Check for updates

Jurnal Akuntansi dan Auditing Indonesia
https://journal.uii.ac.id/JAAI

Symbolic compliance or substantive transparency? Sustainability reporting, corporate attributes, and financial reporting quality in Indonesia

Yuliani Almalita*, Almaida Dwi Kusuma
Sekolah Tinggi Ilmu Ekonomi Trisakti, Jakarta, Indonesia
*Corresponding author e-mail: yalmalita@gmail.com

ARTICLE INFO

Article history:
Received 2026-01-04
Accepted 2026-06-01
Published 2026-06-22

Keywords:
Audit Quality; Financial Reporting Quality; Revenue Growth; Sustainability Reporting; Sustainability Reporting Quality

DOI:
https://doi.org/10.20885/jaai.vol30.iss1.art20

ABSTRACT

This study investigates the effect of sustainability reporting on financial reporting quality in Indonesian manufacturing companies during 2022–2024. Using 375 firm-year observations from 125 listed firms, this study applies panel data regression with the Random Effects Model (REM). The results show that sustainability reporting, sustainability reporting quality, and audit quality do not significantly influence financial reporting quality. In contrast, revenue growth and leverage negatively affect financial reporting quality, whereas firm size and tangibility positively influence reporting quality. These findings indicate that firms' financial characteristics play a more substantial role in determining reporting quality than sustainability disclosure practices. This study contributes to sustainability accounting literature by providing evidence from an emerging market context. Future research should examine governance mechanisms, ESG assurance, and industry-specific factors to better explain variations in financial reporting quality.

Introduction

In the modern global business landscape, corporate transparency is no longer judged solely by short-term financial performance but increasingly by social and environmental accountability through sustainability reporting. The international investment community extensively relies on Environmental, Social, and Governance (ESG) disclosures as crucial instruments for non-financial risk mitigation. However, the rapid integration of non-financial information has sparked a significant credibility dilemma in capital markets. According to the PwC Global Investor Survey (PWC, 2023), 94% of global investors expressed deep concern that corporate sustainability reports frequently contain unverified or exaggerated claims, highlighting a severe risk of greenwashing. This widespread phenomenon uncovers a fundamental accountability gap where massive non-financial reporting does not necessarily mirror substantive ethical corporate behavior; rather, it is often deployed as a managerial cosmetic tool to build an artificial reputation.

Concurrently, financial reporting quality (FRQ) remains the bedrock that ensures efficient capital allocation and minimizes information asymmetry between corporate management and external investors (Biddle et al., 2009). Reliable, relevant, and unbiased financial information is indispensable for market participants to evaluate the true economic reality of an enterprise. As public trust in sustainability narratives weakens due to greenwashing scandals, market expectations for FRQ to serve as an anchor of informational integrity have intensified. Unfortunately, relentless global market pressures to maintain short-term profitability frequently incentivize management to engage in earnings management, directly degrading the quality of reported financial data. Consequently, examining how sustainability disclosures interact with financial reporting quality has emerged as a pressing agenda in international accounting research.

In the context of the Indonesian capital market, the dynamics of financial reporting quality (FRQ) present unique institutional challenges. Indonesian corporate governance is traditionally dominated by highly concentrated, family-controlled ownership structures, creating severe Type II agency conflicts where controlling shareholders possess strong incentives to expropriate wealth from minority stakeholders (Panda & Leepsa, 2017). Under the lens of Agency Theory, this unique environment amplifies managerial pressure to deploy discretionary accruals to mask poor performance or hide private rent-seeking activities. Although the Financial Services Authority (Otoritas Jasa Keuangan [OJK]) implemented Regulation No. 51/POJK.03/2017 to mandate sustainability reports (Otoritas Jasa Keuangan, 2017), institutional enforcement remains developing, leading to compliance that is often administrative or symbolic rather than ethical (Yuliawati et al., 2021). Consequently, the multi-dimensional facets of sustainability reporting encompassing disclosure intensity, structural compliance, and substantive quality based on GRI Standards are highly dependent on intrinsic corporate attributes (firm characteristics), such as firm size (size), corporate age

P ISSN 1410-2420 | E ISSN 2528-6528

(age), financial leverage (leverage), liquidity (liquidity), profitability (ROA), and asset structures (tangibility), which are widely recognized as important determinants of financial reporting quality because they influence firms' incentives, monitoring mechanisms, and reporting behavior (Ferdous et al., 2025; Özer et al., 2024). Larger and more profitable firms tend to face greater stakeholder scrutiny and regulatory pressure, encouraging higher transparency and reporting discipline. Conversely, firms with high leverage may experience stronger incentives to engage in opportunistic reporting to satisfy contractual obligations. Liquidity and tangible asset intensity also influence the credibility and stability of financial disclosures, as financially stable firms generally possess lower incentives for earnings manipulation (Huang et al., 2023).

When corporations face intense performance pressures, reflected through rapid changes in revenue growth, managers encounter heightened agency incentives to engage in opportunistic earnings management. To camouflage these financial distortions and maintain corporate legitimacy, underperforming firms use extensive green narratives as an external cosmetic shield (Sebrina et al., 2023). This raises the critical question: Does sustainability reporting truly reflect ethical corporate behavior or is it used, as a form of window-dressing to divert attention from poor financial governance? Therefore, a rigorous evaluation of Indonesian FRQ requires an integrated empirical framework that simultaneously models multi-dimensional sustainability metrics and innate corporate attributes to expose the boundary between symbolic compliance and substantive transparency.

Extant accounting literature regarding the nexus between sustainability reporting and financial reporting quality presents highly inconsistent and mixed empirical findings. On the one hand, proponents of the transparency view argue that high-quality sustainability reporting signals ethical management, which minimizes opportunistic earnings management and enhances financial reporting quality (Alroud, 2025; Al-Shaer, 2020; Gonçalves et al., 2021). On the other hand, the opportunistic perspective suggests that managers strategically exploit non-financial disclosures as a cosmetic shield or legitimacy tool to mask aggressive accrual manipulations and poor governance (Alsayegh, 2025; Sebrina et al., 2023). The critical research gap in the current literature stems from the fact that most prior studies utilize a restrictive, single-proxy approach to capture sustainability efforts, such as relying solely on a binary disclosure indicator or basic disclosure volume metrics. This approach fails to differentiate between mere disclosure volume and substantive reporting quality. Furthermore, most high-level empirical investigations are situated within advanced economies characterized by stringent legal enforcement and mature external assurance markets. As a result, existing literature fails to explain the nuances of this relationship in emerging markets like Indonesia, where institutional enforcement remains fluid and corporate attributes, including financial growth and audit structures, interact differently with opportunistic managerial incentives (Alsayegh, 2025; Rahayu & Yendrawati, 2025).

This study addresses these gaps and offers distinct empirical novelty by deconstructing corporate sustainability reporting into three distinct, simultaneous dimensions to capture the complete spectrum of corporate commitment: sustainability disclosure intensity, sustainability reporting structural compliance, and substantive sustainability reporting quality calibrated against the Global Reporting Initiative Standards 2021 (Mihai & Aleca, 2023). By executing this comprehensive multi-dimensional framework alongside an integrated array of corporate attributes (Firm Characteristics), this research is uniquely positioned to empirically disentangle whether non-financial reporting in an emerging market acts as a genuine signal of organizational transparency or functions as a symbolic compliance mask concealing managerial opportunism.

The empirical setting of this study is focused on manufacturing enterprises listed on the Indonesia Stock Exchange (IDX) spanning the observation period from 2022 to 2024. The manufacturing sector serves as an ideal study setting because its core industrial operations exert a massive, direct impact on the environment and society, rendering these firms primary targets for stakeholder scrutiny and strict OJK POJK 51 enforcement. Furthermore, the 2022–2024 timeframe represents a highly critical post-pandemic recovery era where intense financial performance pressures and revenue volatility potentially amplified managerial incentives to engage in window dressing, coinciding with the full mandatory implementation of sustainability reporting for medium-to-large public entities in Indonesia.

Practically, the findings offer invaluable insights for multiple capital market stakeholders, most notably regulators and policy makers, such as the Financial Services Authority (Otoritas Jasa Keuangan [OJK]). The documented insignificant effects of green disclosures highlight a critical oversight gap, suggesting that current mandates under Regulation No. 51/POJK.03/2017 may inadvertently foster cosmetic compliance frameworks. Consequently, this study aids the OJK in developing more rigorous, integrated oversight metrics to steer local organizations toward national sustainable growth blueprints. For institutional investors and financial analysts, this paper serves as an essential analytical diagnostic tool; it provides critical data on how sustainability practices interface with real accounting quality, thereby enhancing their capacity to detect potential window-dressing facades and make sound investment decisions. Finally, for manufacturing businesses, these outcomes clearly expose that revenue-driven performance pressure rather than audit quality or narrative disclosures is the primary catalyst driving earnings management incentives in Indonesia, warning corporate boards to balance commercial expansion with rigorous financial governance (Baumüller & Sopp, 2022). This study offers significant utility for the investment community by elucidating how corporate sustainability metrics interface with actual accounting integrity, thereby empowering investors to make optimal, risk-adjusted capital allocations. Consequently, these findings enrich the global literature on corporate governance, non-financial reporting, and financial transparency, delivering critical empirical value to a diverse range of international stakeholders (Alsayegh, 2025).

Literature Review

Agency Theory

Agency Theory fundamentally explains the contractual relationship wherein the principal (owner) delegates decision-making authority and operational control to the agent (manager) to act in the organization's best interest (Panda & Leepsa, 2017), Classical Type I agency conflicts arise from the separation of ownership and control, where voluntary sustainability reporting is conventionally expected to mitigate information asymmetry, decrease agency costs, and ultimately enhance financial disclosure quality by subjecting managers to broader stakeholder scrutiny (ALShanti et al., 2024; Saardchom, 2013). However, in emerging markets like Indonesia, corporate structures are heavily characterized by highly concentrated, family-dominated ownership, which shifts the primary governance risk toward Type II agency conflicts (Panda & Leepsa, 2017).

Under the Type II agency framework, the conflict of interest occurs between controlling (majority) shareholders and non-controlling (minority) shareholders. In this institutional setting, controlling owners often possess both the incentive and the power to dictate managerial actions, potentially expropriating wealth from minority investors and deploying discretionary accruals to camouflage such private rent-seeking activities (Yuliawati et al., 2021). Consequently, the role of sustainability disclosures is transformed from a benevolent signaling mechanism into an opportunistic tool. Rather than reducing information asymmetry to alleviate agency costs, extensive non-financial narratives are strategically leveraged by corporate insiders as a symbolic compliance facade to disguise poor financial governance and earnings manipulation from minority stakeholders. Therefore, synthesizing both Type I and Type II perspectives provides a more rigorous and critical framework for explaining why expanding sustainability disclosures does not automatically guarantee superior financial reporting quality in transitional economies (Panda & Leepsa, 2017).

Sustainability Reporting and Financial Reporting Quality

Sustainability reporting therefore functions not only as a disclosure mechanism but also as a strategic instrument through which firms communicate their environmental, social, and governance commitments to investors, regulators, and society (Parmar et al., 2010). The adoption of globally recognized frameworks, such as the Global Reporting Initiative (GRI) Standards, encourages firms to produce sustainability disclosures that are more structured, comparable, and transparent (Mihai & Aleca, 2023). In Indonesia, these practices are further strengthened by Otoritas Jasa Keuangan Regulation No. 51/POJK.03/2017, which requires public companies and financial institutions to disclose sustainability-related information.

From a theoretical perspective, firms that implement comprehensive sustainability reporting are expected to develop stronger reporting discipline, internal monitoring systems, and governance structures. These mechanisms may reduce information asymmetry and managerial opportunism, improving financial reporting quality. Prior studies support this argument by showing that sustainability reporting enhances transparency and constrains earnings management behavior. Al-Shaer (2020) found that higher sustainability reporting quality is associated with better post-audit financial reporting quality in the United Kingdom. Similarly, Qirem et al., (2023) documented that sustainability accounting practices improve reporting transparency and strengthen stakeholder trust. Özer et al. (2024) further demonstrate that ESG-related activities positively contribute to financial reporting quality across international firms.

However, empirical evidence remains inconclusive, particularly in emerging markets. Some studies suggest that sustainability reporting does not necessarily improve financial reporting quality because firms may disclose sustainability information primarily for symbolic compliance rather than substantive transparency. An empirical investigation by Alroud (2025) in emerging capital markets revealed that sustainability disclosures exert a non-significant effect on financial reporting quality, indicating that non-financial publications frequently function independently of internal financial reporting mechanisms. This neutral relationship is further corroborated within the Indonesian institutional setting by Sebrina et al. (2023), who documented substantial quality variance in corporate sustainability disclosures. Their findings suggest that because regulatory enforcement and verification frameworks for environmental, social, and governance data are considerably less stringent than statutory financial audits, firms tend to utilize sustainability reporting as an instrument for symbolic compliance rather than as a driver of substantive accounting discipline. De Souza et al. (2019) found no significant relationship between sustainability disclosure and earnings management, implying that sustainability reporting may co-exist with opportunistic financial reporting behavior. In emerging economies, such as Indonesia, sustainability reporting practices may still be compliance-oriented due to limited assurance quality, weak monitoring systems, and heterogeneous reporting standards. Based on these theoretical foundations, the following hypothesis is formulated:
H_1: Sustainability reporting is positively associated with financial reporting quality.

Sustainability Reporting Quality and Financial Reporting Quality

While the presence of a sustainability report captures a firm's formal or structural commitment to disclosure, Agency Theory dictates that the actual quality of such disclosures, the depth, verification, and credibility of the non-financial content, serve as the true indicator of corporate ethical behavior. As argued by Agency Theory, in environments with fluid institutional enforcement, managers may opportunistically exploit flexible reporting standards to publish low-quality, superficial green narratives (greenwashing) as a cosmetic window-dressing strategy to obscure underlying operational or financial distortions from minority shareholders (de Souza et al., 2019; Panda & Leepsa, 2017).

Conversely, when a firm delivers high-quality, substantive, and meticulously verified sustainability indicators, it signals authentic stakeholder accountability and robust corporate governance. Prior empirical evidence underscores that high sustainability reporting quality is tightly coupled with a diminished likelihood of engaging in opportunistic earnings management activities (Al-Shaer, 2020). By providing granular, reliable disclosures on environmental and social risks, firms voluntarily expand the transparency baseline, which effectively enhances external monitoring by market analysts and auditors while simultaneously fortifying stakeholder trust (Qirem et al., 2023). Given that superior financial reporting quality is conceptually defined as the absence of opportunistic accounting manipulations and reengineered accruals, a negative relationship between sustainability reporting quality and earnings management logically translates into a positive relationship with FRQ. Based on these theoretical foundations, the following hypothesis is formulated:
H_2: Sustainability reporting quality is positively associated with financial reporting quality

Audit Quality and Financial Reporting Quality

Audit quality is widely considered a key external monitoring mechanism that constrains managerial discretion and enhances financial reporting quality. Firms audited by Big 4 audit firms are generally expected to exhibit higher reporting quality due to stricter audit standards, greater expertise, and stronger reputational concerns (Ani, 2021; Wang et al., 2018). Empirical evidence from developed markets supports this view, showing lower earnings management among big 4 audited firms. However, emerging market evidence presents a more nuanced picture. in some contexts, the quality gap between big 4 and non-big 4 auditors may be less pronounced due to institutional factors, regulatory environments, and market structure (Ferdous et al., 2025). Based on these theoretical foundations, the following hypothesis is formulated:
H_3: Audit quality is positively associated with financial reporting quality.

Revenue Growth and Financial Reporting Quality

Revenue growth reflects a firm's expansion opportunities and operational performance but may also create incentives for opportunistic reporting behavior. High-growth firms often face pressure to sustain performance trajectories, which can increase the likelihood of earnings management through accrual manipulation or real activities (Mohmed et al., 2020; Wang et al., 2018). Empirical studies consistently document a negative association between revenue growth and disclosure quality, suggesting that rapid growth may undermine financial reporting quality (Ferdous et al., 2025). In this context, revenue growth serves as a proxy for performance pressure that may weaken reporting discipline. Based on these theoretical foundations, the following hypothesis is formulated:
H_4: Revenue growth is negatively associated with financial reporting quality.

Firm Size and Financial Reporting Quality

Firm size represents one of the most fundamental and critical corporate attributes governing financial reporting quality (FRQ). In positive accounting literature, a firm's asset scale or sales volume fundamentally reflects its operational complexity, resource capacity, and public visibility, which sequentially dictate internal accounting decisions (Dechow et al., 2010). Extant literature reveals a highly dynamic, multi-directional debate regarding the exact empirical influence of firm size on FRQ. Proponents of a positive relationship argue that large corporations possess superior internal control systems, sophisticated financial technology, and greater resources to employ reputable external auditors, such as the Big Four, which collectively restrict opportunistic management behavior (Ferdous et al., 2025). Furthermore, high public visibility forces large entities to minimize financial misreporting to safeguard their corporate reputation in the capital market (Al-Shaer, 2020; Biddle et al., 2009). Conversely, alternative studies document a negative relationship, viewing larger firms through a critical lens of agency theory. This opportunistic stream suggests that the extreme structural complexity and operational diversification inherent in large organizations paralyze shareholder oversight, enabling executives to mask discretionary accruals within complex consolidated accounts to satisfy relentless market performance pressures (Pucheta-Martínez et al., 2018). Based on these theoretical foundations, the following hypothesis is formulated:
H_5: Firm size is positively associated with financial reporting quality.

Firm Age and Financial Reporting Quality

Firm age is considered an important determinant of financial reporting quality because older firms generally possess more established governance systems, stronger internal controls, and greater reporting experience than younger firms (Chulkov & Wang, 2023). Several prior studies have documented a positive relationship between firm age and financial reporting quality. Chulkov & Wang (2023) argue that mature firms tend to exhibit higher reporting discipline and greater transparency due to accumulated reporting experience and stronger stakeholder scrutiny. Likewise, Özer et al. (2024) found that older firms are associated with higher financial reporting quality because organizational maturity improves governance effectiveness and reporting stability. These findings indicate that firm age may reduce earnings management incentives and strengthen the credibility of financial disclosures. Based on these theoretical foundations, the following hypothesis is formulated:
H_6: Firm age is positively associated with financial reporting quality.

Leverage and Financial Reporting Quality

Leverage reflects the extent to which a firm finances its assets through debt and is commonly measured by the ratio of total liabilities to total assets. Leverage is considered an important determinant of financial reporting quality because highly leveraged firms face greater pressure to meet contractual obligations, maintain debt covenants, and satisfy creditor expectations. According to Agency Theory, high debt levels intensify conflicts between managers, shareholders, and creditors, increasing incentives for opportunistic financial reporting and earnings management practices. Özer et al. (2024) argued that firms with high leverage tend to experience stronger pressure to present favorable financial performance, thereby increasing the likelihood of earnings manipulation and reducing reporting quality. Similarly, Mohmed et al. (2020) reported that financially constrained firms are more likely to engage in accrual-based earnings management to avoid covenant violations and maintain external financing access. Ferdous et al. (2025) also suggested that leverage increases reporting incentives associated with opportunistic disclosure behavior. Based on these theoretical foundations, the following hypothesis is formulated:
H_7: Leverage is negatively associated with financial reporting quality.

Liquidity and Financial Reporting Quality

Leverage reflects the extent to which a firm finances its assets through debt and is commonly measured by the ratio Liquidity is considered an important determinant of financial reporting quality because firms with stronger liquidity positions generally face lower financial distress pressure and reduced incentives to manipulate accounting information. According to Agency Theory, managers in financially constrained firms may engage in opportunistic reporting practices to conceal liquidity problems and maintain investor or creditor confidence. Consequently, liquidity plays a crucial role in influencing managerial incentives and the reliability of financial disclosures (Revata & Almalita, 2023). Several studies have documented positive relationships between liquidity and financial reporting quality. Huang et al. (2023) argued that firms with strong liquidity positions are less likely to engage in earnings management because they experience lower pressure to meet short-term financial obligations. Similarly, Özer et al. (2024) suggested that financially stable firms tend to maintain higher reporting discipline and transparency due to reduced financial uncertainty and stronger monitoring incentives. Higher liquidity may therefore improve the credibility and reliability of financial reporting. Based on these theoretical foundations, the following hypothesis is formulated:
H_8: Liquidity is positively associated with financial reporting quality.

Profitability and Financial Reporting Quality

Profitability reflects a firm's ability to generate earnings from its assets and is commonly measured using Return on Assets (ROA). ROA indicates how efficiently management uses company resources to produce profits and serves as an important indicator of operational performance and financial stability. Several studies have documented a positive relationship between profitability and reporting quality. Özer et al. (2024) argue that profitable firms tend to exhibit stronger governance discipline, greater transparency, and lower incentives for opportunistic reporting because they seek to maintain reputational credibility in capital markets. Similarly, Chulkov & Wang (2023) suggested that financially successful firms are more capable of implementing stronger monitoring systems and disclosure practices, thereby improving reporting reliability and reducing information asymmetry. Based on these theoretical foundations, the following hypothesis is formulated:
H_9: Profitability is positively associated with financial reporting quality.

Tangibility and Financial Reporting Quality

Tangibility is considered an important determinant of financial reporting quality because firms with higher tangible assets generally face lower information asymmetry and reduced opportunities for managerial manipulation

compared to firms dominated by intangible assets. According to agency theory, tangible assets are easier for investors, creditors, and auditors to verify, thereby strengthening external monitoring and limiting opportunistic reporting behavior. Several studies have documented a positive relationship between tangibility and reporting quality. Özer et al. (2024) argued that firms with higher tangible asset intensity tend to exhibit better financial reporting quality because tangible assets reduce managerial discretion in financial statement estimation and improve asset verification processes. Similarly, Attia et al. (2023) found that firms with stronger tangible asset structures are less likely to engage in earnings manipulation because physical assets are more transparent and easier to monitor by external stakeholders. Higher tangibility may therefore improve the reliability and credibility of financial disclosures. Based on these theoretical foundations, the following hypothesis is formulated:
H_{10}: Tangibility is positively associated with financial reporting quality.

Research Method

This study uses manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period as the research population. Because this study employs variables with a one-year lag (t-1), the observation period begins in 2021. The sample selection process uses a purposive sampling method, namely, selecting samples based on specific criteria that are consistent with the objectives of the study (Campbell et al., 2020). The criteria used in this study are as follows:

1. Manufacturing companies consistently listed on the Indonesia Stock Exchange during 2021–2024.
2. Manufacturing companies that consistently publish audited annual reports and financial statements during 2021–2024.
3. Manufacturing companies with financial reporting periods ending on December 31.
4. Manufacturing companies consistently present financial statements in Indonesian rupiah currency.

Based on the established criteria, 138 manufacturing companies were obtained, resulting in 414 firm-year observations before outlier treatment. After conducting outlier treatment, 39 observations were excluded, resulting in a final sample of 375 firm-year observations from 125 manufacturing companies. This quantitative research uses secondary data obtained from audited annual reports, sustainability reports, and financial statements of manufacturing companies listed on the Indonesia Stock Exchange (IDX).

This study applies panel data regression analysis because the data consist of cross-sectional and time-series observations. Hypothesis testing uses panel regression with the Random Effects Model (REM), selected based on model selection procedures. In addition, robustness testing was conducted using robust standard errors and outlier treatment to ensure the consistency and reliability of the empirical results.

The research variables comprise financial reporting quality (FRQ) as the dependent variable, sustainability reporting (SR), sustainability reporting quality (Susqual), revenue growth, and audit quality (Big4) as the independent variables. In addition, this study includes corporate attributes representing firm characteristics, namely firm size (size), firm age (age), leverage (leverage), liquidity (liquidity), profitability measured by return on assets (ROA), and tangibility (tangibility). The operational definitions and measurement formulas of all variables used in this study are presented in Table 1.

Table 1. Definition of independent variables

Variables	Definitions	References
	1. Dependent Variable:	
Financial Reporting Quality (FRQ)	$\frac{TA_{it}}{A_{it-1}} = \alpha_0 + \alpha_1\left(\frac{1}{A_{it-1}}\right) + \alpha_2\left(\frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}}\right) + \alpha_3\left(\frac{PPE_{it}}{A_{it-1}}\right) + \alpha_4(ROA_{it}) + \varepsilon_{it}$ TA: Total accruals are the difference in net income after tax and operating cash flows (OCF). A: a firm's total assets. ΔREV: change in the firm's net revenue. ΔREC: change in the firm's net accounts receivable. PPE: the firm's gross property, plant, and equipment. ROA: return on assets, that is, the firm's net income divided by total assets. εit: residuals. To ensure that the higher value of the variable consistently indicates higher quality and to facilitate interpretation (Chen et al., 2011; Kusnadi et al., 2016), we first take the absolute value of the residuals and, subsequently multiply the absolute value by: $FRQ_{it} = -1\,x\ \mid \varepsilon_{it} \mid$	(Chen et al., 2011; Kothari et al., 2016; Kusnadi et al., 2016)

Variables	Definitions	References
	Therefore, a value of FRQit closer to zero (less negative) signifies a smaller magnitude of discretionary accruals, indicating higher financial reporting quality.	
2. Independent Variables:		
Sustanability Reporting (SR)	0 if there is no sustainability report/no information included in the annual non-financial report; 1 if there is no sustainability report, but sustainability data are included in the annual non-financial report; 2 if there is a sustainability report, but it does not have the GRI standards structure; 3 if there is a sustainability report according to the GRI standards.	(Mihai & Aleca, 2023)
Sustainability Reporting Quality (Susqual)	0 if no sustainability reports exist; 1 if sustainability reports exist; 2 if sustainability reports exist and the company has a sustainability committee affiliated with the board of directors; 3 if sustainability reports exist and assurance is provided by a non-audit firm; 4 if sustainability reports exist and are externally assured by a one of the big 4 or other audit firm.	(Al-Shaer & Zaman, 2016)
Revenue Growth	Sales revenue in year t minus sales revenue in year t-1, divided by sales revenue in year t-1.	(Ferdous et al., 2025; Mohmed et al., 2020; Wang et al., 2018)
Audit Quality (Big4)	1 if audited by one of the Big 4 accounting firms, and 0 if otherwise.	(Aqabna et al., 2023; Ferdous et al., 2025; Ani, 2021)
SIZE	Firm size is defined as the natural logarithm of total assets.	(Özer et al., 2024)
AGE	Firm age is measured by the number of years the company has operated since its establishment.	(Aqabna et al., 2023)
LEV	Leverage is defined as the ratio of total debt to total assets.	(Özer et al., 2024)
LIQ	Liquidity is defined as the ratio of current assets to short-term liabilities.	(Al-Shaer, 2020)
ROA	ROA is defined as net income before extraordinary items divided by total assets.	(Özer et al., 2024)
TAN	Asset tangibility is defined as the net property, plant, and equipment divided by total assets.	(Attia et al., 2023)

Source: Compilation by the Researcher

This study examines the effect of sustainability reporting (SR), sustainability reporting quality (SUSQUAL), revenue growth, audit quality (BIG4), and corporate attributes consisting of firm size (size), firm age (age), leverage (leverage), liquidity (liquidity), profitability (ROA), and tangibility (tangibility) on financial reporting quality (FRQ). The research model is expressed as follows:

$$FRQ\_it = \beta0 + \beta1SR\_it + \beta2SUSQUAL\_it + \beta3BIG4\_it + \beta4REVGROWTH\_it + \beta5SIZE\_it + \beta6AGE\_it + \beta7LEV\_it + \beta8LIQ\_it + \beta9ROA\_it + \beta10TAN\_it + \varepsilon\_it$$

Result and Discussion

Descriptive Statistical Analysis

Descriptive statistics are used to present an overview and summarize the characteristics of the research data. This analysis provides information regarding the mean, minimum value, maximum value, and standard deviation of both the dependent and independent variables employed in the study, as presented in Table 2.

Table 2. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Frq	375	-0.056	0.054	-0.310	-0.000
Sr	375	2.363	0.487	1.000	3.000
Susqual	375	1.235	0.649	0.000	4.000
Big4	375	0.349	0.477	0.000	1.000
Revenuegrowth	375	0.058	0.199	-0.680	0.992
Size	375	28.486	1.636	24.604	33.790
Age	375	40.688	16.104	8.000	95.000
Leverage	375	0.417	0.244	0.044	2.045
Liquidity	375	2.888	3.096	0.127	33.484
Roa	375	0.046	0.086	-0.489	0.332
Tan	375	0.375	0.204	0.016	0.905

Source: Secondary data processed in Stata.

Table 2 presents the descriptive statistics of all variables used in this study, including the mean, standard deviation, minimum value, and maximum value based on 375 firm-year observations from manufacturing companies listed on the Indonesia Stock Exchange during 2022–2024. Financial reporting quality (Frq) has a mean value of -0.056 with a standard deviation of 0.054, indicating low variation in financial reporting quality among the sampled firms. The minimum value of -0.310 suggests that several firms exhibit poor reporting quality, while the maximum value approaches zero, indicating better financial reporting quality in some firms.

Sustainability reporting (Sr) shows a mean value of 2.363 on a scale ranging from 1 to 3, indicating that most firms have implemented sustainability reporting practices and generally disclose sustainability information based on relatively structured reporting standards. Meanwhile, sustainability reporting quality (Susqual) has an average value of 1.235 on a scale of 0 - 4, suggesting that although sustainability reporting practices exist, the quality and external assurance of sustainability disclosures remain relatively limited among Indonesian manufacturing firms.

Audit Quality (Big4) has a mean value of 0.349, indicating that approximately 34.9% of the sampled firms are audited by Big Four audit firms. This finding implies that most manufacturing firms still employ non-Big Four auditors. Revenue Growth (Revenuegrowth) records a positive mean value of 0.058, reflecting moderate sales growth among sampled firms during the observation period. However, the wide range between the minimum and maximum values indicates substantial variation in firms' growth performance. Firm Size (Size) has a mean value of 28.486, suggesting that the sampled firms generally consist of medium-to-large manufacturing companies. Firm age (age) shows an average of 40.688 years, indicating that most firms in the sample are mature and well-established companies.

Leverage has an average value of 0.417, implying that approximately 41.7% of corporate assets are financed through liabilities. Liquidity records a mean value of 2.888, indicating that firms, possess sufficient current assets to meet short-term obligations. Profitability measured by ROA has an average value of 0.046, suggesting that firms generate modest profits from their total assets. Finally, Tangibility has a mean value of 0.375, indicating that tangible assets represent approximately 37.5% of total assets, reflecting the capital-intensive characteristics of manufacturing firms.

Panel data model selection

This study employs panel data regression analysis to examine the relationship between sustainability reporting and financial reporting quality. To determine the most appropriate estimation model, this study conducted the Chow test, Hausman test, and Lagrange Multiplier (LM) test. The results of the panel data model selection tests are presented in Table 3.

Table 3. Section Data Panel Model

Test	Probability	Model
Chow Test	0.0007	FEM
Hausman Test	0.3598	REM
LM Test	0.0020	REM

Source: Secondary data processed in Stata.

Based on Table 3, the Chow test produces a probability value of 0.0007, which is below the 5% significance level, indicating that the fixed-effect-model (FEM) is more appropriate than the common-effect-model (CEM). Furthermore, the Hausman test shows a probability value of 0.3598, which exceeds 0.05, suggesting that the random-effect-model (REM) is more suitable than FEM. The LM test also generates a probability value of 0.0020, confirming that REM is preferable to CEM. Therefore, based on the overall model selection procedures, this study employs the random-effect-model (REM) as the most appropriate estimation model.

The Hypothesis Test

Table 4 presents the results of the panel data regression analysis using the random-effect- model (REM). The regression analysis was conducted to examine the effect of sustainability reporting, sustainability reporting quality, audit quality, revenue growth, and corporate attributes on financial reporting quality among manufacturing companies listed on the Indonesia Stock Exchange during 2022–2024. The results include the regression coefficients, t-statistics, probability values, and hypothesis testing outcomes for each independent variable.

Based on Table 4, the adjusted R-squared value is 0.1919, indicating that approximately 19.19% of the variation in financial reporting quality can be explained by sustainability reporting, sustainability reporting quality, audit quality, revenue growth, and the corporate attribute variables included in this study. Meanwhile, the remaining 80.81% is explained by other variables outside the research model. Furthermore, the Prob (F-statistic) value of 0.000 indicates that the regression model is statistically significant and fit for explaining the relationship between the independent variables and financial reporting quality. This result suggests that the variables included in the model jointly provide explanatory power for the dependent variable.

Table 4. Analysis Results of the t-test and f-test

Variable	Coefficient	t-Statistic	Probability	Remark
Sr	-0.00252	-0.363	0.717	H_1 Rejected
Susqual	-0.00001	-0.003	0.998	H_2 Rejected
Big4	0.00394	0.501	0.617	H_3 Rejected
Revenuegrowth	-0.04230***	-2.729	0.007	H_4 Accepted
Size	0.00686**	2.257	0.025	H_5 Accepted
Age	-0.00004	-0.156	0.876	H_6 Rejected
Leverage	-0.03980**	-2.020	0.044	H_7 Accepted
Liquidity	-0.00046	-0.438	0.662	H_8 Rejected
Roa	-0.05890	-0.936	0.350	H_9 Rejected
Tan	0.03480**	2.320	0.021	H_{10} Accepted
Constant	-0.23500***	-3.328	0.001	
Observations				375
Number of ID				125
Adjusted R-squared				0.1919
Prob (F-statistic)				0.000

Source: Secondary data processed in Stata.

Discussion

Sustainability Reporting and Financial Reporting Quality

The regression results indicate that sustainability reporting (Sr) has a negative but insignificant effect on financial reporting quality (FRQ), as reflected by a coefficient value of -0.00252 and a probability value of 0.717. These findings suggest that the implementation of sustainability reporting among Indonesian manufacturing firms has not yet contributed significantly to improving the credibility and transparency of financial reporting. Although companies increasingly disclose sustainability-related information following the implementation of OJK Regulation No. 51/POJK.03/2017, such disclosures may still be compliance-oriented rather than fully integrated into corporate governance and reporting systems. From an agency perspective, sustainability reporting may function primarily as a reputational mechanism to satisfy stakeholder expectations without necessarily reducing managerial opportunism in financial reporting practices.

This finding is consistent with that of de Souza et al. (2019), reported that sustainability disclosure does not significantly constrain earnings management behavior, implying that sustainability reporting may coexist with opportunistic reporting incentives. Similarly, Chulkov & Wang (2023) argue that the effectiveness of sustainability disclosure in enhancing reporting quality largely depends on institutional enforcement, governance quality, and monitoring mechanisms. However, the result contradicts Al-Shaer (2020) and Özer et al. (2024), who found that sustainability-related disclosures strengthen transparency and improve financial reporting quality. The inconsistency may reflect differences in institutional maturity, assurance practices, and sustainability reporting implementation between developed and emerging markets. Overall, this study indicates that sustainability reporting alone is insufficient to improve financial reporting quality unless accompanied by stronger governance mechanisms and credible disclosure assurance practices.

Sustainability Reporting Quality and Financial Reporting Quality

The regression results show that sustainability reporting quality (Susqual) has a negative and insignificant effect on financial reporting quality (FRQ), as indicated by a coefficient value of -0.00001 and a probability value of 0.998. This finding suggests that the quality of sustainability reporting among Indonesian manufacturing firms has not yet contributed meaningfully to improving the reliability and transparency of financial reporting. Although firms increasingly publish sustainability reports, the existence of sustainability committees or external assurance mechanisms does not necessarily strengthen reporting discipline or reduce opportunistic financial reporting behavior. In the Indonesian context, sustainability reporting practices may still emphasize regulatory compliance and disclosure formality rather than substantive integration into governance and financial reporting systems. Consequently, higher sustainability reporting quality does not automatically translate into higher-quality financial reporting.

This result is consistent with that of de Souza et al. (2019), who found that sustainability disclosure quality does not significantly reduce earnings management practices, suggesting that sustainability reporting may coexist with opportunistic reporting incentives. Similarly, Ferdous et al. (2025) argue that the effectiveness of ESG-related disclosure in improving reporting quality heavily depends on institutional enforcement, governance effectiveness, and assurance credibility. However, the findings contradict Al-Shaer (2020), who reported that higher sustainability reporting quality strengthens post-audit financial reporting quality through improved transparency and accountability mechanisms. The inconsistency across studies may reflect differences in sustainability reporting maturity, assurance practices, and institutional environments between developed and emerging economies. Overall, this study indicates that sustainability reporting quality alone remains insufficient to enhance financial reporting quality without stronger governance structures, effective monitoring systems, and credible external assurance practices.

Audit Quality and Financial Reporting Quality

The regression results indicate that audit quality (Big4) has a positive but insignificant effect on financial reporting quality (FRQ), as reflected by a coefficient value of 0.00394 and a probability value of 0.617. This finding suggests that firms audited by the Big Four audit firms do not necessarily exhibit higher financial reporting quality than firms audited by non-Big Four auditors. Although Big Four auditors are generally associated with stronger audit expertise, stricter audit procedures, and higher reputational incentives, these advantages may not automatically translate into improved financial reporting quality within the Indonesian manufacturing sector. The insignificant relationship may indicate that external audit quality alone is insufficient to constrain managerial opportunism when internal governance mechanisms and institutional monitoring remain weak.

This finding is consistent with Ani (2021), reported that audit-related governance mechanisms do not always significantly improve financial reporting quality in emerging market settings due to differences in regulatory effectiveness and corporate governance structures. Similarly, Chulkov & Wang (2023) argue that financial reporting quality is influenced not only by auditor reputation but also by broader institutional and monitoring environments. However, this result contradicts previous studies suggesting that high-quality auditors strengthen reporting credibility and reduce earnings management practices through more rigorous monitoring and verification procedures (Al-Shaer, 2020; Özer et al., 2024). The inconsistency may reflect variations in audit effectiveness, enforcement quality, and the level of managerial discretion across institutional settings. Overall, this study indicates that audit quality alone may not be sufficient to enhance financial reporting quality without stronger internal governance and more effective regulatory oversight.

Revenue Growth and Financial Reporting Quality

The regression results indicate that revenue growth has a negative and significant effect on financial reporting quality (FRQ), as reflected by a coefficient value of -0.04230 and a probability value of 0.007. This finding suggests that firms experiencing higher revenue growth tend to exhibit lower financial reporting quality. Rapid sales growth may increase managerial pressure to sustain financial performance and meet market expectations, creating stronger incentives for opportunistic financial reporting practices. From an agency theory perspective, managers in high-growth firms may engage in earnings manipulation or aggressive accounting strategies to maintain the appearance of continuous growth and favorable financial performance. In emerging market environments, such as Indonesia, where monitoring mechanisms and enforcement quality may vary across firms, growth pressure can intensify reporting discretion and reduce reporting reliability.

This finding is consistent with Mohmed et al. (2020), who argued that firms facing strong performance pressure are more likely to engage in earnings management behavior to preserve investor confidence and market reputation. Similarly, Ferdous et al. (2025) suggested that financial performance pressure may weaken reporting quality when governance mechanisms and institutional oversight are insufficient to constrain managerial opportunism. However, this result contrasts with studies suggesting that high-growth firms may improve reporting transparency to attract external financing and strengthen stakeholder confidence (Özer et al., 2024). The inconsistency across studies may reflect differences in institutional environments, governance quality, and external monitoring effectiveness between developed and emerging economies. Overall, this study indicates that rapid revenue growth may create incentives for opportunistic reporting behavior, thereby reducing financial reporting quality among Indonesian manufacturing firms.

Firm Size and Financial Reporting Quality

The regression results show that Firm Size (Size) has a positive and significant effect on Financial Reporting Quality (FRQ), as indicated by a coefficient value of 0.00686 and a probability value of 0.025. This finding suggests that larger firms tend to exhibit higher financial reporting quality than smaller firms. Large companies generally face greater scrutiny from investors, regulators, analysts, and other stakeholders, encouraging them to maintain more transparent and credible reporting practices. In addition, larger firms usually possess more sophisticated internal control systems, stronger governance structures, and greater financial resources to support reporting accuracy and compliance. From the perspective of Stakeholder Theory, large firms are under stronger public and reputational pressure to provide reliable financial information, thereby reducing the likelihood of opportunistic reporting behavior.

This finding is consistent with Özer et al. (2024) reported that larger firms tend to maintain higher reporting quality due to stronger governance mechanisms and greater stakeholder monitoring. Similarly, Chulkov & Wang

(2023) argue, that firm size positively influences reporting transparency because large firms possess better disclosure systems and face stronger market discipline. Larger firms are also more likely to attract institutional investors and external analysts, increasing external monitoring and reducing information asymmetry (Maricar & Almalita, 2022). However, some prior studies suggest that large firms may also engage in earnings management to maintain market expectations and stable performance perceptions, particularly under high public pressure (Mohmed et al., 2020). Despite these mixed findings, the results of this study indicate that firm size positively contributes to financial reporting quality among Indonesian manufacturing companies, implying that organizational scale strengthens reporting discipline and transparency practices.

Firm age and Financial Reporting Quality

The regression results indicate that Firm age (Age) has a negative but insignificant effect on Financial Reporting Quality (FRQ), as reflected by a coefficient value of -0.00004 and a probability value of 0.876. This finding suggests that the length of a company's operational experience does not necessarily improve the quality of financial reporting among Indonesian manufacturing firms. Although older firms are generally expected to possess more established governance systems, greater reporting experience, and stronger organizational stability, these advantages may not automatically translate into higher reporting transparency and reliability. In the Indonesian context, firm maturity alone may be insufficient to constrain managerial opportunism if not supported by effective governance mechanisms, external monitoring, and strong regulatory enforcement.

This finding is consistent with Ferdous et al. (2025), who argued that financial reporting quality is influenced more strongly by governance effectiveness and institutional monitoring than by firm maturity itself. Similarly, some prior studies suggest that older firms may develop organizational rigidity and entrenched managerial behavior, potentially reducing reporting flexibility and transparency over time. However, the result contradicts Özer et al. (2024), who found that mature firms generally exhibit better reporting quality due to accumulated reporting experience and stronger stakeholder scrutiny. Chulkov & Wang (2023) also suggest that older firms tend to maintain greater reporting discipline to preserve long-term corporate reputation. The inconsistency across findings may reflect differences in institutional environments, governance quality, and managerial incentives between developed and emerging economies. Overall, this study indicates that firm age does not play a significant role in determining financial reporting quality among Indonesian manufacturing firms.

Leverage and Financial Reporting Quality

The regression results indicate that leverage has a negative and significant effect on financial reporting quality (FRQ), as reflected by a coefficient value of -0.03980 and a probability value of 0.044. This finding suggests that firms with higher debt levels tend to exhibit lower financial reporting quality. High leverage increases financial pressure on firms to meet debt obligations, maintain covenant compliance, and preserve creditor confidence, thereby creating stronger incentives for managerial opportunism and earnings manipulation. From the perspective of Agency Theory, conflicts between managers, shareholders, and creditors become more pronounced in highly leveraged firms, encouraging managers to present overly favorable financial information to reduce perceived financial risk and maintain access to external financing.

This finding is consistent with Özer et al. (2024), who reported that highly leveraged firms are more likely to engage in opportunistic reporting behavior due to increased financial pressure and monitoring from creditors. Similarly, Mohmed et al. (2020) and Nufus & Almalita (2023) found that firms facing financial constraints tend to use accrual-based earnings management to maintain performance stability and avoid covenant violations. Ferdous et al. (2025) and Maricar & Almalita (2022) also argue that leverage intensifies managerial incentives associated with aggressive reporting practices when governance mechanisms are insufficient to constrain opportunistic behavior. However, some prior studies suggest that leverage may improve reporting quality because creditors impose stricter external monitoring and demand greater transparency from firms with high debt exposure (Ani, 2021). Despite these differing perspectives, the findings of this study indicate that leverage primarily increases reporting pressure and reduces financial reporting quality among Indonesian manufacturing firms.

Liquidity and Financial Reporting Quality

The regression results indicate that liquidity has a negative but insignificant effect on financial reporting quality (FRQ), as reflected by a coefficient value of -0.00046 and a probability value of 0.662. This finding suggests that a firm's ability to meet short-term obligations does not necessarily influence the quality of financial reporting among Indonesian manufacturing companies. Although firms with strong liquidity positions are generally expected to experience lower financial distress pressure and reduced incentives for earnings manipulation, high liquidity alone may not guarantee stronger reporting transparency or reporting discipline. In the Indonesian context, financial reporting quality may depend more heavily on governance effectiveness, audit quality, and institutional monitoring than on short-term financial conditions.

This finding is consistent with Ani (2021), who argues that financial reporting quality is more strongly influenced by governance and disclosure mechanisms than by liquidity performance alone. Similarly, some prior studies suggest that excessive liquidity may reduce external monitoring pressure because financially stable firms are perceived as less risky by creditors and investors. However, the result contradicts Huang et al. (2023), who found that firms with stronger liquidity positions tend to exhibit better financial reporting quality due to lower incentives for opportunistic reporting behavior. Özer et al. (2024) also suggested that financially stable firms generally maintain stronger reporting discipline and transparency practices. The inconsistency across findings may reflect differences in institutional environments, governance structures, and monitoring effectiveness between developed and emerging economies. Overall, this study indicates that liquidity does not play a significant role in determining financial reporting quality among Indonesian manufacturing firms.

Profitability and Financial Reporting Quality

The regression results indicate that Profitability (Roa) has a negative but insignificant effect on Financial Reporting Quality (FRQ), as reflected by a coefficient value of -0.05890 and a probability value of 0.350. This finding suggests that higher profitability does not necessarily improve the quality of financial reporting among Indonesian manufacturing firms. Although profitable firms are generally expected to possess stronger financial stability, better governance resources, and lower incentives for opportunistic reporting, high profitability may also create pressure to maintain consistent financial performance and favorable market perceptions. Consequently, managers may still engage in discretionary reporting practices to sustain earnings trends and meet stakeholder expectations, particularly in competitive business environments.

This finding is consistent with Ani (2021), who argues that profitability alone does not significantly determine financial reporting quality because governance effectiveness and institutional monitoring play more dominant roles in constraining opportunistic reporting behavior. Similarly, Mohmed et al. (2020) suggested that profitable firms may still engage in earnings management to preserve market confidence and maintain stable financial performance. However, the result contradicts. Özer et al. (2024) reported that profitable firms tend to exhibit higher financial reporting quality due to stronger transparency incentives and lower financial distress pressure. Chulkov & Wang (2023) also found that financially successful firms generally possess better disclosure systems and stronger reporting discipline. The inconsistency across prior findings may reflect differences in governance quality, external monitoring, and institutional environments between developed and emerging economies. Overall, this study indicates that profitability does not significantly influence financial reporting quality among Indonesian manufacturing firms.

Tangibility and Financial Reporting Quality

The regression results indicate that tangibility (Tan) has a positive and significant effect on financial reporting quality (FRQ), as reflected by a coefficient value of 0.03480 and a probability value of 0.021. This finding suggests that firms with higher proportions of tangible assets tend to exhibit better financial reporting quality. Tangible assets, such as property, plant, and equipment, are generally easier to verify and monitor than intangible assets, thereby reducing managerial discretion in financial reporting. From the perspective of Agency Theory, greater asset tangibility strengthens external monitoring by investors, creditors, and auditors because physical assets are more observable and less susceptible to subjective valuation. Consequently, firms with higher tangible asset intensity are more likely to maintain reliable and transparent financial reporting practices.

This finding is consistent with Attia et al. (2023), who argued that firms with stronger tangible asset structures are less likely to engage in earnings manipulation because tangible assets improve monitoring effectiveness and reduce information asymmetry. Similarly, Özer et al. (2024) reported that firms with higher asset tangibility tend to maintain stronger reporting discipline and higher financial reporting quality due to lower managerial flexibility in accounting estimation. However, some prior studies suggest that highly capital-intensive firms may still engage in opportunistic reporting through depreciation policies and asset impairment estimation, particularly when firms face operational or financing pressure (Ferdous et al., 2025). Despite these differing perspectives, the findings of this study indicate that tangible assets positively contribute to financial reporting quality among Indonesian manufacturing firms by strengthening transparency and reducing reporting discretion.

Conclusion

This study examines whether sustainability reporting practices in Indonesian manufacturing firms reflect symbolic compliance or substantive transparency in improving financial reporting quality. Using manufacturing companies listed on the Indonesia Stock Exchange during 2022–2024, the findings reveal that sustainability reporting, sustainability reporting quality, and audit quality do not significantly influence financial reporting quality. These results suggest that sustainability-related disclosures among Indonesian firms may still function primarily as formal compliance mechanisms rather than as substantive governance practices capable of strengthening reporting transparency and accountability. In contrast, revenue growth and leverage negatively affect financial reporting quality, indicating that firms experiencing higher growth pressure and financial obligations tend to face stronger incentives for opportunistic reporting behavior. Meanwhile, firm size and tangibility positively influence financial reporting quality, implying that larger firms and firms with greater tangible asset intensity possess stronger monitoring mechanisms and reporting discipline. Overall, the findings emphasize that corporate attributes play a more substantial role in shaping financial reporting quality than sustainability disclosure practices alone.

This study contributes to the sustainability accounting and financial reporting literature by extending the debate regarding whether sustainability reporting in emerging markets reflects symbolic legitimacy or substantive transparency. The findings provide important implications for regulators and practitioners, particularly regarding the need to strengthen governance integration, disclosure quality standards, and external assurance practices under Indonesia's sustainability reporting framework. Nevertheless, this study has several limitations. The analysis is restricted to manufacturing firms and has a short observation period, which may limit the generalizability of the findings across industries and institutional settings. In addition, this study primarily focuses on disclosure-based sustainability measures and does not incorporate other governance-related factors such as board characteristics, ESG assurance quality, institutional ownership, or managerial incentives. Future research is therefore encouraged to employ broader industrial samples, longer longitudinal observations, and additional governance dimensions to better capture the extent to which sustainability reporting reflects substantive transparency rather than symbolic compliance in emerging economies.

References

Alroud, S. F. (2025). Digital transformation as a moderator: A study of the impacts of sustainability reporting disclosure on financial reporting quality in the jordanian banking sector. *Economics - Innovative and Economics Research Journal*, *13*(2), 389–413. https://doi.org/10.2478/eoik-2025-0046

Alsayegh, M. F. (2025). Nexus between sustainability reporting disclosure and financial performance: A comprehensive analysis of Saudi Arabia's manufacturing industry. *Sustainable Business and Society in Emerging Economies*, *7*(1). https://doi.org/10.26710/sbsee.v7i1.3250

Al-Shaer, H. (2020). Sustainability reporting quality and post-audit financial reporting quality: Empirical evidence from the UK. *Business Strategy and the Environment*, *29*(6), 2355–2373. https://doi.org/10.1002/bse.2507

ALShanti, A. M., Al-Azab, H. A. H., Humeedat, M. M., & AlQudah, M. Z. (2024). Exploring the evolution of creative accounting and external auditors: bibliometric analysis. *Cogent Business and Management*, *11*(1). https://doi.org/10.1080/23311975.2023.2300500

Ani, M. K. A. L. (2021). Corporate social responsibility disclosure and financial reporting quality: Evidence from gulf cooperation council countries. *Borsa Istanbul Review*, *21*, S25–S37. https://doi.org/10.1016/j.bir.2021.01.006

Aqabna, S. M., Aga, M., & Jabari, H. N. (2023). Firm performance, corporate social responsibility and the impact of earnings management during COVID-19: Evidence from MENA region. *Sustainability (Switzerland), 15*(2). https://doi.org/10.3390/su15021485

Attia, E. F., Khémiri, W., & Mehafdi, M. (2023). Does ownership structure reduce earnings manipulation practice of Egyptian listed firms? Evidence from a dynamic panel threshold model. *Future Business Journal*, *9*(1), 34. https://doi.org/10.1186/s43093-023-00213-4

Baumüller, J., & Sopp, K. (2022). Double materiality and the shift from non-financial to European sustainability reporting: review, outlook and implications. Journal of Applied Accounting Research, 23(1), 8–28. https://doi.org/10.1108/JAAR-04-2021-0114

Biddle, G. C., Hilary, G., & Verdi, R. S. (2009). How does financial reporting quality relate to investment efficiency?. *Journal of Accounting and Economics*, *48*(2–3), 112–131. https://doi.org/10.1016/j.jacceco.2009.09.001

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, *25*(8), 652-661. https://doi.org/10.1177/1744987120927206

Chen, H., Chen, J. Z., Lobo, G. J., & Wang, Y. (2011). Effects of audit quality on earnings management and cost of equity capital: Evidence from China. *Contemporary Accounting Research*, *28*(3), 892–925. https://doi.org/10.1111/j.1911-3846.2011.01088.x

Chulkov, D., & Wang, X. (2023). Corporate social responsibility and financial reporting quality: Evidence from US firms. *Studies in Economics and Finance*, *40*(3), 445–466. https://doi.org/10.1108/SEF-09-2022-0462

de Souza, J. A. S., Flach, L., Borba, J. A., & Broietti, C. (2019). Financial reporting quality and sustainability information disclosure in Brazil. *Brazilian Business Review*, *16*(6), 555–575. https://doi.org/10.15728/BBR.2019.16.6.2

Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, *50*(2–3), 344–401. https://doi.org/10.1016/j.jacceco.2010.09.001

Ferdous, L. T., Rana, T., & Yeboah, R. (2025). Decoding the impact of firm-level ESG performance on financial disclosure quality. *Business Strategy and the Environment*, *34*(1), 162–186. https://doi.org/10.1002/bse.3982

Gonçalves, T., Gaio, C., & Ferro, A. (2021). Corporate social responsibility and earnings management: Moderating impact of economic cycles and financial performance. Sustainability (Switzerland), 13(17). https://doi.org/10.3390/su13179969

Huang, X., Wang, X., Han, L., & Laker, B. (2023). Does sound lending infrastructure foster better financial reporting quality of SMEs?. *European Journal of Finance*, *29*, 542–566. https://doi.org/10.1080/1351847X.2022.2075281

Kothari, S. P., Mizik, N., & Roychowdhury, S. (2016). Managing for the moment: The role of earnings management via real activities versus accruals in SEO valuation. *Accounting Review*, *91*(2), 559–586. https://doi.org/10.2308/accr-51153

Kusnadi, Y., Leong, K. S., Suwardy, T., & Wang, J. (2016). Audit committees and financial reporting quality in Singapore. *Journal of Business Ethics*, *139*(1), 197–214. https://doi.org/10.1007/s10551-015-2679-0

Maricar, T. R., & Almalita, Y. (2022). Pengaruh fixed asset turnover, umur perusahaan dan faktor lainnya terhadap manajemen laba. *E-Jurnal Akuntansi TSM*, *2*(3), 97–108. https://doi.org/10.34208/ejatsm.v2i3.1605

Mihai, F., & Aleca, O. E. (2023). Sustainability reporting based on gri standards within organizations in Romania. *Electronics (Switzerland)*, *12*(3). https://doi.org/10.3390/electronics12030690

Mohmed, A., Flynn, A., & Grey, C. (2020). The link between CSR and earnings quality: Evidence from Egypt. *Journal of Accounting in Emerging Economies*, *10*(1), 1–20. https://doi.org/10.1108/JAEE-10-2018-0109

Nufus, H., & Almalita, Y. (2023). Corporate governance dan profitabilitas terhadap earnings management pada perusahaan non-keuangan. *E-Jurnal Akuntansi TSM*, *3*(2), 373–386. https://doi.org/10.34208/ejatsm.v3i2.2100

Özer, G., Aktaş, N., & Çam, İ. (2024). Corporate environmental, social, and governance activities and financial reporting quality: An international investigation. *Borsa Istanbul Review*, *24*(3), 549–560. https://doi.org/10.1016/j.bir.2024.03.001

Panda, B., & Leepsa, N. M. (2017). Agency theory: Review of theory and evidence on problems and perspectives. *Indian Journal of Corporate Governance*, *10*(1), 74–95. https://doi.org/10.1177/0974686217701467

Parmar, B. L., Freeman, R. E., Harrison, J. S., Wicks, A. C., Purnell, L., & De Colle, S. (2010). Stakeholder theory: The state of the art. *Academy of management annals*, *4*(1), 403-445.

Pucheta-Martínez, M. C., Bel-Oms, I., & Olcina-Sempere, G. (2018). Female institutional directors on boards and firm value. *Journal of Business Ethics*, *152*(2), 343–363. https://doi.org/10.1007/s10551-016-3265-9

PWC. (2023). *Survei Investor Global PwC 2023*. https://www.pwc.com/id/en/media-centre/press-release/2024/indonesian/survei-investor--global-pwc-2023.html

Qirem, I. A. El, Alshehadeh, A. R., Al-Khawaja, H. A., Elrefae, G. A., Jebril, I., & Alshehade, S. A. (2023). The impact of sustainability accounting on financial reporting quality: Evidence from the pharmaceutical and chemical sectors on the ASE. *Journal of Logistics, Informatics and Service Science*, *10*(4), 62–71. https://doi.org/10.33168/JLISS.2023.0405

Rahayu, Y. P., & Yendrawati, R. (2025). Corporate Social Responsibility disclosure: A study on audit committee, audit quality, and company size. *Jurnal Akuntansi dan Auditing Indonesia*, *29*(1), 183-193. https://doi.org/https://doi.org/10.20885/jaai.vol29.iss1.art15

Revata, R., & Almalita, Y. (2023). Pengaruh likuiditas, struktur modal dan aktivitas terhadap nilai perusahaan. *E-Jurnal Akuntansi TSM*, *3*(4), 225–236. https://doi.org/10.34208/ejatsm.v3i4.2288

Saardchom, N. (2013). Enterprise risk management under sustainability platform. *Journal of Business and Economics*, *4*(1), 32-41. http://www.academicstar.us

Sebrina, N., Taqwa, S., Afriyenti, M., & Septiari, D. (2023). Analysis of sustainability reporting quality and corporate social responsibility on companies listed on the Indonesia stock exchange. *Cogent Business and Management*, 10. https://doi.org/10.1080/23311975.2022.2157975

Wang, X., Cao, F., & Ye, K. (2018). Mandatory corporate social responsibility (csr) reporting and financial reporting quality: Evidence from a quasi-natural experiment. *Journal of Business Ethics*, *152*(1), 253–274. https://doi.org/10.1007/s10551-016-3296-2

Yuliawati, R., Sidharta, E. A., & Juliardi, D. (2021). Relationship of the audit committee with financial reporting quality: meta-analysis. *Southeast Asia Journal of Contemporary Business*, *Economics and Law*, *25*(1), 151-159