



Green Innovation, CSR, and Governance: Driving Sustainable Corporate Value Creation

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Abstract

Main Purpose - This study examines the effect of green innovation and green CSR on corporate value, with green governance as a moderate variable.

Method - Using a quantitative approach, this study analyzes secondary data from IDX-listed firms participating in PROPER during 2020–2024, employing moderated regression analysis with SPSS.

Main Findings - Green innovation and green CSR significantly enhance corporate value, while green governance strengthens these relationships.

Theory and Practical Implication - The findings support stakeholder, legitimacy, and signaling theories and highlight the importance of green governance in shaping effective sustainability policies and incentives.

Novelty - This study introduces green governance as a moderating variable linking green innovation, green CSR, and corporate value in an emerging market context.

Abstrak

Tujuan - Penelitian ini bertujuan menguji pengaruh green innovation dan green corporate social responsibility (green CSR) terhadap nilai perusahaan dengan green governance sebagai variabel moderasi.

Metode - Penelitian menggunakan metode kuantitatif dengan data sekunder perusahaan terdaftar di BEI yang mengikuti PROPER periode 2020–2024, dianalisis menggunakan regresi moderasi dengan SPSS.

Temuan Utama - Green innovation dan green CSR berpengaruh positif signifikan terhadap nilai perusahaan, serta green governance memperkuat hubungan tersebut.

Implikasi Teori dan Kebijakan - Temuan ini mendukung teori stakeholder, legitimasi, dan sinyal, serta menegaskan pentingnya penguatan green governance dalam kebijakan keberlanjutan perusahaan.

Kebaruan Penelitian - Kebaruan penelitian terletak pada penggunaan green governance sebagai variabel moderasi dalam hubungan antara green innovation, green CSR, dan nilai perusahaan pada konteks pasar berkembang.

Introduction

Corporate value encompasses investors' perceptions of management's success in overseeing the organization, as evident in the stock market price or other valuation metrics (Pan, 2022; Wati et al., 2024). A high corporate value indicates that investors harbor strong confidence in the company's prospects, contributing to shareholder wealth (Zhang et al., 2020). The Indonesian capital market is susceptible to volatility, leading to significant fluctuations in company worth. The value of publicly traded companies is reflected in their stock prices, whose rises and falls constitute an intriguing phenomenon. For example, PT. Holcim Indonesia Tbk. witnessed a decline in its stock value in 2021, attributable to increased main, operating, and other expenses. The COVID-19 pandemic also impacted the manufacturing sector, affecting the company's valuation (Wati et al., 2023).

Several crucial factors that notably affect corporate value include strong corporate governance and sustainability efforts, such as green innovation and corporate social responsibility (CSR). Green innovation represents a strategic approach in which a company seeks to develop environmentally sustainable products, processes, and operational practices (Liu, 2024). The goal of this innovation is to reduce negative environmental impacts, improve resource efficiency, and create sustainable economic benefits (Xie et al., 2022). Companies that adopt environmentally sustainable practices are typically viewed more positively by consumers, investors, and other key stakeholders (Salihi et al., 2024). Green innovation can impact corporate value by enhancing operational efficiency and boosting corporate reputation (Bai et al., 2024). However, Maulana & Mulyadi (2022) indicate that green innovation does not significantly impact corporate value. This claim implies that green innovation has not yet demonstrated a direct effect on corporate value in Indonesia, possibly due to insufficient market perceptions and high implementation costs that have not been

balanced by financial gains, highlighting the need for effective communication and strong governance support.

Sustainability practices, mainly green Corporate Social Responsibility (CSR), have a profound impact on corporate value. Green CSR signifies an evolution of the traditional notion of corporate social responsibility, specifically focusing on the environmental consequences (Liu et al., 2024). This idea includes the efforts made by companies to reduce their ecological footprint, conserve natural resources, and promote sustainable growth (Chang et al., 2022). Green CSR is a crucial element in building a positive corporate reputation among the public and various stakeholders, while also improving the company's long-term performance in sustainability and profitability (Li et al., 2020). Furthermore, green CSR can enhance corporate value by improving financial outcomes, reputation, and sustainability over the long term (Rauf et al., 2024). However, Sampong et al. (2018) indicate that green CSR does not influence corporate value. This finding indicates that implementing green CSR might not directly lead to an increase in corporate value, which could be due to various factors such as market perception or the effectiveness of the CSR initiatives that have been put into place.

Another factor that can influence corporate value is green governance, which can serve as a moderating factor. Green governance pertains to corporate governance policies and practices that promote sustainability and the successful execution of green initiatives (Chairina & Tjahjadi, 2023). Good corporate governance focused on sustainability can enhance the efficacy of green innovation and green CSR, thereby potentially elevating the company's reputation and value (Arayssi et al., 2020; Tariq et al., 2019). However, Batool et al. (2025) indicate that the moderating role of governance and policies is not always significant in strengthening the relationship between green innovation and environmental performance, suggesting that green governance may not always serve as

an effective moderating variable in this context.

The recognition of the significance of sustainable practices, including green innovation and green CSR, remains somewhat limited among Indonesian firms, which frequently emphasize immediate financial gains over their environmental and social repercussions (Wati et al., 2024). Despite a growing trend among investors to factor in ESG considerations when making investment choices, the inadequate enforcement of environmental regulations undermines companies' drive to adopt green innovations (Bukari et al., 2024; Wati et al., 2025). Firms in the manufacturing sector that are part of the PROPER initiative may experience variations in their corporate valuation, with certain companies, such as PT Indoce ment Tunggal Prakarsa Tbk, still encountering reputational challenges despite holding a green PROPER rating due to the ecological consequences of their activities (Amalia, 2023). Organizations that embrace green innovation, like Pertamina in the field of renewable energy, strive to enhance sustainability, yet obstacles to their corporate valuation continue to exist. The ability of PROPER to enhance corporate value hinges on how well sustainability practices are integrated into business strategies (Wati et al., 2024). When green innovation and green CSR are merely pursued for compliance or image purposes, their effectiveness remains constrained. Research on the role of green governance as a moderating variable is crucial to understanding how companies can maximize the benefits of PROPER in creating sustainable value.

Theoretical Framework

This research is grounded in stakeholder theory, legitimacy theory, and signal theory, which collectively elucidate how businesses create value through a sustainability-oriented approach. Stakeholder theory highlights the necessity for companies to fulfill the expectations of all stakeholders through green innovation and green CSR as a manifestation of their obligation to the environment (Li et al., 2020; Pan, 2022). Legitimacy theory posits

that businesses will sustain their existence by aligning their operations with the values and norms of society, which are embodied in sustainability initiatives (Bukari et al., 2024; Rauf et al., 2024). At the same time, signal theory articulates that green innovation and green CSR serve as favorable indicators for investors regarding the company's dedication to sustainability and management of environmental risks (Bukari et al., 2024; Xie et al., 2022). Within this framework, green governance acts as a moderating variable that strengthens the relationships between green innovation, green CSR, and corporate value. Environmentally conscious corporate governance facilitates the more effective and credible execution of green strategies, bolstering investor trust and positively influencing corporate value.

Hypothesis Development

Green innovation refers to a company's approach aimed at minimizing adverse effects on the environment by creating eco-friendly products, enhancing energy efficiency, and implementing sustainable production methods (Liu, 2024). As concerns regarding sustainability and regulatory demands rise, green innovation emerges as a crucial factor for gaining a competitive edge and fostering long-term economic value (Chouaibi & Chouaibi, 2021). Studies indicate that green innovation enhances operational efficiency, strengthens reputation, boosts customer loyalty, and stabilizes market performance, all of which contribute to business growth and ultimately elevate corporate value (Xie et al., 2022). The positive correlation between green innovation and corporate value is particularly evident when backed by strong financial performance (Bai et al., 2024; Zhang et al., 2020). Therefore, green innovation offers not only environmental advantages, but also enhances corporate value through cost-effectiveness, adherence to regulations, and the cultivation of a favorable public image (Pan, 2022; Salihi et al., 2024). This research is grounded in stakeholder theory and signaling theory, positing that green innovation serves as a tactic to fulfill stakeholder expectations,

establish sustainable competitive advantages, and convey positive signals to the market regarding the company's dedication to environmental responsibility, collectively promoting an increase in corporate value (Pan, 2022; Xie et al., 2022; Zhang et al., 2020). From the discussion above, the hypothesis in this research is:

H1: Green innovation has a significant positive impact on corporate value.

Green CSR represents a type of corporate social responsibility that emphasizes the importance of environmental conservation, including emission reduction, energy efficiency, and waste management (Liu et al., 2024). This approach demonstrates the company's dedication to sustainability and enhances favorable perceptions among stakeholders, boosts trust, improves brand reputation, and elevates the company's market valuation (Chang et al., 2022). Businesses that engage in green CSR are often preferred by eco-conscious consumers, which increases their market presence and enhances their competitive edge (Li et al., 2020). Fatemi et al. (2018) noted that strategic CSR disclosure enhances investor perceptions and elevates corporate value. Furthermore, participation in green CSR aids companies in complying with environmental regulations, minimizes legal risks, and fosters long-term operational stability (Tengfei & Ullah, 2024). Asni & Agustia (2022) also indicated that green CSR positively influences corporate value, mainly when backed by strong governance and solid financial performance. This research aligns with legitimacy theory, stakeholder theory, and signal theory, wherein green CSR serves as a mechanism for companies to fulfill social expectations, cultivate positive stakeholder relationships, and communicate environmental commitment signals to the market, which together promote an increase in corporate value (Chang et al., 2022; Li et al., 2020; Liu et al., 2024). From the discussion above, the hypothesis in this research is:

H2: Green CSR has a significant positive impact on corporate value.

Green innovation refers to the creation of eco-friendly products, processes, or technologies aimed at mitigating adverse effects on the environment while enhancing operational efficiency (Salihi et al., 2024). The successful application of green innovation can elevate both environmental performance and competitiveness, subsequently benefiting the overall value of a firm (Bukari et al., 2024). Nevertheless, this effect is significantly influenced by green governance practices, which involve incorporating environmental factors into strategic decision-making processes (Tariq et al., 2019). Makpotche et al. (2024) suggest that companies with strong green governance are more active in green innovation, which enhances both environmental performance and corporate value. Similarly, Asni & Agustia (2022) demonstrated that mechanisms of green governance promote green innovation, particularly in developing markets, thus boosting corporate value. Therefore, green governance acts as a moderator (enhancer) of the relationship between green innovation and corporate value by facilitating effective investment management, mitigating environmental risks, and optimizing the use of market opportunities (Bukari et al., 2024; Guo et al., 2024). This research is underpinned by stakeholder theory and signaling theory, wherein green governance amplifies the effect of green innovation on corporate value through strategic management of environmental resources, meeting stakeholder expectations, and communicating signals of sustainability commitment to the market (Bukari et al., 2024; Salihi et al., 2024). Given the information provided, the hypothesis in this study is:

H3: Green governance can moderate the effect of green innovation on corporate value.

Corporate Social Responsibility (CSR) has evolved into a long-term strategic approach for businesses, with green CSR representing a facet of social

responsibility that emphasizes environmental concerns like energy efficiency, emission reduction, and conservation of nature (Rauf et al., 2024). By enhancing company reputation, fostering customer loyalty, and building investor trust, green CSR has the potential to elevate corporate value while simultaneously mitigating regulatory risks. Nonetheless, its success is significantly reliant on robust green governance (Li et al., 2020). Le (2022) indicates that effective governance, particularly the proactive involvement of the board in environmental matters, amplifies the influence of green CSR on corporate value. Furthermore, Arayssi et al. (2020) and Li et al. (2020) highlight that in developing nations, strong green governance enhances the connection between green CSR reporting and corporate value. Therefore, green governance emerges as a crucial element for the successful implementation of green CSR, bolstering social legitimacy and enhancing corporate value (Rauf et al., 2024). This research aligns with legitimacy, stakeholder, and signaling theories, which suggest that effective green governance amplifies the execution and communication of green CSR as a means of addressing community expectations, fulfilling stakeholder responsibilities, and sending

positive signals to investors, collectively driving an increase in corporate value (Le, 2022; Li et al., 2020; Rauf et al., 2024). From the discussion above, the hypothesis in this research is:

H4: Green governance can moderate the effect of green CSR on corporate value.

Methods

This research employs a quantitative methodology featuring a causal-comparative design to investigate the influence of green innovation and green CSR on corporate value, alongside the moderating effect of green governance (Hair et al., 2019). The analysis of data was performed utilizing moderated regression analysis facilitated by SPSS. The regression model applied is outlined as follows:

$$CVLU = \beta_0 + \beta_1 GINV + \beta_2 GCSR + \varepsilon_1 \dots (1)$$

$$\text{CVLU} = \beta_0 + \beta_1 \text{GINV} + \beta_2 \text{GCSR} + \beta_3 \text{GGVN} + \beta_4 \text{GINV} * \text{GGVN} + \beta_5 \text{GCSR} * \text{GGVN} + \varepsilon_2 \dots \quad (2)$$

This research utilizes secondary data from 2020 to 2024, employing a purposive sampling technique involving 15 firms listed on the Indonesia Stock Exchange (IDX) that took part in the PROPER evaluation, yielding 75 observations.

Table 1. Company Sample

| Table 1. Company Sample | | |
|--|--|---------|
| No. | Criteria | Amount |
| 1. | Firms listed on the Indonesia Stock Exchange (IDX) from 2020 to 2024 | 833 |
| 2. | Firms that do not participate in PROPER from 2020 to 2024 | (771) |
| 3. | Firms with incomplete data for annual reports and sustainability reports for the years 2020-2024 | (43) |
| 4. | Firms that are not continuously listed on the IDX throughout the 2020-2024 duration | (4) |
| Count of firms meeting the criteria to serve as research samples | | 15 |
| Count of research years spanning from 2020 to 2024 | | 5 years |
| Count of annual reports evaluated (15 x 5 years) | | 75 |

Source: Processed Data (2025)

The dependent variable, corporate value (CVLU), is assessed using Tobin's Q, calculated as (stock market price + total debt) / total assets (Pan, 2022). Green governance (GGVN), the moderating variable, is represented by the presence of a

sustainability committee, assigned a value of 1 if present and 0 if absent (Chairina & Tjahjadi, 2023). Green CSR (GCSR), the independent variable, is evaluated according to the GRI 301–308 environmental disclosure index, receiving a

score of 1 when present and 0 when absent (Fatemi et al., 2018).

Green innovation (GINV), treated as an independent variable, encompasses two dimensions: green product innovation and green process innovation. Green product innovation (GIPD) is assessed through content analysis using a dummy indicator (1 if disclosed, 0 if not), based on three criteria for creating eco-friendly products as described by (Xie et al., 2019), which are: (1) In the product development or design phase, the firm selects raw materials that lead to minimal pollution, (2) The firm utilizes the least quantity of materials for product development or design, (3) The firm manufactures products that are easily recyclable, reusable, and biodegradable. Green process innovation (GIPC) is evaluated using a dummy indicator of 1 if the firm possesses ISO 14001 certification, and 0 otherwise (Qi et al., 2012).

Results and Discussion

Table 2. Descriptive Statistics Output

| | Min | Max | Mean | Std |
|------|-------|-------|-------|-------|
| GIPD | 0.000 | 1.000 | 0.667 | 0.212 |
| GIPC | 0.000 | 1.000 | 0.543 | 0.367 |
| GCSR | 0.219 | 1.000 | 0.693 | 0.204 |
| CVLU | 0.506 | 7.628 | 2.896 | 1.381 |
| GGVN | 0.000 | 1.000 | 0.600 | 0.493 |

Source: Data processed by SPSS, 2025

The mean value of green product innovation (GIPD) recorded at 0.667 signifies that a considerable majority of firms within the sample have adopted green product innovation practices. The mean value of green process innovation (GIPC) at 0.543 suggests that approximately 54.3% of the firms in the sample have achieved or adopted the ISO 14001 standard.

The mean value of green corporate social responsibility (GCSR) at 0.693 indicates a relatively elevated level of disclosure, reflecting that a significant proportion of firms have demonstrated a commitment to social and environmental accountability. The mean value of green governance (GGVN) recorded at 0.600 suggests that 60% of the firms in the

This research employs quantitative analysis utilizing SPSS to examine the correlation between variables. The process begins with descriptive statistical tests followed by classical assumption evaluations (normality, multicollinearity, heteroscedasticity, and autocorrelation). Multiple linear regression analysis is applied to assess the direct influence of green innovation and green CSR on corporate value. Moderated regression analysis is employed to evaluate the impact of green governance moderation through interaction variables. Significance testing is conducted using the t-test (partial effect), F-test (simultaneous effect), and the determination coefficient R^2 (predictive power of the model). A p-value of less than 0.05 indicates that the effect is statistically significant. The comparison of R^2 between the fundamental model and the interaction model illustrates the contribution of green governance moderation in enhancing the prediction of corporate value.

sample have established a sustainability committee as a component of environmentally sustainable corporate governance.

The corporate value (CVLU) assessed through Tobin's Q reveals an average of 2.896, indicating that firms within the sample possess a market valuation that is comparatively greater than the book value of their assets, thereby illustrating optimistic investor anticipations. Firms encompassed in the analysis generally exhibit favorable growth prospects, or the market perceives these entities as possessing substantial future profit potential. The minimum value of 0.506 denotes a firm with a diminished market valuation, whereas the maximum

value of 7.628 signifies a firm with an exceedingly high market valuation. The standard deviation of 1.381 indicates a

considerable degree of variability in company valuations among the sampled entities

Table 3. Classical Assumption Test Results

| Type of Test | Value | Description |
|--------------------------------|-------|--|
| Normality Test: | | |
| Kolmogorov-Smirnov | 0.824 | Data distribution meets normality assumptions (Sig > 0.05) |
| Multicollinearity Test – VIF: | | |
| Green product innovation | 1.321 | Multicollinearity is not detected (VIF < 10) |
| Green process innovation | 1.353 | Multicollinearity is not detected (VIF < 10) |
| Green CSR | 1.457 | Multicollinearity is not detected (VIF < 10) |
| Green governance | 1.102 | Multicollinearity is not detected (VIF < 10) |
| Heteroscedasticity Test – Sig: | | |
| Green product innovation | 0.324 | Heteroscedasticity is not detected (Sig > 0.05) |
| Green process innovation | 0.367 | Heteroscedasticity is not detected (Sig > 0.05) |
| Green CSR | 0.418 | Heteroscedasticity is not detected (Sig > 0.05) |
| Green governance | 0.586 | Heteroscedasticity is not detected (Sig > 0.05) |
| Autocorrelation Test: | | |
| Runs Test | 0.741 | Autocorrelation is not detected (Sig > 0.05) |

Source: Data processed by SPSS, 2025

Based on the findings of the classical assumption test, all the foundational assumptions of linear regression have been satisfied. The data exhibits a normal distribution, no issues

with multicollinearity, no signs of heteroscedasticity are detected, and autocorrelation is absent. Therefore, the data is appropriate for conducting moderated regression analysis.

Table 4. Results of Hypothesis Testing

| Hypothesis | β | t-stat | p-value | Description |
|-----------------------------|---------|--------|---------|-------------|
| Direct Influence: | | | | |
| H1 | 0.314 | 2.45 | 0.018* | Accepted |
| H2 | 0.279 | 2.76 | 0.009* | Accepted |
| R ² | | | 0.814 | |
| Adjusted R ² | | | 0.796 | |
| F Statistics | | | 5.396 | |
| F Test Significance | | | 0.001 | |
| Moderation Regression Test: | | | | |
| H3 | 0.188 | 2.15 | 0.036* | Moderation |
| H4 | 0.164 | 2.02 | 0.048* | Moderation |
| R ² | | | 0.843 | |
| Adjusted R ² | | | 0.811 | |
| F Statistics | | | 4.880 | |
| F Test Significance | | | 0.001 | |

*p<0.05

Source: Data processed by SPSS, 2025

The Adjusted R-squared coefficient for corporate value stands at 0.796, signifying that green innovation and green

CSR contribute to 79.6% of the fluctuations in corporate value, leaving 20.4% attributed to factors beyond the model's scope. The F-

test results in Table 4 reveal that the F statistic is 5.396, accompanied by a significance level of 0.001. This suggests that the independent variables analyzed in this research, specifically green innovation and green CSR, are valid, as the significance value falls below 0.05 or 5%. The R^2 value for the direct effect is 0.814 or 81.4%, and following the moderation regression test, it rises to 0.843 or 84.3%. It can be inferred that green governance (the moderating variable) enhances the

connection between green innovation, green CSR, and corporate value. Table 4 corroborates hypotheses 1 (H1) and 2 (H2), demonstrating that both green innovation and green CSR exert a considerable positive influence on corporate value. Hypothesis 3 ($GGVN^*GINV \rightarrow CVLU$) and hypothesis 4 ($GGVN^*GCSR \rightarrow CVLU$) are significant at a p-value of 0.05, indicating that green governance can moderate the impact of green innovation and green CSR on corporate value.

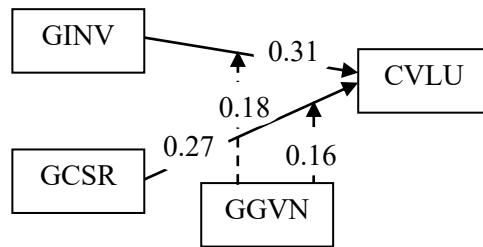


Figure 1. Research Model

Green Innovation and Its Influence on Corporate Value

Green innovation positively influences corporate value. The initial hypothesis outlined in this study is validated. This is corroborated by the research conducted by Bai et al. (2024), Chouaibi & Chouaibi (2021), Liu (2024), Pan (2022), Salihi et al. (2024), Xie et al. (2022), and Zhang et al. (2020). The study's findings indicate that green innovation positively affects corporate value, as it enhances operational efficiency, boosts environmental reputation, and increases competitiveness in a market progressively focused on sustainability. This conclusion aligns with stakeholder theory, which posits that companies that address environmental concerns gain support from stakeholders. It corresponds with signaling theory, where green innovation serves as a favorable indicator of sustainability commitment that elevates the market perception of corporate value.

Green CSR and Its Influence on Corporate Value

Green CSR positively influences corporate value. The second hypothesis outlined in this study is validated. This is

corroborated by the study conducted by Asni & Agustia (2022), Chang et al. (2022), Fatemi et al. (2018), Li et al. (2020), Liu et al. (2024), and Tengfei & Ullah (2024). Green CSR enhances corporate value by boosting reputation, fostering consumer loyalty, ensuring regulatory compliance, and attracting investors, thereby resulting in market appreciation reflected in an increase in corporate value. These findings align with legitimacy theory, which asserts that green CSR facilitates social acceptance for companies; stakeholder theory, which highlights the necessity of nurturing relationships with stakeholders through sustainable practices; and signal theory, where the disclosure of green CSR indicates a company's dedication to sustainability and environmental responsibility, ultimately enhancing the company's perception and market value.

Green Governance Moderates the Impact of Green Innovation on Corporate Value

Green governance serves as a crucial reinforcing element in the connection between green innovation and corporate value. The third hypothesis presented in this research is validated. This is supported by the study conducted by

Asni & Agustia (2022), Bukari et al. (2024), Guo et al. (2024), Makpotche et al. (2024), Salihi et al. (2024), and Tariq et al. (2019). Green governance amplifies the effect of green innovation on corporate value by integrating it into a long-term strategy, enhancing transparency, and fostering investor trust. This aligns with stakeholder theory, as environmentally responsible governance demonstrates accountability to various stakeholders. Additionally, it relates to signaling theory, conveying a positive message about the company's commitment to sustainability, which enhances perceived corporate value.

Green Governance Moderates the Impact of Green CSR on Corporate Value

Green governance serves as a crucial reinforcing element in the connection between green CSR and corporate value. The fourth hypothesis presented in this research is validated. This is supported by Arayssi et al. (2020), Le (2022), Li et al. (2020), and Rauf et al. (2024). Green governance enhances the impact of green CSR on corporate value by ensuring that sustainability strategies are integrated within a framework of transparent, accountable, and internationally recognized governance. The existence of an environmentally responsible governance structure boosts credibility, diminishes risk perception, and fosters efficiency, ultimately generating both economic and social value concurrently. This finding aligns with legitimacy theory, stakeholder theory, and signaling theory, as demonstrated by the company's initiatives to fulfill social expectations, uphold stakeholder trust, and convey positive signals of credible environmental commitments.

Conclusions

Based on the findings from the data analysis of firms involved in PROPER during the 2020-2024 timeframe, this research concludes that green innovation and green corporate social responsibility (green CSR) significantly contribute to enhancing corporate value. This observation suggests that incorporating

environmental considerations into business strategies generates additional value for stakeholders and enhances market perception. Furthermore, the moderating variable of green governance has been shown to reinforce the connection between green innovation and green CSR with corporate value. These findings lend support to both legitimacy theory and stakeholder theory, which highlight the significance of accountability and governance in addressing environmental challenges. Unlike previous studies that solely examined the direct correlation between CSR or innovation and financial performance, this research introduces a novel perspective by incorporating green governance aspects as a moderating factor, particularly in the context of Indonesian companies following the implementation of OJK (Indonesian Financial Services Authority) regulation No. 51/POJK.03/2017.

The primary strength of this article resides in its comprehensive research model, a quantitative approach utilizing longitudinal data, and the inclusion of green governance as a moderating variable, which is still infrequently addressed in the context of emerging markets. The practical implications of this study underscore the necessity for firms to cultivate green innovation and environmentally focused CSR initiatives, bolstered by sustainability-oriented governance, to sustainably elevate corporate value. Recommendations for managers and policymakers include reinforcing regulations related to transparency and green governance, as well as motivating companies to undertake more systematic sustainability reporting. The limitations of this research are associated with the reliance on secondary data and a quantitative approach that has not delved deeply into managerial perceptions. Future research is encouraged to adopt a mixed methods approach and to consider digitalization indicators in the disclosure of environmental information.

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