizing profits and addressing environmental issues. This improves stakeholder and investor confidence as well as the business's reputation. Furthermore, Zhou and Cui (2019) discovered that the issue of green bonds had a beneficial impact on company stock prices.

H_1: Disclosure of green accounting has a beneficial impact on firm value

Stakeholder Theory suggests that maintaining good stakeholder relationships is essential for company sustainability. As measured by programs like the PROPER rating, strong environmental performance demonstrates the business's commitment to addressing environmental issues and minimizing operational impact. This commitment strengthens trust and support from consumers and investors, which enhances the business's reputation and value. Legitimacy Theory posits that companies gain social legitimacy by adhering to accepted norms and standards, such as environmental regulations. Positive environmental performance helps secure this legitimacy, improving the business's standing and ultimately increasing its value. Companies with reasonable environmental performance show concern and attention to environmental issues, which can build a good reputation and increase company value (Rusman and Purnaman, 2020; Fauzi, 2022; and Wirawati et al., 2020). This positive reputation attracts consumers and investors, increasing the company's value. A good PROPER rating from the Ministry of Environment and Forestry (KLHK) can indicate good environmental performance, which builds a positive image of the company.

H_2: Environmental performance has a beneficial impact on firm value

Stakeholder Theory emphasizes that companies must meet stakeholder expectations, including environmental concerns. Greeb accounting helps companies identify operational efficiencies, such as cost savings in energy and raw material usage, which directly contribute to profitability. Additionally, green accounting demonstrates the business's commitment to sustainability, fostering consumer loyalty and trust. Legitimacy Theory further supports this by explaining that companies gain societal acceptance by adopting environmentally friendly practices. This legitimacy enhances the business's reputation, positively impacting profitability. Research by Chasbiandani et al. (2019), Budiono and Dura (2021), Ramadhani et al. (2022), and Suryaningsih et al. (2024) shows that green accounting has a beneficial impact on company profitability. Zhou and Cui (2019) find that green bond issuance positively impacts profitability.

H_3: Green accounting has a beneficial impact on profitability

Stakeholder Theory highlights that companies addressing stakeholder concerns, including environmental issues, are more likely to gain consumer trust and investor support. High environmental performance improves the business's image and attracts more consumers, driving higher sales and profit. Legitimacy Theory complements this by asserting that companies adhering to societal norms in environmental management gain legitimacy, increasing public and stakeholder trust. This trust translates into higher sales, profit, and overall financial performance. Companies that effectively manage environmental issues can generate economic benefits, good reputation, and trust from stakeholders, which have a positive impact on profitability (Ratusasi

& Prastiwi, 2021; Setiawan & Iswati, 2019; and Dewi & Wardani, 2022). A good PROPER rating increases consumer confidence in the business's products, increases sales, and ultimately profits.

H_4: Environmental performance has a beneficial impact on profitability

Stakeholder Theory explains that high profitability allows companies to meet better stakeholder needs, including those of investors and consumers. Profitability reflects operational efficiency and firm performance, which builds investor confidence and increases the business's market value. Legitimacy Theory aligns with this by suggesting that profitable companies are valued financially and viewed as legitimate and socially acceptable by stakeholders. Therefore, high profit reinforces the business's legitimacy and boosts its value. Companies with high profits are considered to have good performance and can attract more investors, increasing the company's value (Dewi & Narayana, 2020; Nugroho, 2023). A high rate of return indicates operational efficiency, increasing the stock price and demand for the stock.

H_5: Profitability has a beneficial impact on firm value

Stakeholder Theory argues that companies with substantial profits are better equipped to allocate resources toward green accounting practices, which often require important investment. By disclosing green accounting, companies demonstrate their commitment to environmental issues, enhancing their legitimacy in the eyes of society. High profitability enables companies to initiate and disclose green accounting practices effectively, improving their image and, consequently, their firm value. Legitimacy Theory further suggests that such disclosures contribute to societal acceptance and bolster the business's reputation, indirectly increasing its value.

H_6: Profitability mediates the effect of green accounting disclosure on firm value

Stakeholder Theory posits that environmental performance enhances the business's image, attracting consumers and investors and increasing profitability. Improved profitability indicates efficient resource management, which supports the business's growth and sustainability. Legitimacy Theory adds that companies demonstrating substantial environmental performance impact gain societal legitimacy, which fosters public trust. Higher profitability, driven by this trust and firm performance, attracts further investment, enhancing the business's market position and firm value. Research by Ramadhana and Juniartini (2022) states that company performance can mediate the influence of environmental performance on company value. High trust from the public and consumers in a company will increase profitability through its sales. Increased profitability will attract investors because companies that experience high profits will have the potential to provide high dividend distributions. In addition, the high dividend that the company will give will cause a positive response to attract investors to provide more capital injections and will impact increasing the company's value.

H_7: Profitability mediates the impact of environmental performance on firm value

METHODS

The quantitative methodology used in this study mainly draws from secondary data sources. Financial documents, annual reports, and sustainability reports from manufacturing companies from 2020 to 2022 are all included in the analysis. The Indonesia Stock Exchange's official website (www.idx.co.id), the websites of the individual companies, and the results of the Environmental Performance Rating Program (PROPER) for 2020–2022 published by the Ministry of Environment and Forestry of the Republic of Indonesia (KLHK) were the sources of these documents. The documentation approach is the data collection strategy used in this study. The study uses Eviews 10 software for statistical data analysis and hypothesis testing. This study used purposive sampling to select the samples (Table 1).

Table 1. Purposive Sampling Criteria

No.	Description	Total
1	The percentage of manufacturing companies that were listed on the Indonesia Stock Exchange from 2020 to 2022	167
2	Manufacturing companies have not been part of PROPER from 2020 to 2022	(98)
3	Manufacturing companies that did not provide financial reports, annual reports, and sustainability reports from 2020 to 2023	(12)
4	Number of companies that meet the criteria	57
5	Amount of observable data for at least three years from 2020 to 2022	171

Source: Data Processed (2024)

The company's value in this study was measured using Tobin's Q method. In this study, Tobin's Q was calculated using the financial statements of the first quarter after the year of the study; this study used the period from 2020 to 2022 where to find Tobin's Q, the necessary data was sought in the financial statements of the first quarter of 2021 to 2023. Green accounting is measured using dummy variables that pay attention to three costs disclosed in the company: environmental, operational, waste recycling, and environmental management. Environmental performance is a parameter to assess the company's achievements related to environmental aspects.

The environmental performance is proxied by acquiring a PROPER rating from the Ministry of Environment and Forestry of the Republic of Indonesia. Profitability in this study is proxied by Return On Asset (ROA) because ROA can show a company's ability to generate net income from total assets. ROA can measure the extent to which a company utilizes its assets to earn profits and the rate of return on investment by using all its assets. Table 2 shows the definition of the operational variables used in this study.

Table 2. Definition of the Operational Variables.

Variables	Indicator	Source
Firm value	$Tobin's\ Q = \frac{MVE_{t+1} + DEBT_{t+1}}{TA_{t+1}}$	(Melawati & Rahmawati, 2022)
Green accounting	1 = Environmental Cost 0 = Non-Environmental Cost	(Ikhsan, 2018)
Environmental performance	PROPER = Gold score 5, green score 4, blue score 3, red score 2, black score 1.	(Tiep Le et al., 2023) (Pamungkas et al., 2024)
Profitability	$ROA = \frac{Net\ Profit}{Assets\ Total} \times 100\%$	(Muslichah & Bahri, 2021)

Source: Previous Study

After obtaining the necessary data, data analysis, and processing are carried out to obtain findings in the form of information that solves or answers the problem statement in the study. This section describes the methods used to analyze and interpret the data: The study employs descriptive analysis, with hypothesis testing conducted using the path analysis method through multiple linear regression. The mediation model is reviewed using the Sobel test. Path analysis calculates the direct and indirect effects of the influence variables on the response outcome (Model 1 and Model 2).

Model 1:

$$ROA_{it} = \alpha + \beta_1 + GA_{it} + \beta_2 EP_{it} + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

Model 2:

$$Tobins\ Q_{it+1} = \alpha + \beta_1 GA_{it} + \beta_2 EP_{it} + \beta_3 ROA_{it} + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Where:

α	= Constanta
β	= Coefficient Regression Influences variable
ROA	= Return on Assets
GA	= Green Accounting
EP	= Environmental Performance
ε	= Error

RESULTS AND DISCUSSIONS

Table 3 displays the results of the descriptive statistical analysis conducted in this research. According to the findings shown in Table 1, the total number of observations (N) amounts to 171. This signifies that 171 data points were examined, including 57 companies listed on the IDX, throughout the three-year research timeframe from 2020 to 2022. The green accounting variable shows an average point of 0.67, with a standard deviation of 0.473, which is lower than the mean. This indicates that the data distribution for green accounting among the observed companies is relatively stable, with minimal variation between individual data points. The least amount for green accounting is 0, while the highest point is 1. The average point for the environmental performance variable is 3.052, and the standard deviation is 0.55, also lower than the mean. This suggests that the data distribution for environmental performance is relatively consistent, with low variability among the observed companies. The least amount recorded for this variable is 2, and the highest point is 5.

Table 3. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Green accounting	171	0	1	0.67	0.473
Environmental performance	171	2	5	3.052	0.555
Firm value	171	0.38	11.27	1.745	1.603
Profitability	171	-0.21	0.60	0.059	0.102
Valid N (listwise)	171				

Source: Data Processed with Eviews (2024)

On the other hand, the profitability variable has an average point of 0.059 and a standard deviation of 0.102, which is higher than the mean. This indicates important variability in profitability data among the companies studied. The lowest recorded profitability point is -0.210, observed in Martina Berto Tbk in 2021, while the highest profitability point is 0.60, achieved by FKS Food Sejahtera Tbk in 2020. The firm value variable's average point is 1.745, with a standard deviation of 1.603, which is lower than the mean. This suggests a uniform distribution of firm value data among the analyzed companies, with minimal variation. The lowest equity point recorded is 0.38, observed in Kabelindo Murni Tbk in 2021, while the highest equity point is 11.27, achieved by Unilever Indonesia Tbk in 2020.

Calculation of path coefficients and determining model equations Structural

The data testing in this study used the path analysis technique (Path Analysis), where path analysis is an extension of multiple linear regression analysis to test the causal relationship between 2 or more variables. The calculation of the path coefficient was carried out using reviews, and the results are shown in Tables 4 and 5. Based on the substructure two path analysis outline in Table 4, we can formulate the structural equation (Equation 3). The regression analysis indicates a positive relationship between green accounting and environmental performance. With an importance point of 0.000, which is less than the threshold of 0.05, it can be concluded that green accounting and environmental performance have an important positive impact on profitability (ROA). Findings from the substructure two path analysis outline in Table 5, we can formulate the structural equation (Equation 4).

Table 4. Path Analysis Test Results (Structure 1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Green accounting	0.594	0.089	6.624	0.000
Proper	0.400	0.091	4.397	0.000
C	0.019	0.067	0.286	0.775

Source: Data Processed with Eviews (2024)

$$ROA = 0{,}594\, X_1 + 0{,}400\, X_2 + \varepsilon_1 \quad \text{(3)}$$

Table 5. Path Analysis Test Results (Structure 2)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Green Accounting	0.222	0.040	5.471	0.000
Proper	0.170	0.037	4.498	0.000
ROA	0.242	0.036	6.702	0.000
C	-0.021	0.025	-0.819	0.414

Source: Data Processed with Eviews (2024)

$$Y = 0{,}222\, X_1 + 0{,}170\, X_2 + 0{,}242\, Z + \varepsilon_2 \quad \text{(4)}$$

With an importance point of 0.000, or less than 0.05, the regression analysis shows a positive correlation between green accounting, environmental performance, and profitability (as determined by ROA). This implies that the equity point variable, which Tobin's Q represents, is positively impacted by green accounting, environmental performance, and profitability (ROA). The determination coefficient essentially measures how far the ability can go the model in explaining the variation of dependent variables. The results of Path Analysis based on Structural Equation 1, reveal an R-squared point of 0.725. This indicates that 72.51% of the variation in profitability (ROA) is influenced by variations in green accounting (X1) and environmental performance (X2). The remaining 27.49% is attributed to other factors not included in the model. Table 6 shows the summary of the hypothesis testing result for the direct effect.

Table 6. Summary of Hypotheses Testing Result (Direct Effect)

Hypothesis	Hypothesis Statement	β	Sig.	Result
H1	Disclosure of green accounting has a beneficial impact on firm value	0.594	0.000	Accepted
H2	Environmental performance has a beneficial impact on firm value.	0.400	0.000	Accepted
H3	Green accounting has a beneficial impact on profitability.	0.222	0.000	Accepted
H4	Environmental performance has a beneficial impact on profitability.	0.170	0.000	Accepted
H5	Profitability has a beneficial impact on firm value.	0.242	0.000	Accepted

Source: Data Processed with Eviews (2024)

In Path Analysis based on Structural Equation 2 shows an R-squared point of 0.910. This means that 91.01% of the variation in the firm (Tobin's Q) is explained by variations in green accounting (X1), environmental performance (X2), and profitability (ROA). The remaining 8.99% is due to other factors outside the scope of the model. Table 7 shows the summary of the indirect effect's result.

Table 7. Summary of Hypotheses Testing Result (Indirect Effect)

Hypothesis	Hypothesis Statement	Sobel test result (S)	Sobel test result (M)	Result
H6	Profitability mediates the effect of green accounting disclosure on firm value.	0.030	4.711	Accepted
H7	Profitability mediates the effect of environmental performance on firm value.	0.026	3.676	Accepted

Source: Data Processed with Eviews (2024)

Sobel Test Results (Testing Indirect Influence)

To test the importance of the indirect effect of profitability mediating green accounting on firm value, with the following formula:

$$S_{b1b7} = \sqrt{b7^2 S_{b1}^2 + b1^2 S_{b7}^2} \quad \text{.............} (5)$$

$$S_{\beta 1 \beta 7} = \sqrt{(0.242)^2(0.089)^2 + (0.242)^2(0.036)^2}$$

$$S_{b1b7} = 0.030$$

Description:

Sb1b7	= the range of indirect standard error
Sb1	= the standard error of coefficient b1
Sb7	= the standard error of coefficient b7
b1	= the path from X_1 to Y_1
b7	= the path from Y_1 on Y_2
b1b7	= the path from X_1 to Y_1 (b_1), the path from Y_1 to Y_2 (b7)

Use the following formula to determine the ab coefficient's M point in order to assess the indirect effect's importance:

$$M = \frac{b1b7}{Sb1b7} \quad \text{.............} (6)$$

$$M = \frac{(0.594)(0.242)}{0.030} = 4.711$$

According to the data of the previously mentioned computations, M concludes that the indirect effect of profitability as a mediator between firm value and green accounting is 4.711, surpassing the 1.96 criterion. This suggests that profitability mediates the relationship between green accounting and firm value. The following formula will be applied in order to review the importance of the indirect influence of profitability mediating environmental performance impact on firm value:

$$S_{b2b7} = \sqrt{b7^2 S_{b2}^2 + b1^2 S_{b7}^2} \quad \text{.............} (7)$$

$$S_{\beta 1 \beta 7} = \sqrt{(0.242)^2(0.091)^2 + (0.400)^2(0.036)^2}$$

$$S_{b1b7} = 0.026$$

Description:

Sb2b7	= the range of the indirect standard error
Sb2	= the standard error of coefficient b2

Sb7	= the standard error of coefficient b7
b2	= the path from X_2 to Y_2
b7	= the path from Y_2 on Y_2
b2b7	= the path from X_2 to Y_2 (b_2) the path from Y_2 to Y_2 (b7)

Use the following formula to determine the ab coefficient's M point in order to assess the indirect effect's importance:

$$M = \frac{b1b7}{Sb1b7} \qquad (8)$$

$$M = \frac{(0.400)(0.242)}{0.026} = 3.676$$

According to the data of the above calculations, the M point for the indirect effect of profitability mediating environmental performance on firm value is 3.676, which is greater than 1.96. This indicates that profitability is a variable that mediates the relationship between environmental performance and firm value.

The effect of green accounting implementation impact on firm value

With a regression coefficient of 0.222 and a p-point of 0.000, the analysis's findings show that green accounting has a statistically important impact on business points. The disclosure of green accounting appears to positively impact business points, as indicated by the p-point of 0.000, which is less than 0.05. This investigation demonstrates that transparency in green accounting procedures increases corporate points. Improved use of green accounting builds investor and stakeholder trust, which raises the company's point. Businesses that use green accounting are seen as profit-driven and ecologically conscious, enhancing their brand and increasing stakeholder trust in their sustainability initiatives.

This viewpoint is in line with stakeholder theory, which holds that companies should act to serve the interests of their stakeholders by being socially and ecologically responsible in addition to their own. Companies that initiate environmentally friendly practices can increase their worth by building trust, improving their reputation, and winning over stakeholders. As a result, green accounting becomes more than just an environmental management tool; it becomes an essential business strategy for attaining long-term growth and sustainability. Pedron et al. (2021) state that environmental disclosure raises a business's point. Furthermore, Zhou and Cui (2019) discovered that the issue of green bonds had a beneficial impact on company stock prices. Additionally, Purbawangsa et al. (2020) found that CSR disclosures increase firm value.

The effect of environmental performance impact on firm value

With a regression coefficient of 0.170, the research shows that the impact of environmental performance on business points has an importance point of 0.000. The correlation between environmental performance and firm value is positive, as indicated by the importance point 0.000, which is less than 0.05. The results indicate that improvements in environmental performance are associated with higher business points. This relationship is explained by the fact that businesses that effectively handle environmental issues demonstrate a strong commitment to sustainability, which enhances their reputation. A positive reputation increases shareholder support and trust, raising the firm's worth. Stakeholder theory, which holds that businesses must satisfy the demands and expectations of their stakeholders, is in line with this conclusion. Businesses provide crucial information that builds confidence with stakeholders by disclosing environmental performance in sustainability disclosures. This ensures their continued support and improves the organization's long-term viability. According to Rusman and Purnaman (2020), and Fauzi (2022), environmental performance positively impacts company points since businesses that successfully handle environmental concerns can generate revenue, build a solid reputation, and win over stakeholders.

The effect of green accounting implementation impact on profitability

The analysis results show that the importance point for the effect of green accounting on profitability is 0.000, and the regression coefficient is 0.594. An importance point of 0.000, less than 0.05, indicates that green accounting disclosure positively impacts profitability. The positive correlation between green accounting and profitability arises because green accounting helps companies communicate environmental costs to internal and external stakeholders. It acts as a tool for managing and disclosing the economic impacts of corporate environmental responsibilities, ultimately improving transparency. Companies can reduce current and future costs by addressing environmental concerns, potentially leading to higher profits. This approach strengthens the business's competitive advantage and supports sustainable growth. These findings are consistent with legitimacy theory, which suggests that organizations aim to align their activities with societal points and norms to gain legitimacy. Companies must fulfill their environmental obligations to maintain legitimacy and garner positive stakeholder responses. Ramadhani et al. (2022), Yulianingsih and Wahyuni (2023), and Suryaningsih et al. (2024) have also stated that green accounting positively affects financial performance. Implementing green accounting can boost consumer and stakeholder confidence as consumers increasingly recognize the importance of environmental preservation. This, in turn, encourages consumers to purchase environmentally friendly products perceived as safer.

The effect of environmental performance impact on profitability

The analysis results show an importance point of 0.000 and a regression coefficient of 0.400 for the effect of environmental performance on profitability. Since the importance point of 0.000 is less than 0.05, it indicates that environmental performance benefits profitability. This implies that as environmental performance improves, profit tends to increase. The positive relationship between environmental performance and profitability can be explained by the fact that better environmental performance enhances public perception of a business's financial strength. This positive image increases consumer trust and product sales, resulting in higher profits. Dewi and Wardani (2022), Kalash (2021), and Setiawan and Iswati (2019) also found that environmental performance positively influences company profitability. De Mendonca and Zhou's (2019) research also revealed an important relationship between environmental performance and customer satisfaction, where a business's environmental efforts influence customers' perceptions of quality and point. As a result, customers are more likely to be drawn to companies that prioritize environmental welfare.

The effect of profitability on firm value

The analysis results of the importance point of the effect of profitability on firm value is 0,000, and the regression coefficient point is 0,242. The importance point of 0,000 <0,050 indicates that profitability has a beneficial impact on firm value. The results can be interpreted as follows: the higher the profit generated, the more the company's point will increase. The existence of a positive relationship between profitability variables and firm value is important because profitability can influence the business's ability to meet the needs and interests of stakeholders. This research is in line with research by Nugroho (2023), Dewi and Narayana (2020), and Sudimas et al. (2023), who stated that profitability has a beneficial impact on firm value. Investors will consider the profitability ratio as the leading indicator in assessing the potential return on their investment. If the profitability ratio point shows high efficiency in generating returns, investors will view positively that the investment they make will provide a satisfactory return. The level of return achieved gives an idea of how well investors point the company. If the company proves its high profitability, it will encourage investors to invest, potentially increasing the stock price and demand.

Profitability mediates the effect of green accounting implementation on firm value.

The results of the indirect effect analysis with the Sobel test show an M count of 4,711> 1,96. This means that profitability can mediate the effect of green accounting on firm value. The results of this study mean that the better the implementation of green accounting will encourage increased profitability, then high profitability will further increase the firm value. The test results of green accounting disclosure, which has an important indirect effect on firm value through profitability, are because when the company has achieved good profit, then the company will disclose green accounting to obtain a public image and legitimacy from the community. This is because disclosure of green accounting requires much money, in-depth study, and a relatively long time. So, companies must consider many factors before disclosing green accounting, considering it is still voluntary. This study's results align with research conducted by Nugroho (2023).

Profitability mediates the effect of environmental performance on firm value.

The results of the indirect effect analysis with the Sobel test show that the M count is 3,676 > 1,96. This means that profitability can mediate the effect of environmental performance on firm value. The results of this study mean that the better the implementation of environmental performance will encourage increased profitability, then high profitability will further increase firm value. The test results of environmental performance have an important indirect effect on firm value through profitability because the better the rating obtained, the better the business's ability to carry out environmental management and the smaller the chance of the impact of environmental problems that occur due to the business's operational activities. Good environmental management will improve the business's reputation. The good reputation obtained by the company will influence the business's point of view because it can build stakeholders' perceptions of the company. This study's results align with research conducted by Elisabeth and Maria and Elisabeth (2022).

CONCLUSIONS

This study provides empirical evidence on the impact of green accounting implementation and environmental performance on firm value, with profitability as a mediator. The findings show that green accounting and environmental performance positively influence firm value and profitability, while profitability also positively influences firm value. Moreover, profitability mediates the relationship between green accounting, environmental performance, and firm value. The study has limitations, including its focus on whether companies disclose green accounting costs without evaluating the efficiency or effectiveness of those costs. The periods used to measure green accounting, environmental performance, and firm value variables differ. Future research could explore alternative measurement proxies, such as total costs for green accounting, price-to-book point or price-to-earnings ratio (PER) for firm value, and ROE or ROI for profitability. Researchers could also consider more extended periods to assess the long-term effects of green accounting and environmental performance on firm value.

REFERENCES

Budiono, S., & Dura, J. (2021). The effect of green accounting implementation on profitability in Companies Compass Index 100. *International Journal of Educational Research & Social Sciences, 2*(6), 1526–1534. https://doi.org/10.51601/ijersc.v2i6.216.

Cahyani, R. S. A., & Puspitasari, W. (2023). Pengaruh kinerja lingkungan, biaya lingkungan, kepemilikan saham publik, green accounting, dan struktur modal terhadap kinerja keuangan. *Jurnal Akuntansi Trisakti, 10*(2), 189–208. https://doi.org/10.25105/jat.v10i2.17846.

Chasbiandani, T., Rizal, N., & Indra, S. (2019). Penerapan green accounting terhadap profitabitas perusahaan di Indonesia. *Accounting and Financial Review, 2*(2), 126–132. https://doi.org/10.26905/afr.v2i2.3722.

Cho, S. J., Chung, C. Y., & Young, J. (2019). Study on the relationship between CSR and financial performance. *Sustainability, 11*(2), 343. https://doi.org/10.3390/su11020343.

Damayanthi, I. G. A. E. (2019). Fenomena faktor yang mempengaruhi nilai perusahaan. *Jurnal Ilmiah Akuntansi dan Bisnis, 14*(2), 208-218. https://doi.org/10.24843/jiab.2019.v14.i02.p06.

De Mendonca, T. R., & Zhou, Y. (2019). Environmental performance, customer satisfaction, and profitability: A study among large U.S. companies. *Sustainability, 11*(19), 5418. https:// doi. org/10.3390/su11195418.

Dewi, P. P., & Narayana, I. P. E. (2020). Implementasi green accounting, profitabilitas dan corporate social responsibility pada nilai perusahaan. *E-Jurnal Akuntansi, 30*(12), 3252. https://doi.org/10.24843/ eja.2020.v30.i12.p20.

Dewi, P. P., & Wardani, I. D. S. (2022). Green accounting, pengungkapan corporate social responsibility dan profitabilitas perusahaan manufaktur. *E-Jurnal Akuntansi, 32*(5), https://doi.org/10.24843/ EJA.2022.v32.i05.p01.

Elkington, J. (1997). The triple bottom line. *Environmental Management: Readings and Cases, 2*, 49–66. https://doi.org/10.4324/9781849773348.

El-Mohr, S. I., Elshahat, I., Elshahat, A., & Hassan, M. B. (2021). The association between environmental performance and financial performance: The case of Egypt. *Academy of Accounting and Financial Studies Journal, 25*(6), 1-16. https://www.abacademies.org/abstract/the-association-between-environmental-performance-and-financial-performance-the-case-of-egypt-11674.html.

Erlangga, C. M., Fauzi, A., & Sumiati, A. (2021). Penerapan green accounting dan corporate social responsibility disclosure terhadap nilai perusahaan melalui profitabilitas. *Akuntabilitas, 14(*1), 61–78. https://doi.org/10.15408/akt.v14i1.20749.

Fadhilah, A. T., Suharman, H., & Handoyo, S. (2021). The determinants of environmental performance: A study on Indonesia listed firms. *Journal of Accounting Auditing and Business, 4*(2), 70–79. https://doi. org/10.24198/jaab.v4i2.34944.

Faizah, B. S. Q. (2020). Penerapan green accounting terhadap kinerja keuangan. *Jurnal Riset Akuntansi Kontemporer, 12*(2), 94–99. https://doi.org/10.23969/jrak.v12i2.2779.

Fauzi, T. H. (2022). The effect of environmental performance on firm value with mediating role of financial performance in manufacturing companies in Indonesia. *Academic Journal of Interdisciplinary Studies, 11*(3), 256–265. https://doi.org/10.36941/ajis-2022-0081.

Han, M., Lin, H., Wang, J., Wang, Y., & Jiang, W. (2019). Turning corporate environmental ethics into firm performance: The role of green marketing programs. *Business Strategy and the Environment, 28*(6), 929–938. https://doi.org/10.1002/bse.2290.

Ikhsan, A. (2018). *Akuntansi Lingkungan dan Pengungkapannya*. Yogyakarta: Graha Ilmu.

Kalash, I. (2021). The impact of environmental performance on capital structure and firm performance: The case of Turkey. *Society and Business Review*, *16*(2), 255–277. https://doi.org/10.1108/SBR-11-2020-0138.

Kanzari, A., Rasmussen, J., Nehler, H., & Ingelsson, F. (2022). How financial performance is addressed in light of the transition to circular business models - A systematic literature review. *Journal of Cleaner Production, 376*, 134134. https://doi.org/10.1016/j.jclepro.2022.134134.

Kasmir. (2014). *Analisis Laporan Keuangan (7th ed.).* Jakarta: PT Raja Grafindo.

Kelly, S. G., & Henny, D. (2023). Pengaruh green accounting dan kinerja lingkungan terhadap nilai perusahaan dengan profitabilitas sebagai variabel moderasi. *Jurnal Ekonomi Trisakti*, *3*(2), 3301–3310. https://doi.org/10.25105/jet.v3i2.18051.

Kusuma, A., & Anggraini, D. I. (2023). Pengaruh penerapan green accounting terhadap profitabilitas pada perusahaan manufaktur. *Jurnal Ekonomi, Bisnis, dan Sosial, 1*(1), 161-171 https://jurnal.uwp.ac.id/ feb/index.php/jebs/article/view/193.

Lako, A. (2018). Conceptual framework of green accounting. *Accounting*, 60-66. https://repository.unika. ac.id/19994/1/ConceptualFrameworkofGreenAccounting-1%20-%20artikel%205.pdf

Lestari, A. D., & Khomsiyah. (2023). Pengaruh kinerja lingkungan, penerapan green accounting, dan pengungkapan sustainability report terhadap nilai perusahaan. *Jurnal Ekonomi Bisnis, Manajemen dan Akuntansi, 3*(3), 2797–7161. https://doi.org/doi.org/jebma.v3n3.2799.

Maria, E., & Elisabeth, Y. (2022). Analisis penerapan green accounting dan kinerja lingkungan terhadap harga saham melalui profitabilitas perusahaan. Dinamika Ekonomi: *Jurnal Ekonomi Dan Bisnis, 15*(2), 375-392. https://doi.org/10.53651/jdeb.v15i2.381.

Melawati, H. G., & Rahmawati, M. I. (2022). Pengaruh green accounting dan pengungkapan CSR terhadap nilai perusahaan: Profitabilitas sebagai variabel mediasi. *Jurnal Ilmu dan Riset Akuntansi, 11*(6). https://jurnalmahasiswa.stiesia.ac.id/index.php/jira/article/view/4626.

Nogueira, E., Gomes, S., & Lopes, J. M. (2023). A meta-regression analysis of environmental sustainability practices and firm performance. *Journal of Cleaner Production, 426*, 139048. https://doi.org/10.1016/j.jclepro.2023.139048.

Nugroho, W. C. (2023). Efek mediasi profitabilitas pada pengaruh green accounting terhadap nilai perusahaan. *E-Jurnal Akuntansi, 33*(3), 648. https://doi.org/10.24843/eja.2023.v33.i03.p05.

Pamungkas, I. D., Raihan, M. R., Satata, D. P. I., & Kristianto, A. Y. (2024). Impact of corporate social responsibility between green accounting and sustainable development goals. *Jurnal Dinamika Akuntansi, 16*(1), 43-57. https://doi.org/10.15294/jda.v16i1.48675.

Pedron, A. P. B., Macagnan, C. B., Simon, D. S., & Vancin, D. F. (2021). Environmental disclosure effects on returns and market value. *Environment, Development and Sustainability, 23*(3), 4614–4633. https://doi.org/10.1007/s10668-020-00790-2.

Pratiwi, A. S., & Hidayah, R. (2023). The influence of corporate social responsibility in mediating relationships green accounting on financial performance. *Management Studies and Entrepreneurship Journal, 4*(5), 5530-5541. http://journal.yrpipku.com/index.php/msej.

Purbawangsa, I. B. A., Solimun, S., Fernandes, A. A. R., & Rahayu, S. M. (2019). Corporate governance, corporate profitability toward corporate social responsibility disclosure and corporate value (comparative study in Indonesia, China, and India stock exchange in 2013-2016). *Social Responsibility Journal, 16*(7), 983–999. https://doi.org/10.1108/SRJ-08-2017-0160.

Ramadhana, M. L., & Januarti, I. (2022). Pengaruh kinerja lingkungan dan kinerja keuangan terhadap nilai perusahaan. *Diponegoro Journal of Accounting, 11*(1), 1–14. https://ejournal3.undip.ac.id/index.php/accounting/article/download/32957/26322.

Ramadhani, K., Saputra, M. S., & Wahyuni, L. (2022). Pengaruh penerapan green accounting dan kinerja lingkungan terhadap kinerja keuangan dengan tata kelola perusahaan sebagai variabel moderasi. *Jurnal Akuntansi Trisakti, 9*(2), 229–244. https://doi.org/10.25105/jat.v9i2.14559.

Ratusasi, M. L., & Prastiwi, A. (2021). *Pengaruh penerapan green accounting terhadap kinerja perusahaan sektor pertambangan dan industri semen yang terdaftar di BEI pada tahun 2015-2018.* [Skripsi Sarjana, Universitas Brawijaya]. https://repository.ub.ac.id/id/eprint/194673/.

Riyadh, H. A., Al-Shmam, M. A., Huang, H. H., Gunawan, B., & Alfaiza, S. A. (2020). The analysis of green accounting cost impact on corporations financial performance. *International Journal of Energy Economics and Policy, 10*(6), 421–426. https://doi.org/10.32479/ijeep.9238.

Rusmana, O., & Purnaman, S. M. N. (2020). Pengaruh pengungkapan emisi karbon dan kinerja lingkungan terhadap nilai perusahaan. *Jurnal Ekonomi, Bisnis dan Akuntansi, 22*(1), 42-52. https://doi.org/10.32424/jeba.v22i1.1563.

Setiawan, P., & Iswati, S. (2019). Carbon emissions disclosure, environmental management system, and environmental performance: Evidence from the plantation industries in Indonesia. *Indonesian Journal of Sustainability Accounting and Management, 3*(2), 215. https://doi.org/10.28992/ijsam.v3i2.99.

Sudimas, M. R., Ramdany, R., & Ispriyahadi, H. (2023). Does financial performance mediate the impact of green accounting and environmental performance on firm value? *Journal of Governance Risk Management Compliance and Sustainability, 3*(1), 58–73. https://doi.org/10.31098/jgrcs.v3i1.1487.

Suryaningsih, M. S., Susilawati, S. S., & Novianti, R. (2024). The effect of green accounting implementation and corporate social responsibility on company profitability. *Economic Studies, 33*(6), 180-196. https://ideas.repec.org/a/bas/econst/y2024i6p180-198.html.

Tiep Le, T., Ngo, H. Q., & Aureliano-Silva, L. (2023). Contribution of corporate social responsibility on SMEs' performance in an emerging market – the mediating roles of brand trust and brand loyalty. *International Journal of Emerging Markets, 18*(8), 1868–1891. https://doi.org/10.1108/IJOEM-12-2020-1516.

Tjoa, E. V., & Patricia, L. (2022). Green accounting, environmental performance, and profitability: empirical evidence on high profile industry in Indonesia. *Research In Management and Accounting, 5*(2), 93–105. https://doi.org/10.33508/rima.v5i2.4158.

Wardianda, A. B. W., & Slamet Wiyono. (2023). Pengaruh green accounting terhadap kinerja keuangan dengan moderasi corporate governance terhadap perusahaan properti dan real estate yang terdaftar pada Bursa Efek Indonesia (BEI) tahun 2018-2021. *Jurnal Ekonomi Trisakti, 3*(2), 3183–3190. https://doi.org/10.25105/jet.v3i2.17411.

Wirawati, N. G. P., Putri, I. G. A. M. A. D., & Badera, I. D. N. (2020). Pengaruh ukuran perusahaan, leverage, pengungkapan lingkungan, dan kinerja lingkungan pada nilai perusahaan. *E-Jurnal Akuntansi, 30*(9), 2417. https://doi.org/10.24843/eja.2020.v30.i09.p19.

Yulianingsih, N. M., & Wahyuni, A. (2023). Pengaruh penerapan green accounting, intellectual capital, kepemilikan manajerial dan manajemen laba terhadap kinerja keuangan pada perusahaan pertambangan. *Jurnal Akuntansi Profesi, 14*(1), 133-146. https://doi.org/10.23887/jippg.v3i2.

Zhou, X., & Cui, Y. (2019). Green bonds, corporate performance, and corporate social responsibility. *Sustainability, 11*(23), 6881. https://doi.org/10.3390/su11236881.