



THE EFFECT OF GREEN ACCOUNTING AND CORPORATE SOCIAL RESPONSIBILITY ON COMPANY VALUE WITH FINANCIAL PERFORMANCE AS A MEDIATION VARIABLE IN THE BASIC AND CHEMICAL INDUSTRY SECTORS ON THE INDONESIA STOCK EXCHANGE (IDX) (PERIOD 2023–2024)

Aldypie Angger Kinanthi, Ati Sumiati, Unggul Purwohedi

Faculty of Economics and Business, Universitas Negeri Jakarta, Indonesia

Abstract

This study examines the effects of green accounting and corporate social responsibility (CSR) on company value and tests financial performance as a mediating variable. The population comprises basic and chemical industry companies listed on the Indonesia Stock Exchange in 2023–2024. Purposive sampling produced 42 firm-year observations. Green accounting is measured by the natural logarithm of environmental costs, CSR by a disclosure index based on 119 Global Reporting Initiative indicators, financial performance by return on equity (ROE), and company value by price-to-book value (PBV). The data were analyzed using descriptive statistics, classical assumption tests, path analysis, and the Sobel test. The results show that green accounting, CSR, and ROE do not have significant direct effects on company value. Green accounting and CSR also do not significantly affect ROE. The indirect-effect results do not consistently support Financial Performance as a mediating variable, indicating that the indirect effects of both CSR and Green Accounting are also not significant. These findings indicate that sustainability spending and disclosure were not yet priced by investors during the short observation period. Companies should therefore connect environmental and social initiatives to measurable operational efficiency, risk reduction, and long-term financial outcomes rather than treating them primarily as compliance disclosures.

Keywords: green accounting; corporate social responsibility; company value; financial performance; mediation

BACKGROUND

Company value reflects market confidence in a company's current condition and future prospects and is commonly associated with share prices. For companies in the basic and chemical industry, value creation is particularly challenging because production processes are closely connected to resource consumption, emissions, waste, and community impacts. The IDX basic materials sector index fluctuated during 2020–2024 and declined from 1,307.47 in 2023 to 1,251.87 in 2024, illustrating the market uncertainty faced by firms in this sector.

Sectoral Index Development – IDX Raw Goods Sector				
2020	2021	2022	2023	2024
920,97	1 234,38	1.216,13	1.307,47	1.251,87

Based on the IDC Raw Materials Sector Index processed by the Financial Services Authority (OJK), the index fluctuated between 2020 and 2024, indicating the unstable performance of basic and chemical industry companies. In 2024, there was a 55.6-point decline compared to 2023, which saw a 91.34-point increase compared to 2022. This indicates a decline in the value of companies in the raw materials sector, also known as the basic and chemical industry. This should be the focus of company management in designing strategies that can increase company value, which in turn will increase investor wealth (Komala et al., 2021). Therefore, a high company value will increase investor confidence in investing in the company, which will positively impact the company's development and sustainability. The stakeholder perspective expands corporate responsibility beyond shareholders. Companies are expected to balance profit, people, and planet by managing environmental impacts and maintaining constructive relationships with employees, consumers, communities, regulators, and investors. Green accounting responds to this expectation by identifying, measuring, and disclosing environmental costs. In principle, transparent environmental accounting can improve resource efficiency, reduce environmental risk, strengthen legitimacy, and support sustainable value creation (Lako, 2018; Anggita et al., 2022).

CSR similarly represents a company's commitment to social and environmental accountability. High-quality CSR may enhance reputation and stakeholder trust, yet its financial consequences are not automatic. Investors may perceive environmental and social expenditure as a current cost when benefits are uncertain or take time to materialize. Prior studies consequently report mixed results: some find positive effects on company value or profitability, while others find insignificant effects (Erlangga et al., 2021; Martini et al., 2022; Hutabarat, 2024).



Financial performance may provide the mechanism through which sustainability practices become economically visible. When green accounting and CSR improve efficiency, reduce risk, or strengthen demand, profitability can rise and subsequently be rewarded by the market. This study therefore tests both direct relationships and the mediating role of ROE in the relationship between green accounting, CSR, and PBV in Indonesian basic and chemical industry companies during 2023–2024.

Based on the research background above, the research questions in this study are formulated as follows:

- 1. Does Green Accounting have an effect on Company Value?
- 2. Does Corporate Social Responsibility have an effect on Company Value?
- 3. Does Financial Performance have an effect on Company Value?
- 4. Does Green Accounting have an effect on Financial Performance?
- 5. Does Corporate Social Responsibility have an effect on Financial Performance?
- 6. Does Financial Performance mediate the effect of Green Accounting on Company Value?
- 7. Does Financial Performance mediate the effect of Corporate Social Responsibility on Company Value?

THEORETICAL FRAMEWORK AND HYPOTHESES

Stakeholder theory and sustainability practices

Stakeholder theory holds that corporate survival depends on the organization’s ability to create and distribute value among parties that affect or are affected by corporate activity. Environmental cost recognition and CSR disclosure function as accountability mechanisms. However, disclosure can influence valuation only when stakeholders consider it credible, relevant, and economically consequential. This study proposes seven hypotheses: green accounting and CSR affect company value; financial performance affects company value; green accounting and CSR affect financial performance; and financial performance mediates each sustainability–value relationship.

Code	Hypothesis
H1	Green Accounting has an effect on Company Value.
H2	Corporate Social Responsibility has an effect on Company Value.
H3	Financial Performance has an effect on Company Value.
H4	Green Accounting has an effect on Financial Performance.
H5	Corporate Social Responsibility has an effect on Financial Performance.
H6	Financial Performance mediates the effect of Green Accounting on Company Value.
H7	Financial Performance mediates the effect of Corporate Social Responsibility on Company Value.

METHOD

This quantitative explanatory study uses secondary data from annual reports, sustainability reports, and financial statements published by companies and the Indonesia Stock Exchange. The population consists of basic and chemical industry companies listed on the IDX. Purposive sampling required companies to be listed during 2023–2024, publish the required reports, disclose environmental cost information, and provide complete data for all variables. The final dataset contains 42 observations.

Variable	Operational measure
Company value (Y)	Price-to-book value (PBV): market price per share divided by book value per share.
Green accounting (X1)	Natural logarithm of disclosed environmental costs.
CSR (X2)	CSR disclosure index: disclosed GRI 2021 items divided by 119 applicable indicators; an item receives 1 if disclosed and 0 otherwise.
Financial performance (Z)	Return on equity (ROE): net income divided by total equity.

Descriptive statistics were followed by normality, multicollinearity, heteroskedasticity, and autocorrelation tests. Path analysis estimated (1) the effects of green accounting and CSR on ROE and (2) the effects of green accounting, CSR, and ROE on PBV. Statistical significance was evaluated at $\alpha = 0.05$. Indirect effects were assessed using the Sobel test. Because mediation requires an interpretable indirect pathway, the Sobel statistics were evaluated together with the significance and direction of their constituent paths.



RESULTS

Descriptive statistics and model diagnostics

Variable	PBV	GA	CSR	ROE
Mean	0.7133	21.5115	0.5947	0.0309
Maximum	1.6706	26.240	0.9789	0.1928
Minumum	0.0007	16.851	0.3529	-0.3031
Std. Dev.	0.3969	2.2946	0.1353	0.1043

PBV, green accounting, and CSR show standard deviations below their means, whereas ROE is comparatively heterogeneous and includes loss-making firms. The residual normality test reports probability 0.493. VIF values for green accounting and CSR are 1.21, indicating no serious multicollinearity. The heteroskedasticity test reports Prob. Chi-Square of 0.2726, and the Durbin–Watson statistic is 2.098. Collectively, these diagnostics do not indicate violations severe enough to preclude the reported path analysis.

Path analysis

Path	Coefficient	Std. error	t-statistic	p-value	Decision
Green accounting → PBV	0.057661	0.030104	1.915423	0.0630	Not significant
CSR → PBV	-0.904067	0.500555	-1.806127	0.0788	Not significant
ROE → PBV	0.449275	0.591512	0.759536	0.4522	Not significant
Green accounting → ROE	0.013304	0.007866	1.691390	0.0987	Not significant
CSR → ROE	-0.149533	0.133373	-1.121167	0.2691	Not significant

None of the five direct paths is significant at the 5% level. Accordingly, H1–H5 are not supported. The explanatory power is also modest: green accounting, CSR, and ROE explain 14.76% of the variation in PBV ($R^2 = 0.147640$), while green accounting and CSR explain 7.18% of the variation in ROE ($R^2 = 0.071870$). Most variation in company value and financial performance is therefore attributable to factors outside the model.

Mediation assessment

Indirect relationship	Reported Sobel z	Interpretation at $ z > 1.96$
Green accounting → ROE → PBV	0.69288	Not significant
CSR → ROE → PBV	-0.62882	Not significant

The results indicate that Financial Performance does not mediate the effect of Green Accounting on Company Value, with a Z-value of 0.69288, which is below the critical value of 1.96. Similarly, Financial Performance does not mediate the effect of Corporate Social Responsibility on Company Value, with a Z-value of -0.62882, which is also below 1.96. H6 and H7 are not supported.

DISCUSSION

Green accounting, CSR, and company value

Green accounting does not significantly affect PBV. Although environmental expenditure signals corporate responsibility, investors may not immediately translate such spending into higher valuation. During a two-year window, environmental costs can be perceived as expenses rather than investments, particularly when disclosures do not demonstrate quantifiable efficiency gains, avoided liabilities, or new revenue. This result is consistent with evidence that market appreciation of environmental accounting depends on profitability, firm characteristics, disclosure quality, and the maturity of sustainability practices (Martini et al., 2022; Hutabarat, 2024).

CSR also has no significant direct effect on PBV. The negative coefficient should not be interpreted as a reliable economic effect because it is statistically insignificant. The finding suggests that the quantity of GRI items disclosed may not capture program quality, credibility, or materiality. Investors may continue to prioritize conventional fundamentals and may discount generic or compliance-oriented disclosure. CSR is more likely to influence value when initiatives are strategically connected to stakeholder risks and their outcomes are communicated consistently.

Sustainability practices and financial performance

Neither green accounting nor CSR significantly affects ROE. Environmental and social investments often require initial expenditure, while benefits such as resource efficiency, reputation, customer loyalty, and lower regulatory risk accumulate



over longer periods. The 2023–2024 period may therefore be insufficient to observe the financial return from such practices. The heterogeneous ROE distribution also indicates that firm-specific profitability conditions may dominate sustainability-related effects.

Financial performance and mediation

ROE does not significantly affect PBV in the estimated model. Company value in the sector may be shaped by growth expectations, leverage, commodity prices, capital intensity, macroeconomic conditions, and risk, none of which is represented in the model. More importantly, the insignificant paths from green accounting and CSR to ROE and from ROE to PBV provide no coherent evidence of mediation. This interpretation corrects the contradictory inequality in the thesis and prevents an unsupported mediation claim. Sustainability initiatives may still create long-term value, but the present dataset does not establish that ROE transmits their effect to PBV.

CONCLUSION AND IMPLICATIONS

The study finds no statistically significant direct effect of green accounting, CSR, or ROE on company value among basic and chemical industry companies listed on the IDX during 2023–2024. Green accounting and CSR also do not significantly affect ROE. After reconciling the reported Sobel statistics with the displayed path estimates, financial performance is not supported as a mediator in either relationship.

Companies should move beyond compliance-oriented sustainability reporting by linking environmental and social programs to measurable operational outcomes, including energy and material efficiency, waste reduction, risk mitigation, customer retention, and cash-flow effects. Investors should combine sustainability disclosure with profitability, leverage, governance, growth, and risk indicators. Regulators can strengthen comparability by encouraging disclosure of both expenditure and verified outcomes. Future research should use a longer panel, broader sectors, panel-data estimators, lagged effects, and alternative measures such as environmental performance, ESG scores, ROA, Tobin's Q, governance quality, and firm risk.

The main limitations are the two-year observation period, the relatively small sample, reliance on disclosed environmental costs and a binary GRI index, and the use of single proxies for financial performance and company value. These limitations restrict generalization and may weaken the ability to detect delayed sustainability effects.

REFERENCES

- Akal, A. T. U., Gaffar, S., R., Basir, M., & Mashuddin, N. (2023). Disclosure of corporate social responsibility on company value through financial performance. *Atestasi: Jurnal Ilmiah Akuntansi*, 6(1), 83–102. <https://doi.org/10.57178/atestasi.v6i1.605>
- Anggita, W., Nugroho, A. A., & Suhaidar. (2022). Carbon emission disclosure and green accounting practices on company value. *Jurnal Akuntansi*, 26(3), 464–481. <https://doi.org/10.24912/ja.v26i3.1052>
- Ashari, M. H., & Anggoro, Y. (2021). Mewujudkan keberhasilan usaha dengan penerapan akuntansi hijau. *Jurnal Riset dan Aplikasi: Akuntansi dan Manajemen*, 5(1), 45–56. <https://doi.org/10.33795/jraam.v5i1.005>
- Avanda, D., & Widiatami, A. K. (2024). Pengaruh biaya lingkungan, kinerja lingkungan, dan komite audit terhadap kinerja keuangan dengan corporate social responsibility sebagai variabel intervening. *Business and Accounting Education Journal*, 5(3), 393–409. <https://doi.org/10.15294/baej.v5i3.7207>
- Endiana, I. D. M., Dicriyani, N. L. G. M., Adiyadnya, M. S. P., & Putra, I. P. M. J. S. (2020). The effect of green accounting on corporate sustainability and financial performance. *Journal of Asian Finance, Economics and Business*, 7(12), 731–738. <https://doi.org/10.13106/jafeb.2020.vol7.no12.731>
- Erlangga, C. M., Fauzi, A., & Sumiati, A. (2021). Penerapan green accounting dan corporate social responsibility disclosure terhadap nilai perusahaan melalui profitabilitas. *Akuntabilitas: Jurnal Ilmu Akuntansi*, 14(1), 61–78. <https://doi.org/10.15408/akt.v14i1.20749>
- Ghozali, I. (2021). *Aplikasi analisis multivariate dengan program IBM SPSS 26 (10th ed.)*. Badan Penerbit Universitas Diponegoro.
- Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 24(5), 391–430. <https://doi.org/10.1016/j.jaccpubpol.2005.06.001>
- Hutabarat, F. (2024). Effect of green accounting, leverage, firm size on company value with profitability as intervening variable. *International Journal of Professional Business Review*, 9(4), 1–25. <https://doi.org/10.26668/businessreview/2024.v9i4.4612>
- Lako, A. (2018). Rerangka konseptual akuntansi hijau. *Akuntan Indonesia*, 60–66.
- Martini, M., Kesuma, I., Triharyati, E., Nurhayati, Y., Andrialdio, A., Yavanda, S., & Muri, F. (2022). Green accounting and its implementation to company value in mining companies of Indonesia. *Proceedings of the 1st ADPEBI International Conference on Management, Education, Social Science, Economics and Technology*, 1–14.
- Meiyana, A., & Aisyah, M. N. (2019). Pengaruh kinerja lingkungan, biaya lingkungan, dan ukuran perusahaan terhadap kinerja keuangan dengan corporate social responsibility sebagai variabel intervening. *Nominal*, 8(1), 1–18. <https://doi.org/10.21831/nominal.v8i1.24495>



Mulyasari, W., & Murwaningsari, E. (2019). Intellectual capital, competitive advantage, financial performance and company value among banking industries in Indonesia. *Advances in Social Sciences Research Journal*, 6(4), 78–89.
<https://doi.org/10.14738/assrj.64.6419>

Singh, S., Holvoet, N., & Pandey, V. (2019). Bridging sustainability and corporate performance through environmental accounting. *Sustainability Accounting literature*.