

From ESG Compliance to Sustainability Credibility: The Role of Green Accounting Quality and Carbon Emission Disclosure in Shaping Market Response and Its Implications for the Accounting Profession

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ARTICLE INFO

Article history:

Received 15-06-2026

Accepted 07-07-2026

Available online 29-08-2026

Keywords:

Green accounting quality;
carbon emission disclosure;
sustainability credibility;
market response; ESG



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ABSTRACT

This study investigates the influence of Green Accounting Quality and Carbon Emission Disclosure on capital market response, with sustainability credibility serving as the mediating variable, among beyond compliance companies in Indonesia. A quantitative research design with panel data regression analysis was employed using a sample of 20 companies classified as beyond compliance firms under the PROPER rating system during the 2020–2024 observation period. The study applied the Random Effect Model (REM) with the assistance of EViews 10 software.

The results indicate that Carbon Emission Disclosure positively and significantly affects sustainability credibility, whereas Green Accounting Quality demonstrates a positive and significant relationship with market response. In contrast, Carbon Emission Disclosure has a negative effect on market response, while sustainability credibility does not significantly influence market response. These findings suggest that the Indonesian capital market is gradually moving toward ESG-oriented investment considerations, although sustainability credibility has not yet been fully recognized as economically relevant information by investors.

This study contributes to the ESG literature by emphasizing sustainability credibility as an important explanatory mechanism for understanding how environmental disclosure practices are interpreted by capital market participants. The findings also highlight the evolving role of the accounting profession in strengthening sustainability credibility through ESG reporting, green accounting, carbon accounting, and sustainability assurance.

1. INTRODUCTION

Climate change and sustainability-related challenges have increasingly transformed how corporations, governments, regulators, and investors interpret corporate responsibility and long-term business value. Environmental problems associated with climate change are now viewed not only as ecological concerns but also as factors affecting economic resilience and social stability in many countries, including Indonesia. The rise in global temperatures, irregular rainfall patterns, and the growing frequency of hydrometeorological disasters demonstrate that climate change has become a real and ongoing global issue rather than merely a future prediction. In this context, industrial activities producing high levels of carbon emissions are widely considered major contributors to environmental deterioration, creating stronger demands for corporations to balance economic objectives with environmental accountability.

In Indonesia, the consequences of climate change have become increasingly apparent over recent years, particularly through the escalation of floods, extreme weather events, and other hydrometeorological disasters occurring across various regions. Previous studies indicate that these environmental conditions are influenced not only by natural causes, but also by deforestation, environmental degradation, and inadequate environmental management practices associated with human and industrial activities that have not fully incorporated sustainability principles (OECD, 2022). These developments highlight the increasingly important role of the business sector in promoting environmental sustainability and supporting ecological resilience.

In contemporary business environments, Environmental, Social, and Governance (ESG) practices have become increasingly important for investors, regulators, and other stakeholders. ESG is no longer interpreted merely as a form of regulatory fulfillment, but has gradually evolved into an essential element in building corporate transparency, legitimacy, and public trust. As a result, companies are increasingly encouraged to communicate their sustainability initiatives more transparently through sustainability reporting, green accounting practices, and carbon emission disclosure.

Green accounting represents a company's effort to integrate environmental aspects into accounting systems and managerial decision-making activities. Meanwhile, carbon emission disclosure functions as an important communication tool that enables companies to report environmental impacts, emission management strategies, and commitments toward carbon reduction to stakeholders. Therefore, sustainability-related disclosures are expected not only to demonstrate corporate compliance with environmental regulations but also to enhance the credibility of sustainability information used by investors in evaluating corporate sustainability performance.

In Indonesia, increasing attention toward ESG-related issues can be observed through the wider adoption of sustainability reporting practices and the growing expectation for environmental transparency among listed companies. To address sustainability concerns and encourage stronger environmental responsibility, the Indonesian government, through the Ministry of Environment and Forestry, established the Corporate Performance Rating Assessment Program (PROPER). Beyond assessing corporate compliance with environmental regulations, this program also acknowledges companies that demonstrate environmental management practices exceeding mandatory standards. Companies receiving Green and Gold ratings are classified as beyond compliance firms because they demonstrate a stronger commitment to sustainable business practices.

This study is mainly based on legitimacy theory and signaling theory in explaining corporate sustainability behavior and market perceptions. Legitimacy theory suggests that companies attempt to gain public acceptance and maintain organizational legitimacy by implementing environmentally responsible activities and disclosing sustainability-related information (Suchman, 1995; Deegan, 2002). Within the ESG reporting framework, Green Accounting Quality and Carbon Emission Disclosure represent corporate efforts to demonstrate environmental accountability and strengthen relationships with stakeholders.

On the other hand, signaling theory explains that sustainability disclosure may function as a strategic signal capable of shaping investor perceptions and influencing market reactions (Spence, 2002). Companies providing high-quality sustainability information are generally expected to send positive signals regarding transparency, environmental accountability, and long-term business sustainability. Accordingly, investors may perceive credible ESG disclosure as an indication of lower environmental uncertainty and stronger future corporate prospects.

Nevertheless, empirical findings regarding the association between ESG disclosure and market response remain inconclusive. Several studies report that environmental disclosure contributes positively to firm value and investor trust, whereas other studies suggest that sustainability information does not always receive favorable market responses. This condition is particularly common in emerging markets, where investors may still prioritize short-term financial performance and remain cautious regarding the credibility of sustainability disclosure.

In addition, prior research has largely concentrated on the direct effect of ESG disclosure on firm performance and market outcomes, whereas relatively few studies have examined sustainability credibility as an explanatory mechanism for understanding how environmental information is interpreted by investors and capital markets. This issue has become increasingly relevant due to the growing concerns surrounding symbolic disclosure practices and the risk of greenwashing within sustainability reporting.

Moreover, empirical research focusing specifically on beyond compliance companies is still relatively limited, especially in Indonesia. Beyond compliance companies possess distinctive characteristics because they implement environmental management practices that exceed minimum regulatory requirements. Consequently, these companies provide an important setting for examining whether green accounting quality and carbon emission disclosure are truly capable of enhancing sustainability credibility and shaping market responses.

However, the wider adoption of ESG disclosure practices and the attainment of beyond compliance status do not automatically strengthen investor trust in corporate sustainability information. Some firms disclose environmental information comprehensively and integrate sustainability into their long-term business strategies, while others may rely more heavily on symbolic disclosure practices that potentially lead to perceptions of greenwashing (Delmas & Burbano, 2011). This situation suggests that achieving environmental legitimacy depends not only on the extent of ESG compliance but also on a company's ability to provide credible and trustworthy sustainability information.

Within capital market activities, the credibility of sustainability information has become increasingly important because it may shape investor perceptions and market reactions toward firms. Investors are increasingly incorporating ESG-related information into their investment decisions, particularly information on Green Accounting Quality and Carbon Emission Disclosure. Several previous studies suggest that ESG activities and environmental disclosure may improve firm value and stimulate positive market responses because they are interpreted as indicators of transparency and corporate commitment toward sustainability (Friede et al., 2015; Fatemi et al., 2018). Other empirical findings also show that carbon emission disclosure can influence investor assessments regarding environmental risk exposure and corporate market valuation (Matsumura et al., 2014; Clarkson et al., 2013).

Nevertheless, previous empirical evidence concerning ESG disclosure and market response continues to show mixed and inconsistent results. Several studies indicate that investors do not always respond positively or significantly to ESG-related information, particularly in emerging market environments where investment decisions are still strongly influenced by short-term financial considerations. This situation suggests that the rapid growth of sustainability reporting practices does not automatically strengthen market appreciation toward corporate sustainability information. As a consequence, capital markets may still be transitioning toward ESG-oriented investment behavior, where sustainability disclosure has not yet been fully recognized as economically meaningful information in investment decisions.

Besides these inconsistent findings, earlier studies have predominantly examined the direct relationship between green accounting, carbon disclosure, and firm performance or market value. Comparatively few studies have examined sustainability information credibility as an explanatory mechanism for understanding how capital market participants interpret corporate environmental practices. Within sustainability reporting practices, the presence of ESG disclosure alone does not necessarily guarantee that the information is perceived as credible, reliable, and valuable by investors. This issue has become increasingly relevant as the expansion of sustainability reporting is also accompanied by growing concerns over symbolic disclosure behavior and the risk of greenwashing practices (Cho et al., 2015; Michelon et al., 2015).

In Indonesia, empirical research related to green accounting and carbon emission disclosure is still relatively limited and tends to examine companies in general categories rather than firms classified as beyond compliance organizations, such as companies awarded Green and Gold ratings under the PROPER program. Beyond compliance firms possess unique characteristics because they implement environmental management practices that exceed minimum regulatory requirements. Accordingly, this group of companies provides an important research context for evaluating whether green accounting quality and carbon emission disclosure are genuinely able to strengthen sustainability information credibility and influence capital market reactions.

The rapid expansion of ESG practices and sustainability reporting has also contributed to significant changes in the accounting profession. Accountants are no longer expected to focus solely on preparing conventional financial statements, but are increasingly required to measure, evaluate, assure, and communicate credible sustainability-related information to investors and stakeholders. These developments have increased the demand for competencies associated with ESG reporting, carbon accounting, sustainability assurance, and sustainability performance measurement (Simnett et al., 2009; O'Dwyer et al., 2011). This transformation suggests that the future of the accounting profession extends beyond traditional financial reporting to encompass sustainability credibility, ESG assurance, and the provision of decision-useful information for investors.

Moreover, when investors do not fully respond to corporate ESG initiatives, the challenge lies not merely in the availability of sustainability disclosure, but also in the credibility, quality, and measurability of the information presented. Under these circumstances, the accounting profession plays a strategic role as a gatekeeper of sustainability credibility by strengthening trust in sustainability reporting and ensuring that ESG disclosures provide meaningful and economically relevant information rather than merely symbolic claims.

This study is expected to provide a deeper understanding of how corporate ESG practices are interpreted by market participants through sustainability information credibility, while highlighting the evolving role of the accounting profession in strengthening sustainability transparency, ESG assurance, and credible sustainability reporting.

This study contributes to the ESG literature by introducing sustainability credibility as an explanatory mechanism linking Green Accounting Quality and Carbon Emission Disclosure to capital market responses. In contrast to many previous studies that mainly emphasize the direct association between ESG disclosure and corporate performance, this research positions sustainability credibility as an important dimension in explaining how capital markets evaluate corporate sustainability practices. Furthermore, this

study specifically focuses on beyond compliance companies in Indonesia, which possess distinctive characteristics because they implement ESG practices beyond minimum regulatory standards. Therefore, the study also contributes to emerging market ESG research by providing evidence that sustainability disclosure alone may not automatically generate favorable market responses without sufficient information credibility.

2. METHODS

Research Design and Sample

This study adopted a quantitative research design using panel data regression to examine the effects of Green Accounting Quality and Carbon Emission Disclosure on capital market response, with Sustainability Credibility serving as the mediating variable, among beyond compliance companies in Indonesia. The quantitative design was chosen because the study focuses on empirically testing the associations among variables using measurable company data. In addition, panel data analysis allows researchers to observe corporate behavior more thoroughly across different companies and time periods.

The study population comprised companies that obtained Green and Gold ratings in the Corporate Performance Rating Assessment Program (PROPER) administered by the Indonesian Ministry of Environment and Forestry. According to PROPER records, the population consisted of 85 companies with Gold ratings and 227 companies with Green ratings. Companies classified as beyond compliance were selected because they implement environmental management practices that exceed minimum regulatory requirements.

The sample for this study was selected through a purposive sampling technique by considering the availability of annual reports, sustainability reports, and the completeness of the required research data during the 2020–2024 observation period. Companies with incomplete data or those that did not consistently publish sustainability reports during the 2020–2024 observation period were excluded from the sample. Based on these requirements, the final dataset included 20 companies, resulting in 100 panel data observations.

The relatively small sample size reflects the exclusive nature of beyond compliance companies in Indonesia. Firms awarded Green and Gold ratings under the PROPER program are recognized for their consistently strong environmental performance and commitment to sustainability practices. Consequently, the sampling process emphasized the quality of sustainability practices and the consistency of reporting rather than achieving wider industrial representation.

Data Collection

This study used secondary data obtained from annual reports, sustainability reports, PROPER assessment reports, publications issued by the Indonesia Stock Exchange (IDX), and corporate websites covering the 2020–2024 observation period.

Variable Measurement

This study employed Green Accounting Quality (GAQI) and the Carbon Emission Disclosure Index (CEDI) as the independent variables. Sustainability Information Credibility, measured using the Sustainability Credibility Index (IKIK), served as the mediating variable. Meanwhile, capital market response served as the dependent variable and was represented by Tobin's Q (TOBINSQ). In addition, firm size (SIZE) and profitability measured by Return on Assets (ROA) were incorporated as control variables in the research model.

Table 1. Variable Measurement

Variable	Definition and Measurement
Green Accounting Quality (GAQI)	Green Accounting Quality represents the extent to which a company implements and discloses environmental accounting practices within its operational activities. This variable was measured using a disclosure index constructed through content analysis of annual reports and sustainability reports. The measurement indicators included environmental cost disclosure, waste and energy management, environmental investments, recognition of environmental costs, and environmental performance evaluation. Each disclosed indicator received a

score of 1, while undisclosed items were assigned a score of 0. The final index value was obtained by dividing the number of disclosed items by the total number of indicators used in the measurement.

Carbon Emission Disclosure (CEDI)	Carbon Emission Disclosure describes the degree of corporate transparency in reporting carbon emissions and related emission management activities. This variable was assessed using a carbon disclosure index derived from content analysis of annual reports and sustainability reports. The measurement indicators included carbon emission disclosure, emission measurement methods, carbon reduction targets, emission management strategies, and carbon performance evaluation. Each disclosed indicator was assigned a score of 1, while items that were not disclosed received a score of 0.
Sustainability Credibility (IKIK)	Sustainability credibility represents the degree to which corporate sustainability information is perceived as reliable and trustworthy by stakeholders. This variable was measured using the Sustainability Credibility Index, which consists of 16 indicators encompassing the dimensions of relevance, reliability, transparency, and assurance. The indicators were developed based on the sustainability reporting requirements stipulated in POJK No. 51/2017 and aligned with the relevant disclosure principles of the GRI Standards. Each disclosed item received a score of 1, while undisclosed items were assigned a score of 0. The Sustainability Credibility Index was constructed based on sixteen disclosure indicators grouped into four dimensions. The relevance dimension evaluates the disclosure of sustainability policies, material issues, sustainability targets, and sustainability performance evaluation. The reliability dimension assesses the availability of quantitative environmental data, consistency of disclosure across reporting periods, clarity of measurement methods, and explanations of environmental impacts. The transparency dimension includes disclosure of carbon emissions, sustainability strategies, stakeholder engagement, and data comparability. The assurance dimension evaluates whether the sustainability report is externally assured, whether the assurance is conducted by an independent party, the assurance standards applied, and the assurance opinion provided. The index was calculated by dividing the total disclosed items by the total number of indicators, resulting in an index ranging from 0 to 1.
Capital Market Response (TOBINSQ)	Capital market response in this study was represented by Tobin's Q, which reflects how the market values corporate performance and future growth potential. Tobin's Q was calculated as the ratio of the market value of equity plus total liabilities to total assets.
Firm Size (SIZE)	Firm size was measured as the natural logarithm of total assets.
Profitability (ROA)	Profitability was proxied by Return on Assets (ROA), which was calculated by dividing net income by total assets.

Source: Developed by the authors based on POJK No. 51/2017, GRI Standards, and prior ESG disclosure literature.

Data Analysis Technique

The data were analyzed using panel data regression techniques with EViews 10 software. The estimation process involved three alternative panel regression approaches, namely the Common Effect

Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The most appropriate regression model was selected through the Chow Test and Hausman Test procedures. The selected model was subsequently used to estimate the proposed research model and test the research hypotheses.

Before conducting the regression analysis, diagnostic testing was carried out to evaluate the adequacy of the research model. Multicollinearity testing was performed using a correlation matrix to detect potential high correlations among the independent variables. Correlation values below 0.90 indicate that multicollinearity was not present in the regression model.

Subsequently, panel data regression analysis was applied to investigate the effect of Green Accounting Quality and Carbon Emission Disclosure on sustainability credibility and capital market response among beyond compliance companies in Indonesia.

Regression Model

The panel regression equations applied in this study are presented as follows:

Model 1

$$IKIK_{it} = \alpha + \beta_1 GAQI_{it} + \beta_2 CEDI_{it} + \beta_3 SIZE_{it} + \beta_4 ROA_{it} + \varepsilon \quad (1)$$

Model 2

$$TOBINSQ_{it} = \alpha + \beta_1 GAQI_{it} + \beta_2 CEDI_{it} + \beta_3 IKIK_{it} + \beta_4 SIZE_{it} + \beta_5 ROA_{it} + \varepsilon \quad (2)$$

Description:

IKIK = Sustainability information credibility

TOBINSQ = Capital market response

GAQI = Green Accounting Quality Index

CEDI = Carbon Emission Disclosure Index

SIZE = Firm size

ROA = Return on Assets

ε = Error term

3. RESULTS AND DISCUSSIONS

Results

Descriptive Statistics

Descriptive statistics were used to summarize the characteristics of the research variables, including Green Accounting Quality (GAQI), the Carbon Emission Disclosure Index (CEDI), Sustainability Information Credibility (IKIK), Return on Assets (ROA), Firm Size (SIZE), and Capital Market Response (TOBINSQ), proxied by Tobin's Q.

Table 2. Descriptive Statistics

Variables	Mean	Std.Dev.	Minimum	Maximum
CEDI	0.924000	0.138622	0.400000	1.000000
GAQI	0.832450	0.075887	0.420000	0.920000
IKIK	0.838700	0.137699	0.500000	1.000000
ROA	0.077913	0.080117	-0.203000	0.310000
SIZE	30.83702	1.217245	27.98872	32.76376
TOBINSQ	1.259654	1.089296	0.354537	5.688703

Source: EViews 10 Output

Based on Table 1, the Carbon Emission Disclosure (CEDI) variable has a mean value of 0.924000, with a maximum value of 1.000000 and a minimum value of 0.400000. These results indicate that the sample companies generally exhibit a relatively high level of carbon emission disclosure. The Green Accounting Quality (GAQI) variable has a mean value of 0.832450 with a standard deviation of 0.075887. This finding suggests that beyond compliance companies generally exhibit high Green Accounting Quality with relatively low variation across the sample.

Furthermore, the sustainability information credibility variable (IKIK) shows a mean value of 0.838700 and a standard deviation of 0.137699, indicating that the sample companies generally exhibit a high level of Sustainability Information Credibility. The capital market response variable, proxied by Tobin's Q, has a mean value of 1.259654 with a standard deviation of 1.089296. These results indicate considerable variation in capital market responses across the sample companies.

Meanwhile, the profitability variable proxied by Return on Assets (ROA) has a mean value of 0.077913, indicating that the sample companies generally exhibit positive profitability performance. In addition, Firm Size (SIZE) has a mean value of 30.83702, indicating that the sample consists predominantly of large firms.

Multicollinearity Test

Table 3. Multicollinearity Test

Variables	CEDI	GAQI	IKIK	ROA	SIZE
CEDI	1.000000	0.670819	0.609677	0.069813	0.304781
GAQI	0.670819	1.000000	0.409828	-0.024096	0.104270
IKIK	0.609677	0.409828	1.000000	-0.124522	0.291771
ROA	0.069813	-0.024096	-0.124522	1.000000	0.118886
SIZE	0.304781	0.104270	0.291771	0.118886	1.000000

Source: EViews 10 Output

Based on Table 6, all correlation values among the independent variables are below 0.90, indicating that the research model does not suffer from multicollinearity problems. The highest correlation coefficient was observed between Carbon Emission Disclosure (CEDI) and Green Accounting Quality (GAQI), with a value of 0.670819. However, this value remains below the commonly accepted threshold for multicollinearity.

Panel Model Selection

Sustainability Information Credibility Model

Panel model selection was performed to determine the most appropriate regression model for the Sustainability Information Credibility model by comparing the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM).

Table 4. Panel Model Selection for the Sustainability Information Credibility Model

Model Testing	Probability	Decision
Chow Test	0.0000	FEM
Hausman Test	0.0862	REM

Source: EViews 10 Output

Based on the test results presented in Table 2, the Chow Test shows a probability value of 0.0000 (< 0.05), indicating that the Fixed Effect Model is more appropriate than the Common Effect Model. Furthermore, the Hausman Test produces a probability value of 0.0862 (> 0.05), suggesting that the Random Effect Model is the most appropriate model for this study. Therefore, the effect of Green Accounting Quality and Carbon Emission Disclosure on Sustainability Information Credibility was estimated using the Random Effect Model (REM).

Regression Results of the Sustainability Information Credibility Model

Table 5. Regression Results of the Sustainability Information Credibility Model

Variables	Coefficient	Probability
C	-0.279966	0.5657
GAQI	-0.012067	0.9434
CEDI	0.613782	0.0000*
SIZE	0.018362	0.2442
ROA	-0.059683	0.7192

Adjusted $R^2 = 0.394849$

Prob(F-statistic) = 0.000000

Source: EViews 10 Output

Based on the regression results presented in Table 3, Carbon Emission Disclosure (CEDI) demonstrates a positive and significant effect on sustainability information credibility, indicating that

broader carbon emission disclosure strengthens the perceived credibility of corporate sustainability information. These findings suggest that greater environmental transparency plays an important role in strengthening stakeholder trust in corporate sustainability practices.

In contrast, Green Accounting Quality (GAQI) does not show a significant effect on sustainability information credibility. Similarly, the control variables SIZE and ROA do not significantly influence sustainability credibility. The Adjusted R-squared value of 0.394849 indicates that the independent variables explain approximately 39.48% of the variation in Sustainability Information Credibility, while the remaining 60.52% is attributable to other factors not included in the research model.

Based on the estimation results of the Random Effect Model, the regression equation is formulated as follows:

$$IKIK_{it} = -0.279966 - 0.012067GAQI_{it} + 0.613782CEDI_{it} + 0.018362SIZE_{it} - 0.059683ROA_{it} + \varepsilon_{it} \quad (3)$$

Capital Market Response Model

Table 6. Panel Model Selection for the Capital Market Response Model

Model Testing	Probability	Decision
Chow Test	0.0000	FEM
Hausman Test	0.0737	REM

Source: EViews 10 Output

Based on the test results presented in Table 4, the Chow Test shows a probability value of 0.0000 (< 0.05), indicating that the Fixed Effect Model is more appropriate than the Common Effect Model. Furthermore, the Hausman Test produces a probability value of 0.0737 (> 0.05), suggesting that the Random Effect Model is the most appropriate estimation model for this study. Therefore, the effects of Green Accounting Quality, Carbon Emission Disclosure, and Sustainability Information Credibility on Capital Market Response were estimated using the Random Effect Model (REM).

Regression Results of the Capital Market Response Model

Table 7. Regression Results of the Capital Market Response Model

Variables	Coefficient	Probability
C	3.633803	0.4223
GAQI	2.776156	0.0185*
CEDI	-1.849930	0.0186*
IKIK	-0.170972	0.8089
SIZE	-0.095553	0.6444
ROA	1.464975	0.2020

Adjusted R² = 0.053147

Prob(F-statistic) = 0.041742

Source: EViews 10 Output

Based on the regression results presented in Table 5, Green Accounting Quality (GAQI) demonstrates a positive and significant effect on capital market response, indicating that higher quality environmental accounting practices are positively interpreted by the market. These findings suggest that investors increasingly consider the quality of sustainability-related information when assessing corporate value.

In contrast, Carbon Emission Disclosure (CEDI) shows a negative and significant effect on capital market response, indicating that broader carbon emission disclosure may increase investor concerns regarding environmental risk exposure and future sustainability-related costs. This finding suggests that carbon emission information has not yet been fully perceived by investors as a positive sustainability signal.

Meanwhile, sustainability credibility (IKIK) does not demonstrate a significant effect on capital market response. Similarly, the control variables SIZE and ROA do not significantly influence market

response. The Adjusted R-squared value of 0.053147 indicates that the independent variables explain approximately 5.31% of the variation in Capital Market Response, while the remaining 94.69% is attributable to other factors not included in the research model.

Based on the estimation results of the Random Effect Model, the regression equation is formulated as follows:

$$\text{TOBINSQit} = 3.633803 + 2.776156\text{GAQlit} - 1.849930\text{CEDlit} - 0.170972\text{IKIKit} - 0.095553\text{SIZEit} + 1.464975\text{ROAit} + \varepsilon_{it} \quad (4)$$

Discussion

1. Carbon Emission Disclosure and Sustainability Information Credibility

The results of this study indicate that Carbon Emission Disclosure (CEDI) has a positive and significant effect on sustainability information credibility. These findings suggest that the broader the extent of carbon emission disclosure provided by a company, the higher the perceived credibility of its sustainability information. Carbon emission disclosure signals greater transparency regarding the environmental impacts of a company's operations and reflects a stronger commitment to sustainable business practices.

These findings are consistent with stakeholder theory, which explains that companies are required to fulfill stakeholders' information needs through transparent and accountable disclosure practices. Within the ESG context, carbon emission disclosure serves as a communication mechanism that conveys a company's commitment to environmental responsibility to investors, regulators, and other stakeholders.

In addition, the findings also support legitimacy theory, which suggests that companies seek to obtain social legitimacy by providing environmental information that is relevant and trustworthy. In the beyond compliance context, carbon emission disclosure is no longer viewed merely as compliance with environmental regulations, but also as part of a corporate strategy to strengthen sustainability credibility.

Companies that actively disclose carbon emission information tend to be perceived as having higher levels of ESG transparency compared to firms with more limited disclosures. These findings indicate that carbon emission disclosure plays an important role in strengthening the perceived credibility of corporate sustainability information. However, this credibility is not necessarily translated into higher market valuation or stronger capital market responses.

2. Green Accounting Quality and Capital Market Response

The findings of this study reveal that Green Accounting Quality (GAQI) has a positive and significant effect on capital market response. These results indicate that the market has begun to respond positively to companies demonstrating higher quality green accounting practices. High-quality green accounting practices are perceived as signals of a company's commitment to sustainability, environmental transparency, and responsible corporate governance.

These findings suggest that sustainability information has started to possess economic relevance in investment decision-making. Investors no longer rely solely on traditional financial information, but also increasingly consider the quality of environmental information disclosed by companies. In this context, Green Accounting serves as a strategic communication mechanism through which companies demonstrate their commitment to environmental responsibility and long-term business sustainability.

The results are consistent with legitimacy theory and signaling theory, which explain that companies can build positive market perceptions through the disclosure of information reflecting credible sustainability practices. High-quality Green Accounting signals that a company possesses strong sustainability governance and a greater capacity to manage future environmental risks. These findings further indicate that the Indonesian capital market is gradually moving toward ESG-informed investment decision-making. Nevertheless, the results suggest that the market evaluates not only the extent of ESG disclosure, but also the quality of the sustainability information communicated by companies.

Therefore, green accounting is no longer perceived merely as a form of administrative compliance, but has evolved into a strategic instrument for strengthening investor confidence and shaping capital market responses toward corporate sustainability practices.

3. Carbon Emission Disclosure and Capital Market Response

The results of this study indicate that Carbon Emission Disclosure (CEDI) has a negative and significant effect on capital market response. These findings suggest that more extensive carbon emission

disclosure is associated with a less favorable capital market response. Therefore, carbon emission information has not yet been fully perceived by investors as a positive signal of corporate sustainability.

From the perspective of signaling theory, these findings suggest that carbon emission disclosure may be interpreted by investors as a signal of increasing environmental risk exposure. The broader the disclosure of carbon emissions, the greater the investor concern regarding potential environmental costs, energy transition costs, and regulatory risks that may affect future corporate performance. Under such conditions, the market tends to respond more cautiously to carbon emission information.

One possible explanation is that investors in emerging markets, including Indonesia, may still prioritize short-term financial performance over long-term sustainability benefits. Extensive carbon emission disclosure may indicate that companies are likely to incur additional costs associated with emission reduction programs, investments in cleaner technologies, compliance with future environmental regulations, and sustainability reporting. Consequently, rather than being perceived solely as a positive sustainability signal, carbon emission disclosure may also be viewed as reflecting greater operational costs and environmental risks, thereby leading to a more cautious market response.

These findings also demonstrate that the Indonesian capital market remains in a transitional phase toward ESG-informed decision making. Although attention to ESG issues continues to increase, investors may still perceive carbon emission information primarily as an indicator of environmental risk rather than corporate sustainability excellence. This condition suggests that the market has not yet fully distinguished between companies that provide substantive carbon emission disclosure and those engaging in symbolic disclosure practices.

The results of this study confirm that ESG disclosure does not automatically generate positive market responses. In certain contexts, carbon emission disclosure may instead increase investor sensitivity toward corporate environmental risks. Therefore, the quality and credibility of sustainability information become critical factors in strengthening investor confidence in corporate ESG practices.

These findings further indicate that, within the context of emerging markets, carbon emission disclosure has not yet been fully perceived as a source of competitive sustainability advantage. Instead, it is more commonly associated with potential environmental costs and risks than with corporate sustainability leadership.

These findings suggest that carbon emission disclosure conveys a dual signal to investors. While it reflects a company's commitment to environmental responsibility and sustainability, it may simultaneously signal higher future compliance costs, transition risks, and environmental liabilities. This dual interpretation provides a plausible explanation for the negative capital market response observed among Indonesian investors.

4. Sustainability Information Credibility and Capital Market Response

The findings of this study indicate that sustainability information credibility (IKIK) does not have a significant effect on capital market response. These results suggest that Sustainability Information Credibility has not yet been fully perceived by the market as economically relevant information for firm valuation. Therefore, although companies may demonstrate relatively high Sustainability Information Credibility, this has not been directly translated into higher market valuation by investors.

The insignificant effect of sustainability credibility on capital market response also indicates that sustainability credibility has not yet functioned effectively as a mediating mechanism linking ESG disclosure practices and market valuation. Although companies may strengthen Sustainability Information Credibility through broader environmental disclosure, investors in the Indonesian capital market may still place greater emphasis on short-term financial performance than on the quality of sustainability information when making investment decisions.

These findings further indicate that the Indonesian capital market remains in a transitional stage toward ESG-informed investment decision-making. Under these conditions, sustainability information credibility has not yet become a primary determinant in investment decision-making.

From the perspective of signaling theory, these findings imply that the sustainability signals communicated by companies are not yet fully perceived by investors as credible and trustworthy. This condition may arise because the increasing adoption of ESG disclosure practices has not always been accompanied by stronger investor confidence in the substance of sustainability information disclosed by companies. In other words, the market has begun to differentiate between mere ESG compliance and sustainability credibility that genuinely reflects the quality of corporate sustainability practices.

Furthermore, these findings indicate that investors remain concerned about the possibility of symbolic disclosure and greenwashing practices, limiting the positive impact of sustainability information on market responses. This condition demonstrates that the extent of ESG disclosure alone is insufficient to build investor confidence without adequate information quality and validation mechanisms.

The findings of this study suggest that ESG development within the Indonesian capital market still requires stronger sustainability assurance, transparency, and standardization of sustainability reporting practices. Therefore, Sustainability Information Credibility depends not only on the extent of ESG disclosure, but also on a company's ability to build investor trust in the authenticity and quality of the information it communicates.

5. Implications for the Future of the Accounting Profession

The findings of this study have important implications for the future transformation of the accounting profession in the era of ESG and sustainability reporting. The increasing market attention toward green accounting quality and carbon emission disclosure indicates that sustainability information is no longer viewed merely as a complement to financial statements, but rather as an integral component of investor decision-making processes.

From the perspective of legitimacy theory, pressures arising from the external environment encourage companies not only to pursue ESG compliance, but also to build sustainability credibility reflected through the quality of the information they disclose. In this context, the accounting profession has evolved from being merely a provider of financial information to becoming a strategic contributor to the credibility of corporate sustainability reporting.

This role positions accountants as sustainability credibility gatekeepers, responsible not only for measuring and reporting ESG information but also for ensuring its validity, consistency, and reliability. The finding that the market has not yet fully responded to sustainability information credibility indicates the existence of a credibility gap, thereby strengthening the urgency of enhancing sustainability assurance mechanisms and the standardization of ESG reporting practices.

These implications suggest that the accounting profession must develop specialized competencies, particularly in carbon accounting, ESG reporting, and sustainability assurance, to meet the growing demands for transparency and accountability in capital markets.

Ultimately, the transition toward a sustainable economy not only transforms corporate reporting practices but also redefines the strategic role of the accounting profession from a provider of historical financial information to a guardian of Sustainability Information Credibility that supports investment and economic decision-making in the ESG era.

Conclusion

The findings of this study show that Carbon Emission Disclosure enhances the credibility of corporate sustainability information, while Green Accounting Quality positively influences capital market responses. In contrast, Carbon Emission Disclosure is associated with a negative capital market response, while Sustainability Information Credibility does not significantly influence corporate market valuation. These findings suggest that sustainability credibility has not yet effectively served as an intermediary mechanism connecting ESG disclosure practices with investor market responses.

The study also indicates that the Indonesian capital market is gradually shifting toward ESG-oriented investment decision-making. Nevertheless, Sustainability Information Credibility has not yet been fully perceived by investors as economically relevant information for investment decision-making. This situation reflects the presence of a credibility gap, where market participants are increasingly aware of corporate sustainability initiatives while still questioning the reliability, authenticity, and substantive quality of ESG disclosures provided by companies.

These findings further indicate that ESG disclosure alone is insufficient to generate positive market valuation unless it is supported by credible and reliable sustainability information that strengthens investor confidence.

These findings also highlight the evolving role of the accounting profession in the ESG era. Accountants are increasingly expected not only to prepare financial statements but also to strengthen sustainability credibility through ESG reporting, green accounting, carbon accounting, and sustainability assurance. This transformation underscores the profession's strategic contribution to supporting sustainable development and improving the quality of corporate sustainability reporting.

This study has several limitations, particularly the relatively small number of beyond compliance companies included in the sample and the specific approach used to measure Sustainability Information Credibility. Accordingly, future research is encouraged to develop broader and more comprehensive measures of Sustainability Information Credibility and sustainability assurance while also examining how investors distinguish between substantive sustainability practices and symbolic ESG disclosure in shaping capital market responses.

ACKNOWLEDGE

The author sincerely acknowledges the Department of Accounting, Politeknik Negeri Pontianak, for the research funding and institutional support provided throughout this study. The support received has been highly valuable in facilitating the research process and the preparation of this manuscript.

The author also extends sincere appreciation to colleagues, academic peers, and mentors for their constructive feedback, valuable insights, and encouragement throughout the development of this research.

Any interpretations, conclusions, and possible limitations presented in this study remain entirely the responsibility of the author.

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