Sustainability Reporting and Quality Management on Company Performance in Indonesia

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ABSTRACT

The aim of this paper is twofold: 1) to analyze the impact of corporate sustainability reporting and quality management on firm performance in Indonesia, and 2) to find out whether there is any significant difference between all sectors of industries in Indonesia concerning the impact of such reporting on firm performance. This study focuses on 697 publicly traded company with 270 samples in Indonesia. We utilized statistical package SMARTPLS analysis to assess both the direct and indirect effects of the hypothesized variables by employing content analysis, using binary (0 and 1) coding, to gauge the extent of sustainability performance disclosure according to the Global Reporting Initiative (GRI) framework. The findings from this analysis are then utilized to investigate the relationship between corporate sustainability reporting and company performance through the application of a logistic regression model. The finding reveals a noteworthy positive correlation between sustainability reporting and a company's performance. Additionally, it suggests that the influence of quality management can moderate this relationship between sustainability reporting and firm performance.

INTRODUCTION

Sustainability reporting (SR) plays a critical role in fostering management transparency and building trust among investors and the public, thereby enhancing a company's corporate image and attracting investment. When effectively communicated and managed, SR can generate value for the company (Khattak, 2020). In this context, businesses frequently encounter challenges and risks in the social and environmental spheres. Elkington's (1998) Triple Bottom Line (TBL) framework, which encompasses the dimensions of people, planet, and profit, emphasizes the importance of companies not only focusing on financial gain but also considering their impact on society and the environment. Therefore, it is essential for companies to prioritize sustainable long-term values over short-term gains, aligning with the TBL concept (Khallaf et al., 2017; Omran et al., 2019; Robins, 2006). Churet, SAM, and Eccles (2014) advocate for "integrated reporting," which combines sustainability reporting with financial performance, to develop a comprehensive long-term strategy for companies. Such integrated reports are considered essential for meeting the expectations of all stakeholders, providing them with a deeper understanding of the relationship between business outcomes and current business trends.

The extant body of research findings reveals a strong association between SR and company values (Berthelot et al., 2012; Carrot & Stick, 2013; Cho & Patten, 2007; Harymawan et al., 2020) and market values (see e.g., Kuzer & Uyar, 2017; Laskar, Chakraborty & Maji, 2017; Loh et al., 2017). Additionally, Buallay (2019) asserts that SR enables firms to make revenue increases and cost reductions, to cause transparency, and to enforce the stability of the company (see also e.g., Eccles & Saltzman, 2011; Jain & Winner, 2016). Buallay's study elucidates the significant contribution of sustainability reporting (SR) to financial performance (FP), aiding stakeholders, decision-makers, investors, and policymakers in building and enriching their understanding of SR practices. Leon-Silva (2022) reported sustainability information is influenced by some factors: the size of the company, financial resources, and economic status of municipalities on their websites in Latin America. These factors are shaped by both internal and external dynamics that influence the decisions and actions undertaken by municipal entities regarding sustainability practices and the disclosure thereof. The obligation for managers to report sustainability information stems from the imperative need to gain legitimacy and avoid disapproval from stakeholders (Bhattacharrya & Cummings, 2015; Deegan, 2014; Deegan et al., 2002) and to improve financial and company performance (Augustyn, Elshaer, & Akamavi, 2019; Laskar, 2018).

SR then constitutes one of the main concerns widely addressed and publicized in recent decades. However, SR is merely a factor contributing to the CP of the firms. Another component, Quality management, is thought to give powerful benefits to CP. Augustyn et al., (2019) observed that there is a substantial association between financial reporting and quality management (QM). There are long-lasting efforts made by companies to lead to better QM by optimizing the workforce, consistent with the organizational climate through corporate values and actively communicating with customers so that the desired QM is obtained (Buallay, 2018; Ching et al., 2017; Jizi et al., 2014; Mitra et al., 2017). A plan in QM is crucial in leveraging firm performance and value. It provides a crucial source of firm competencies. Additionally, Hendrick & Singhal (2001) specify that QM is favorably connected with Financial Performance (FP) which is determined by the business size, the degree of capital intensity and diversification, and the maturity and timing of QM. Likewise, Parvadavardini et al., (2016) demonstrated a favorable correlation between QM practices and performances on firm financial performance. Their result also demonstrates that QM and financial performance exert a direct influence. On the other side, Agus et al., (2019) observed that QM boosts customer satisfaction that subsequently brings improvement to the FP. As such, SR and financial reporting are regarded to have a larger effect and strong platform for a company's transparency.

However, the extant studies mostly focus on the association of QM and CP emphasizing financial performance (FP), while the discussion of Non-Financial Performance (NFP) seems to be neglected. Omran et al., (2019) reported that QM is positively and significantly associated with NFP. As such, the needs to incorporate NFP (e.g., technological use of manufacturing) are strongly required (Drury et al., 1993; Srivastava, 2013). Ahmad and Zabri (2016) suggest the need to include NFP as the supplementing values of the companies. They reported that some NFP elements (e.g., marketing strategy, customer satisfaction, and on-time delivery) provided a strong association with the FP. Additionally, other elements such as quality control, costumer-manufacturer engagement, flexibility, dependability, and internal efficiency constitute robust factors affecting NFP that eventually lead to FP (Hayes, 1985).

The primary function of the financial market or stock exchange is to generate and consolidate information on market prices. This enables managers to make informed decisions and guide investors in real economic activities. However, the presence of asymmetric information between principals and agents impedes investors from accessing specific and accurate company information (Cheong & Zurbruegg, 2016; Jiang & Pang, 2016; Jiang, Kim, & Pang, 2011). Furthermore, companies must maintain a high level of transparency in their information dissemination (Sila et al., 2017). The growing concerns for public interest issues such as climate change, water management, and employee diversity are closely linked to sustainability reporting by companies. These factors directly influence company value as they impact company performance.

Significant strides have been made in comprehending the significance of material sustainability issues. There has been a remarkable increase in the number of companies measuring and disclosing environmental metrics such as carbon emissions, water usage, and waste management, as well as social aspects including employee welfare, product impact, and customer relations. Moreover, governance-related data such as political lobbying efforts and diversity within boards to combat corruption have also gained prominence. Empirical studies indicate the financial relevance of specific sustainability concerns, alongside the establishment of industry-specific standards by entities like the Sustainability Accounting Standards Board (Aggarwal & Singh, 2019; Argento et al., 2018; Bommel, 2014; Kilic & Kuzey, 2018; Laskar, 2018; Mcnally & Maroun, 2018; Petcharat & Zaman, 2019).

In our proposed research model, we introduce Quality Management (QM) as a moderating variable that mediates the relationship between corporate sustainability reporting and firm performance. We argue that regulators should enhance their supervision and monitoring, particularly for companies closely linked with the government. Firms with robust quality management systems should prioritize transparency in their corporate operations. Furthermore, both internal and external auditors need to intensify their auditing efforts to deliver more dependable and accurate financial information, particularly to minority shareholders such as investors and analysts. This approach aims to foster greater trust and accountability within the corporate sector.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Institutional setting

In Indonesia, however, numerous companies exhibit reluctance and actively avoid reporting their sustainability practices (Budiana & Budiasih, 2020; Rusmanto & Williams, 2015; Sharma, 2013). Rusmanto et al. (2015) highlight that the requirement for Indonesian companies to report their sustainability practices is still in its infancy. Many of these companies appear to lack awareness regarding the significance of sustainability reporting in terms of transparency to the community. This situation is compounded by investors' preference for short-term financial gains, while management teams grapple with addressing risks to sustain their value-creation efforts (Kusuma & Koesrindartoto, 2014). Furthermore, Kusuma et al. (2014) indicate a positive yet statistically insignificant impact of sustainability reporting on company performance (CP). In contrast, Laskar (2018) and Zarefar et al. (2022) asserts that sustainability reporting has a substantial impact on company performance in Indonesia. Budiana et al. (2020) suggest that sustainability reporting facilitates the reinforcement of company values and contributes to improved profitability and overall performance. It is recognized that the concept of sustainability reporting in Indonesia is still in its early stages and lags behind other Asian countries such as Japan, South Korea, and India in terms of its impact. However, companies are expected to be able to implement strategies that not only prioritize business sustainability but can also carry out their business processes with the concept of sustainable development (Agustia, 2020). Attention to the environment can provide added value to a company. Consumer interest in environmental awareness creates opportunities for companies to implement green marketing and increase sales. This is an alternative strategy that helps the company's image and adds value to the company's business, even consumers demand environmentally friendly choices and will pay higher prices (Osiako et al., 2022).

This study aims to investigate the impact of SR on CP (both FP-NFP) of Indonesian firms. We take QM as a mediating variable that is hypothesized to have a strong association with SR and FP-NFP. The extant studies examining the impact of sustainability reporting on company performance with quality management as a moderating variable are still scant and not widely explored. We seek to fill gaps in the research literature and supplement moderating variables to investigate the direct and indirect effects of SR on CP from Indonesian companies. Additionally, the association of QM and CP (FP and NFP) is under-researched in the Indonesian context. This study is also aimed at filling the gaps to provide a fined-grained result of the QM and CP association. The impact of SR on FP and NFP is measured through consideration of contingency factors (Grewatsch and Kleindienst, 2017) as an approach to satisfy stakeholders who have the same goals through sustainability (McAdam and Leonard, 2003; Quintana Garcia et al., 2018).

We hypothesize a strong association between SR to CP (FP and NFP) mediated by QM. Hence, to test those hypotheses, we propose research questions as follows:

1. Does corporate sustainability reporting have a positive effect on company performance?
2. Does corporate sustainability reporting have a positive effect on quality management?
3. Does quality management have a positive effect on company performance?
4. Does corporate sustainability reporting and quality management have a positive effect on company performance?

Sustainability reporting (SR) is a form of communication through social activity reporting to help persons in companies manage their transparency in their relationships with their stakeholders. Currently, many companies have carried out sustainability reports encompassing economic, social, and environmental performance as well as providing a comprehensive overview of non-financial aspects related to corporate social activities (Burhan et al., 2012; Carp et al., 2019). This sustainability report creates a close and warm relationship between the company and stakeholders, reduces costs through efficient resource management, influences a long-term business strategy, increases efficiency, and attracts investors so that it can improve the company performance both financial and non-financial performance.

A considerable body of literature review supports the company's motivation to make transparent information using SR which is mostly deemed to be associated with legitimacy, standards, regulations, and stakeholders (Buallay, 2019). Isaksson (2019) pinpoints that interpreting SR is not an easy practice. For instance, The World Global Business Council for Sustainable Development (WBCSD) has provided a website that exerts the complexity and toughness of sustainability information (WBCSD, 2018). The need to provide vivid guidelines for analyzing reports should be improved by focusing on the scope of reporting as the entire value chain. Furthermore, Isaksson suggests that the focus of the report should be more emphasized to the people and planet's needs rather than merely the profit as poverty eradication and climate change reduction. SR as voluntary activity became a pivotal element for a company aimed at assessing the current progress of the current state that leads to sustainability as well as communicating the progress of company activities encompassing social, economic, and environmental dimensions to the stakeholders (Lozano et al., 2016). In this vein, transparency to cope with those dimensions is urgently required.

Previous studies reveal that there is a significant positive relationship between sustainability reporting and company performance (Laskar, 2018; Laskar & Maji, 2016). This impact is more promising in developing countries than in developed countries. However, the SR practices are still well-developed in the Indonesian context. Rusmanto and Williams (2015) reported that only 9% out of 100 companies in Indonesia disclosed their SR during 2011-2012 (see also Kusuma et al., 2014; Sharma, 2013).

Concerning financial performance, prior studies have presented compelling evidence indicating that sustainability reporting (SR) exerts a positive influence. Aggarwal (2013), for instance, explored the impact of corporate sustainability performance on financial performance. Through a longitudinal study, their findings suggested that corporate sustainability performance had a positive yet statistically insignificant effect on financial performance, as measured by return on assets and total asset growth. Additionally, Laskar (2018) examined 36 companies across Japan, South Korea, India, and Indonesia and reported a positive correlation between sustainability reporting and financial performance. While the findings underscored the beneficial impact of sustainability reporting on company sustainability, they also revealed that Indonesia exhibited lower sustainability reporting compared to the other three countries mentioned.

The extant literature review and research found mixed results between SR and company performance. The results could be attributed to a failure in continuity in reporting. However, theoretically, there is a positive relationship between SR and company performance (KPMG, 2008). Sustainability reporting supports a healthy relationship between the interests of the company and the interests of stakeholders, the efficiency of resource management, and transparency and attracts investors to improve company performance. Therefore, based on this relationship, the researcher intends to empirically test the following hypothesis:

Hypothesis 1: Sustainability reporting has a positive impact on the company's performance
Hypothesis 2: Sustainability reporting has a positive impact on the Quality management

In line with previous research related to sustainability reporting, which focuses on which variables may influence the relationship between sustainability reporting and company performance (Buallay *et al*, 2018; Diouf & Boiral, 2017; Franco et al., 2019). Previous studies have explored the moderating effect of quality management, albeit to a limited extent, leaving a gap in the literature that we aim to address. We seek to investigate the concurrent impact of quality management and sustainability reporting on company performance to gain a deeper understanding of their combined influence on both financial and non-financial aspects. Quality management is recognized as a positive strategy for companies, offering numerous benefits such as waste reduction, enhanced customer satisfaction, improved internal communication, increased employee commitment and motivation, stronger supplier relationships, and ultimately, improved company performance (Franco et al., 2019). By examining the interplay between quality management and sustainability reporting, we aim to contribute to a more comprehensive understanding of their collective impact on company performance.

While both quality management and sustainability reporting offer benefits to a company, they often require similar resources, address similar needs, and align with company objectives. In instances where there is conflict or overlapping interests between these two strategies, managers may opt to prioritize one over the other to enhance effectiveness and efficiency. Given that both sustainability reporting and quality management are geared towards stakeholder interests, simultaneous implementation of these activities can lead to conflicting efforts and activities within the company. Therefore, we propose the second hypothesis as follows:

Hypothesis 3: Quality Management has a positive impact on the company's performance
Hypothesis 4: sustainability reporting and Quality Management have a positive impact on the company's performance

METHODS

We employed a quantitative method, Partial Least Squares Structural Equation Modeling (PLS-SEM), utilizing annual and sustainability reports obtained from Bloomberg, IDX, and GRI sustainability reports as secondary data sources. Our sample comprised all companies listed on the Indonesian stock exchange, spanning nine sectors: 7 agricultural, 10 mining, 8 basic industry, 1 miscellaneous, 4 consumer goods, 3 property, and real estate, 5 infrastructural, 12 financial, and 4 trade-investment companies. Of 697 data, samples were collected over 5 years from 2015 to 2019, resulting in a total of 270 observations across the companies. We employed purposive sampling techniques, focusing on companies that published both annual and sustainability reports, to ensure the robustness of our analysis.

Independent variable. Company performance was set up as an independent variable with Market Book Ratio (MBR) as a proxy for financial performance in which MBR constitutes a market-based measurement. In this vein, SR enables companies to maintain and improve robust relationships between stakeholders and the company. It also scaffolds the company to manage resources efficiently, reduce the risk of community complaints, and increase market capitalization (Arayssi *et al.,* 2016; Laskar, 2018; Laskar & Maji, 2016; Malik, 2015; Uwuigbe, 2018). On the other hand, MBR is a better indicator of a company's financial performance to fit and represent the stakeholder expectations. We also use Market Book Value to book the value of equity. Such a value was obtained by multiplying the number of outstanding equity shares by the share price at the end of the fiscal year. Additionally, Operational performance was applied by using Return on assets (ROA). Measured ROA uses the ratio of operating profit to sales (Hussain et al., 2018; Laskar, 2018). Meanwhile, non-financial performance using a marketing performance proxy has been measured using Tobin's Q (Buallay, 2019).

Dependent Variable. We utilized reliability reporting the use of the Corporate Sustainability Performance (CSP) proxy as the independent variable in this study. CSP was gauged using the GRI (Global Reporting Initiative) Reporting 4 framework. To measure the CSP disclosure score, the GRI4 framework was deemed the most appropriate framework because most of the sample companies have used the GRI framework to report their CS reports. The content analysis method was used to measure CSP using the GRI reporting framework (G4). This technique was considered empirically valid in previous studies related to sustainability reporting (Kuzey & Uyar, 2017; Laskar, 2018; Munshia & Duttab, 2016). Most researchers used the coding system for content analysis, using (1) if any or (0) if no items have been specified in the GRI reporting on sustainability reporting. Then the disclosure index is obtained by calculating the proportion of the total score to the maximum score that can be achieved.

Mediating variable. We used dichotomy variables: (1) certification or no certification (0) to measure QM, namely whether the company has ISO 9001 or not. ISO 9001 specifies special requirements that must be adopted so that the consistency of products, services and processes is carried out in all types of industries (Franco et al., 2019). The measurement is in line with our hypothesis that is whether the impact of sustainability reporting on changes in company performance depends on the companies' adoption of QM practices. ISO 9001 sets forth some requirements that the company must adopt for the consistency of products, services, and processes for any companies (Chatzoglou et al, 2015) It also has been utilized as a QM measure by several previous studies (Levine and Toffel, 2010 as the review).

Control Variable. We used firm size as control variable by utilizing total asset (TA) of companies (Hardiningsih et al., 2020; Laskar, 2018). The other control variables were utilized to control the impact of capital structure that is leverage gauged using Ratio of total debt to total assests (Karaman et al., 2018). We summarized the variables mentioned above in table 2.

Table 2 **List of variables**

Variables	Labels	Measurements
Dependent variables		
Operational performances	ROA	Net income divided by total assets
Financial performance	MBR	The MV equity to book value (BV) of equity.
Market performance	TQ	(Market value of equity + total liabilities + preferred equity + minority interest): book value of assets
Independent variables		
Sustainability reporting	SR	Binary variable taking the value of 1 if the company publishes a GRI-based report in a given year and a value of 0 otherwise
Control variables		
Leverage	L	Ratio of total debt to total assets
Total assets	TA	Total assets of the firm

RESULTS

We employed the statistical package SMARTPLS analysis to assess both the direct and indirect effects of the hypothesized variables. Partial Least Squares (PLS) path modeling was chosen as it is considered a methodologically sound alternative for theory testing (Ringle & Sinkovics, 2009). In this framework, financial reports were treated as endogenous variables directly influenced by Sustainability Reporting and Quality Management, which served as exogenous variables. Additionally, we computed and interpreted the coefficients to ascertain the magnitudes of association between the variables. Quality Management was positioned as a mediating variable intervening between Sustainability Reporting and Firm Performance, delineating its role in the relationship between the two constructs.

Table 1 model evaluation for data validity dan reliability

Expected magnitude	This study	Decision
Loading factor (LF) = ≥ .5	**Between .87 and 1.0**	**Valid**
Average variance extracted (AVE ≥ .50)	**Between .76 and 1.0**	**Valid**
Fornell-lacker		**Valid**
Heterotrait-Monotrait Ratio (HTMT) < .90	**Between .17 and .35**	**Valid**
Composite reliability (CR ≥ .70)	**CR = 0.9 – 1.0**	**Reliable**
Cronbach's Alpha >.70		**Reliable**
VIF < 5) and t-test >1.96	**Between 1 – 2.4**	**Valid**
SRMR < .1	**.019**	**Valid**

SmartPLS comprises two models to be measure that is inner model i.e., research hypothesis and outer model i.e., variables measurement. Additionally, model evaluation was carried out to measure the validity and reliability of the model (Hair et al., 2012). Those evaluations comprised three subsequent steps. First, we evaluated the measurement model encompassing convergent validity i.e., loading factor (LF ≥ .5), composite reliability (CR ≥ .70), average variance extracted (AVE ≥ .50) and discriminant validity i.e., cross loadings, AVE square ≥ correlation among variables, and HTMT < .90. Second, we checked the structural model encompassing multicollinearity between variables (VIF < 5) and t-test >1.96. Last, we carried out the evaluation of model good-fitness embracing R square magnitude, effect size F Square, and SRMR.

DISCUSSION

Sustainability reporting has a positive impact on the company performance

The results depicted in Figure 2 demonstrate that the impact of sustainability reporting on company performance is statistically insignificant, indicating a magnitude of 8.4% (P-Value = .31 > .05), thus addressing research hypothesis 1. This discovery adds to both theoretical frameworks and empirical insights into the interplay among sustainability reporting (SR), quality management (QM), and company performance (CP). Prior literature suggests a linear correlation between SR and CP, with potential outcomes spanning positive or negative effects. Furthermore, there are indications that the relationship between SR and CP may conform to a U-shaped or inverted U-shaped pattern, as observed by Franco et al. (2020) in their comprehensive review. These conflicting findings may arise from the costs

and uncertainties associated with social and environmental investments, potentially attenuating the linkage between SR and CP, as posited by Park et al. (2017).
Our results are consistent with the conclusions outlined in the prior research (Kusuma et al., 2014; Rusmanto et al., 2015). More precisely, our investigation validates the insignificant influence of solely sustainability reporting (SR) on company performance (CP), indicating a path coefficient magnitude of 8.4%. This magnitude lacks statistical significance in forecasting CP implies that the elements encompassed within SR, including economic, social, and environmental dimensions, might offer comparatively diminished contributions to CP. The lack of awareness and the reluctance to avoid reporting SR may contribute to the less substantial effect of SR on CP (Budiana & Budiasih, 2020; Laskar, 2013)

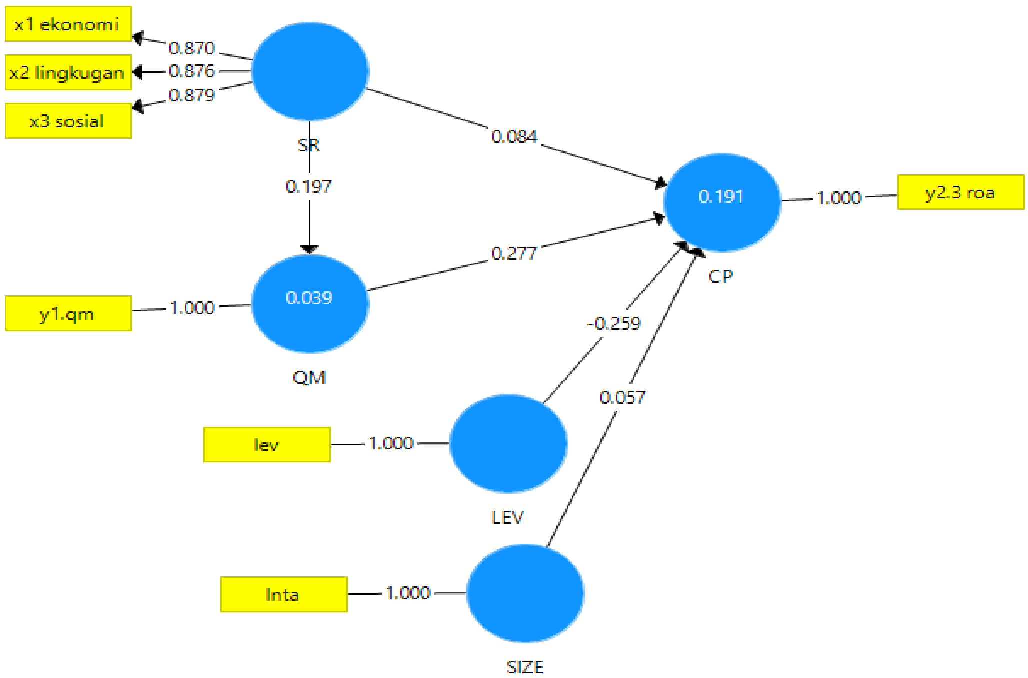

Figure 2 Path analysis of Sustainability reporting by mediating variables on company performance

Sustainability reporting has a positive impact on the Quality management

By contrast, sustainability reporting demonstrates a significant influence on quality management, with a magnitude of 18% (P-Value = .00 < .05). We posit that while a robust dedication to sustainability reporting (SR) is essential, it alone may not suffice if cost constraints persist as a substantial obstacle. Challenges such as inadequate commitment, reputational risks, and the presence of contradictory stakeholders can impede the effective implementation of SR within organizations (Buallay, 2019; Carlos and Lewis, 2018; Omran et al., 2019). Moreover, there exists a discernible stakeholder demand for the adoption of SR practices, yet focusing solely on SR to enhance financial performance might engender negative perceptions. Salancik and Pfeffer (1978) contend that stakeholders harbor favorable sentiments toward entities that provide readily accessible and pertinent resources under the organization's control. Consequently, if the commitment to SR primarily aims at augmenting financial outcomes and benefits a select group of stakeholders like customers, suppliers, and employees, discerning a clear impact of SR on company performance becomes challenging.

Certainly, a one-size-fits-all approach is insufficient when examining the relationship between sustainability reporting (SR) and company performance (CP) in specific contexts. There is a pronounced need for contingent, company-specific factors that mediate the relationship between these variables. This study augments quality management (QM) as a mediating factor between SR and CP. The substantial positive impact of SR on QM, elucidated by a path coefficient of 19.7%, underscores the pivotal role of QM within the company. Put differently, the diligence exercised in adhering to ISO 9001 standards subsequent to implementing SR strategies has yielded stakeholder satisfaction. The extensive and diverse sample utilized in this study validates such stakeholder contentment. Indeed, ISO 9001 serves as a managerial instrument that delineates the companies engaged in such practices (Agus et al., 2019; Arumugam et al., 2008; Augustyn et al., 2019).

Quality Management has a positive impact on the company performance

Quality management demonstrates a significant influence on company performance, with a magnitude of 27% (P-Value = .00 < .05). These findings substantiate the second and third hypotheses posited earlier. Furthermore, our study unveils that quality management (QM) practices wield a significant and positive impact on company performance (CP). This discovery aligns with prior investigations conducted (Augustyn, 2019; Buallay, 2019; Khattak, 2020; Idris, 2011). Quality management practices foster the cultivation of trust and reciprocity among stakeholders, culminating in elevated market valuations and diminished transactional overheads, thereby satisfying clientele and bolstering productivity and employee allegiance. Additionally, the persistent endeavors towards improvement and advancement entailed by QM exert a pivotal influence on determining the fortunes of companies, significantly shaping their financial outcomes (Agus et al., 2019; Parvadavardini et al., 2016).

The role of managers is pivotal in shaping the vision and mission of the company, as well as in implementing quality management (QM) practices to guide organizational members and ensure adherence to company policies. Managers also play a crucial role in managing conflicts within the company. Effective leadership is essential for making high-quality business decisions and possessing the necessary knowledge to manage information effectively. A holistic approach is necessary to ensure the effectiveness of QM implementation in improving both financial performance (FP) and non-financial (NFP) company performance (Ahmad et al., 2016; Douglas & Judge, 2003; Hayes, 1985). Furthermore, it is imperative for companies to establish clear and measurable vision and mission statements, and for leadership to articulate these goals clearly to organizational members. Additionally, strategies for achieving these goals must be well-defined and communicated to ensure alignment and commitment across the organization.

The pivotal role of managers in shaping the vision, mission, and implementation of quality management (QM) practices within companies cannot be overstated. Managers are instrumental in guiding organizational members, ensuring adherence to company policies, and effectively managing conflicts that may arise. Effective leadership is crucial for making sound business decisions and managing information efficiently. It is imperative for companies to adopt a holistic approach to QM implementation, focusing on both financial performance (FP) and non-financial (NFP) aspects of company performance. To ensure the effectiveness of QM, companies must establish clear and measurable vision and mission statements. Leadership plays a critical role in articulating these goals clearly to organizational members and ensuring alignment and commitment across the organization. By defining well-defined strategies for achieving these objectives and communicating them effectively, companies can enhance their performance and competitiveness in the market.

Sustainability Reporting And Quality Management Have A Positive Impact On The Company Performance

The combined magnitude observed in the direct and indirect effects of sustainability reporting and quality management amounts to 54% (P-Value = .00<.05). Our study revealed a positive correlation between company size and firm performance (FP) when treated as a control variable, aligning with the findings of Buallay (2019). Buallay also noted a similar positive effect of company size on financial performance. This observation suggests that non-financial factors, such as company size, may indeed exert an influence on the financial performance of companies (Leon-Silva et al., 2022). Despite not attaining statistical significance, this result implies that variables beyond sustainability reporting (SR) and quality management (QM) could contribute to the overall financial performance (Buallay, 2019; Jones et al.,2007).

Conversely, our analysis indicated a negative impact of company leverage on company performance (CP). This suggests that lower leverage tends to positively affect FP, indicating that reduced reliance on debt financing may lead to enhanced financial performance for companies. This finding underscores the importance of considering financial structure and capital management strategies alongside sustainability reporting and quality management when assessing their collective impact on company performance (Burhan et al., 2012; Diouf & Boiral, 2017; Franco et al., 2019). The negative impact of company leverage on company performance (CP) highlights the importance of financial structure and capital management strategies in influencing company outcomes. The excessive debt can increase financial risk and hinder a company's ability to generate profits. Lower leverage, on the other hand, suggests a healthier financial position and greater flexibility in managing resources, which can lead to improved financial performance. Therefore, when assessing the collective impact of sustainability reporting and quality management on firm performance, it is essential to consider factors such as leverage and financial structure to gain a comprehensive understanding of their influence on company outcomes (Grewatsch & Kleindienst, 2017; Quintana-Garcia *et al.*, 2018).

The observed negative impact of company leverage on company performance (CP) underscores the significance of financial structure and capital management strategies in shaping company outcomes. Excessive debt levels can heighten financial risk and constrain a company's ability to generate profits, potentially leading to adverse effects on overall performance. Conversely, lower leverage signifies a more robust financial position and greater flexibility in resource management, which can contribute to enhanced financial performance. Moreover, the findings emphasize the need to integrate considerations of financial structure and capital management alongside sustainability reporting and quality management when evaluating their collective impact on company performance. By acknowledging the intricate interplay between financial metrics and sustainability initiatives, organizations can develop more holistic strategies to optimize their performance outcomes. This holistic approach is crucial for gaining a comprehensive understanding of the factors driving company performance and for guiding strategic decision-making processes effectively.

CONCLUSION

Our study examines the intricate connections among sustainability reporting (SR), quality management (QM), and company performance (CP), revealing insights into their complex interplay. While statistical significance was not achieved, our findings offer valuable insights into this relationship, highlighting the potential influence of non-financial factors like company size on CP. We uncover a significant positive impact of sustainability reporting on quality management, emphasizing SR's role in fostering robust QM practices and stakeholder satisfaction. Additionally, we identify a significant positive relationship between quality management and company performance, aligning with prior research and emphasizing QM's critical role in enhancing organizational success. The combined effect of sustainability reporting and quality management on company performance is substantial, underscoring the synergistic outcomes of SR and QM. A holistic management approach, integrating SR, QM, and strategic financial decisions, is crucial for organizational resilience and success. Further research is needed to explore these relationships comprehensively and their implications for organizational performance across various contexts, guiding organizations toward sustainable growth and success.

While our findings offer valuable insights into this relationship, it's important to note some limitations. Firstly, our study did not achieve statistical significance, suggesting the need for caution in interpreting the results. Additionally, our research focused primarily on quantitative analysis, potentially overlooking qualitative aspects that could provide deeper insights into the dynamics at play. Further research is warranted to address these limitations and explore several avenues. Firstly, qualitative studies could complement our quantitative findings, providing a richer understanding of how SR and QM practices are implemented and perceived within organizations. Additionally, longitudinal studies could offer insights into the long-term effects of SR and QM on CP, allowing for a more comprehensive assessment of their impact over time. Moreover, exploring the role of contextual factors, such as industry dynamics and regulatory environments, could provide valuable insights into how these factors influence the relationship between SR, QM, and CP. Furthermore, investigating the potential moderating effects of organizational characteristics, such as size, industry, and organizational culture, could provide a more nuanced understanding of the relationship between SR, QM, and CP. Additionally, examining the role of external stakeholders, such as investors and consumers, in shaping organizational practices and performance could offer valuable insights into the broader implications of SR and QM initiatives.

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