



Trends in Environmental Reporting and Firm Value: A Systematic Literature Review and Future Directions

Ni Gusti Ayu Pitria*¹  and Rahmawati H.S² 

^{1,2}Hasanuddin University, Makassar, Indonesia

¹ayupitria@unhas.ac.id

Abstract. Background Corporate environmental reporting has grown in importance in the context of corporate social responsibility and sustainability. Transparent reporting is expected to benefit long-term firm value. Nonetheless, the relationship between environmental reporting and firm value still requires a deeper understanding. This study aims to conduct a literature review of environmental reporting trends and their impact on firm value over the past decade. The purpose of this review is to identify patterns, challenges and opportunities that exist in related research. In addition, this study also aims to recommend future research directions. The method used is a systematic literature review. The data search process was conducted through several databases using relevant keywords. A total of 101 articles were selected based on predetermined inclusion and exclusion criteria. The results show several key trends in environmental reporting over the past decade, such as increased transparency, adoption of GRI standards, and regulatory influence. Reporting also positively impacts firm value through competitive advantage, access to capital, good image, and stakeholder compliance. Despite this progress, more research is needed on effective sustainability reporting frameworks and their impact on firms' long-term financial performance.

Keywords: Sustainability (CSR) Reporting Trends, Firm Value, CSR Reporting Methodologies, Future Research Directions.

1 Introduction

In the last decade, environmental issues have become one of the main concerns at the global level, driven by the real impacts of climate change, biodiversity decline, and widespread pollution [1]. Events, such as increasingly frequent natural disasters and increasing public awareness of the importance of sustainability, have prompted companies to rethink the way they operate and interact with the environment. In this context, corporate disclosure of environmental information has emerged as an important element in corporate social responsibility (CSR) and risk management practices [2]. These disclosures not only serve as a tool to report environmental performance, but also as a means to build trust and transparency with stakeholders.

Many studies show that good disclosure of environmental performance can give companies a competitive advantage, improve their reputation in the eyes of consumers and investors, and contribute to an increase in firm value. Studies in various countries also show a positive relationship between environmental

information disclosure firm value. For example, research in the Gulf Cooperation Council (GCC) countries found that environmental disclosure is significantly associated with an increase in firm value as measured by Tobin's Q [3]. Research in China also shows that the quality of environmental information disclosure has a positive correlation with firm value, especially in highly polluting industries [4, 5]. In addition, research in the Brazilian stock market shows that environmental disclosure can increase the value of publicly traded companies [6].

However, the relationship between environmental disclosure and firm value is not always consistent. Some studies suggest that factors such as annual report text characteristics, corporate ownership, and profitability may moderate this relationship [7, 8]. For example, the length and readability of annual report text may strengthen the relationship between environmental disclosure and firm value, while text similarity may weaken it [4]. In addition, non-state companies tend to benefit more from environmental disclosure than state-owned companies [5].

Research also shows that investment in environmental protection and disclosure of environmental information can influence each other. Adequate investment in environmental protection, if accompanied by transparent disclosure, can increase firm value [7]. However, excessive disclosure without adequate investment may negatively affect firm value.

In this context, it is important to conduct a systematic review of the existing literature on environmental disclosure trends and their impact on firm value. This review aims to identify patterns, challenges, and opportunities that exist in this research over the past ten years. We will explore the various factors that influence this relationship, including industry context, applicable regulations, as well as market reactions to such disclosures. By understanding these dynamics, we hope to provide deeper insights into how companies can utilize environmental disclosures to enhance their value.

In addition, this study will identify gaps in existing research, which can form the basis for a future research agenda. The emergence of new technologies, changes in government policies, as well as shifts in consumer behavior are some of the factors that need to be explored further to understand their impact on environmental disclosure and firm value.

Through this study, it is expected to make a significant contribution to the existing literature and provide strategic recommendations for practitioners and stakeholders in the field of sustainability. Thus, this study will not only focus on academic aspects, but also provide practical guidance for companies in formulating effective and sustainable disclosure strategies. Therefore, we summarize the research questions as follows:

RQ1. What are the key trends in environmental reporting identified in the literature review over the past decade, and how do these trends affect firm value?

RQ2. What methodologies were used in previous studies to evaluate the impact of environmental reporting on firm value?

RQ3. What future research directions are suggested to deepen the understanding of the relationship between environmental reporting and firm value?

2 Literature Review

2.1 Stakeholder Theory

Stakeholders are groups of individuals or entities that are affected by or can influence the achievement of company goals. According to stakeholder theory, companies must take into account the interests of all relevant stakeholders, not just shareholders[9]. Stakeholders include various groups such as employees, customers, suppliers, communities, and shareholders. This theory argues that companies should not only focus on shareholder profits, but should also consider the interests of all parties involved in the company's operations [10, 11].

Good environmental performance can affect environmental stakeholders such as the community around the company's operating location [10]. The community will be more supportive of the company's operations if the company is environmentally friendly. This in turn will minimize the risk of conflict and disruption of operations due to community protests. This risk reduction can increase the value of the company, for example, companies that have good stakeholder relationship capabilities tend to create greater value for all parties involved[10, 12, 13].

2.2 Legitimacy Theory

The concept of legitimacy theory explains how companies seek to ensure that their values and actions are in line with the expectations and norms of the society in which they operate. This theory assumes that companies must fulfill a social contract with society to gain legitimacy, which in turn allows them to operate smoothly and gain support from various stakeholders [14, 15]. Good environmental management is one way for companies to legitimize themselves. By conducting environmentally friendly practices, the company sends signals to society that it pays attention to environmental issues that are considered important. This will strengthen the company's social legitimacy and this strategy can help companies create value by strengthening positive perceptions from society [16].

When the company's legitimacy is maintained, the business can run smoothly because it avoids disruption. This condition will ultimately support sustainable value creation for the company [17]. Thus, legitimacy theory asserts that good environmental performance contributes to increasing long-term firm value[18, 19]

2.3 Firm Value

Firm value is an important measure for any company. This term refers to an assessment of how much economic value a company has today and in the future. Various ways can be used to measure the amount of firm value of a company. Environmental reporting is one way for companies to disclose their environmental performance to stakeholders[20]. Disclosure of good environmental information turns out to have a positive correlation with the company's firm value [21]. This is due to the various benefits that companies get from adequate environmental reporting.

By disclosing its environmental performance, the company can strengthen its business legitimacy. The public will trust the company's commitment to operate in an

environmentally friendly manner [22]. Good reputation is useful for attracting consumers and quality employees. This can increase the company's competitiveness in the long run. In addition, environmental reporting can reduce the risk of losses due to social protests or regulatory sanctions related to unanticipated operating impacts. For investors, transparency of environmental performance helps them assess the risk of company operations and facilitate investment decisions [23].

3 Research Methods

To achieve our research objectives, we used a systematic literature review (SLR), inspired by [24, 25]. A systematic literature review is a data collection method used in social research to locate, evaluate, and interpret areas of research related to the research topic or phenomenon. To fulfill the eligibility criteria, titles, abstracts, and full-text articles were identified through a self-screened database search. To answer our research questions, we used the model of existing studies [26, 24] by setting the research questions and running various identification processes, data and database search strategies, inclusion and study selection criteria, exclusion criteria, and inclusion screening.

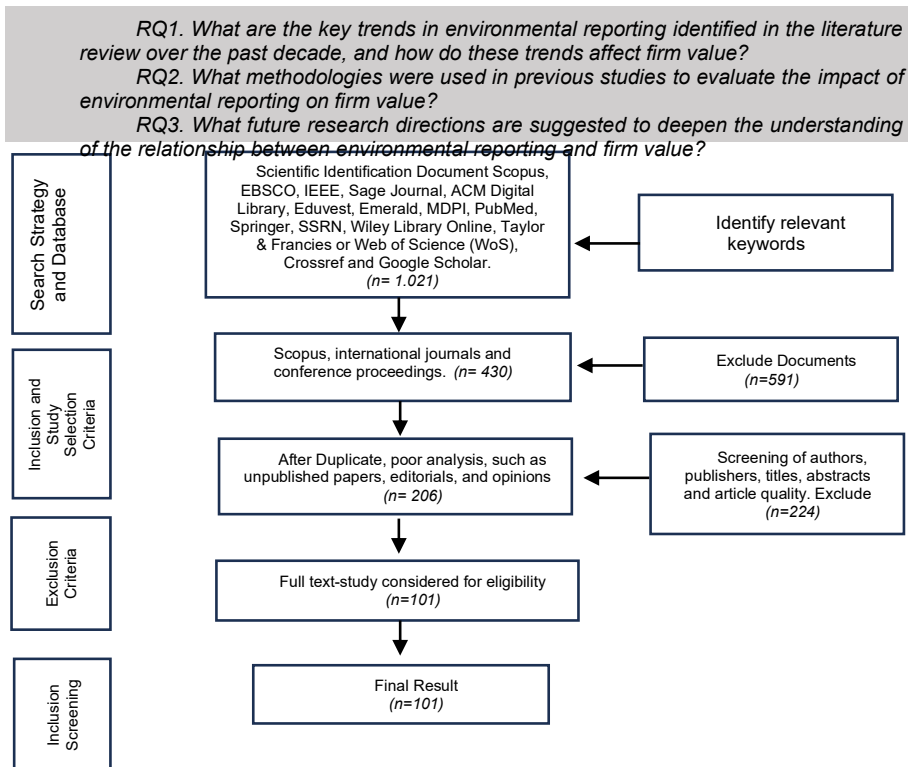


Fig. 1. Document selection process

3.1 Database and search strategy

A predetermined set of keywords was used as the search strategy to search the database. To produce accurate results, the search strategy incorporates important search principles. During the reading of the title, abstract, or full text, the search strategy also considers all possible terms, keywords, and phrases related to the topic [27]. After determining the research question, research objectives, assessing the quality, and synthesizing the results, a research approach is created [28]. Therefore, when selecting publications for this study, only important data was considered. The scope of scientific repositories such as Scopus, EBSCO, IEEE, Sage Journal, ACM Digital Library, Eduvest, Emerald, MDPI, PubMed, Springer, SSRN, Wiley Library Online, Taylor & Francies, or Web of Science (WoS), Crossref, and Google Scholar were used in this study. Therefore, we concentrated on journal articles published between 2015 and 2024 and applied the SLR methodology inspired by [24, 29] to avoid distractions due to first-time implementation issues. We received 1,021 articles. To minimize the scope of the study, keywords will be selected after determining the search site [30]. Trends in sustainability (CSR) reporting, corporate value, CSR reporting methodologies, and future research directions. The results of the search process and selection criteria based on publication year and keywords showed that we found 101 relevant articles (figure 1).

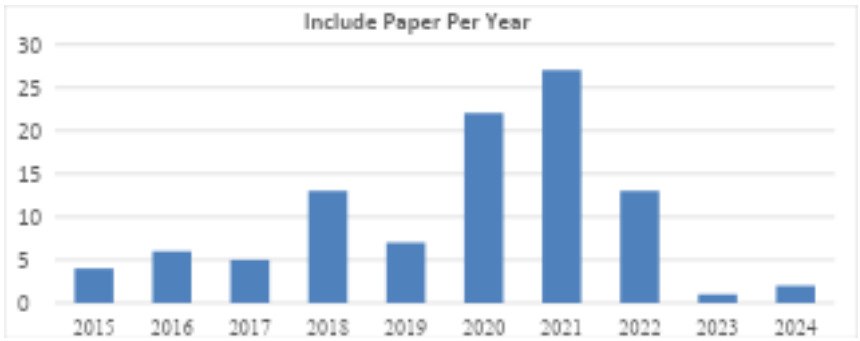


Fig. 2. Distribution of research related to publication year



Fig. 3. Number of Publication Per Journal

3.2 Inclusion Criteria and Study Selection

Studies to be included in this SLR must meet the predetermined inclusion criteria. To determine the final eligibility of the studies, those that have completed keyword screening will undergo a full manuscript review process. In addition, the references of the selected studies will be checked to find other studies that may be relevant. At this time, we have obtained 430 journals that will be discussed further. The following selection criteria were used to select relevant papers [27]:

1. Studies that explicitly address environmental reporting trends and their impact on firm value;
2. Research that conducts methods in data collection and data analysis used in research related to corporate social responsibility reports;
3. Research that describes or recommends future research directions in the context of environmental reporting and firm value;
4. Research published in the English between 2015 and 2023; and
5. Research in the form of scientific journal articles, conferences, conference proceedings, and Scopus.

If the research does not meet the inclusion criteria, it will be excluded from the review process.



Fig. 4. Publication Per Journal

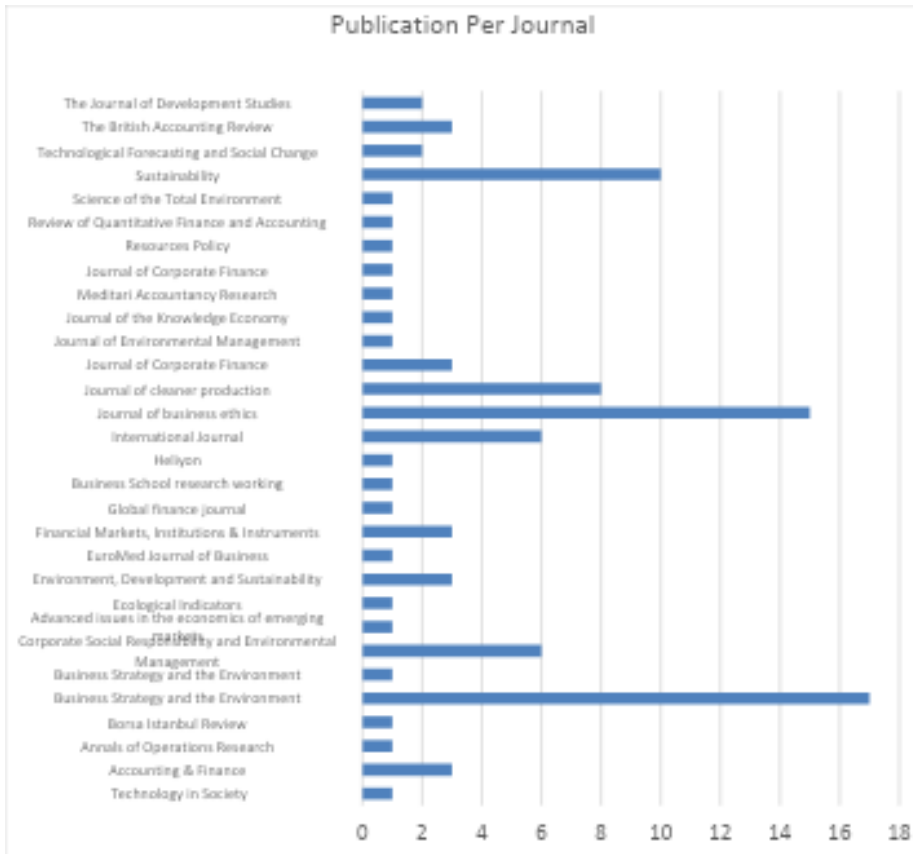


Fig. 5. Number of Publication Per Journal

3.3 Exclusion Criteria

Exclusion criteria, or exclusion criteria, is one of the important components in SLR that is used to select studies to be included in a systematic review. Not only should researchers establish the previously described inclusion criteria, they should also establish clear exclusion criteria to eliminate irrelevant studies. Once the duplicate elimination process is complete, the next step in SLR is to establish clear exclusion criteria. Researchers should eliminate studies that are considered low-quality or irrelevant to the purpose of the systematic review. They should also eliminate similar publications. By manually conducting bibliometric analysis, researchers can achieve this. This includes examining citation patterns, the novelty of the topic, and its relationship to the research question. Publications that deviate from the main focus or address topics that do not fit the pre-established inclusion requirements should be discarded. In addition, publications considered to be of low quality, such as editorial papers, opinion pieces, and documents that were not formally published, had to be

eliminated by researchers. Results were collected from 403 journals to 206 scientific papers.

3.4 Inclusion Screening

From the two subject areas of the search, we obtained 101 articles (n=101) to be included in the further process inspired by [26]. In the inclusion screening stage, this research focuses on countries that have major trends in environmental reporting, as well as how these trends were identified in the literature review over the past decade and their impact on firm value. This research aims to analyze the patterns of environmental disclosure across countries, explore the factors that influence such reporting, and evaluate how transparency in environmental performance disclosure can contribute to increased firm value. By understanding the different geographical and regulatory contexts, it is expected to identify best practices that can be adopted by companies around the world [31].

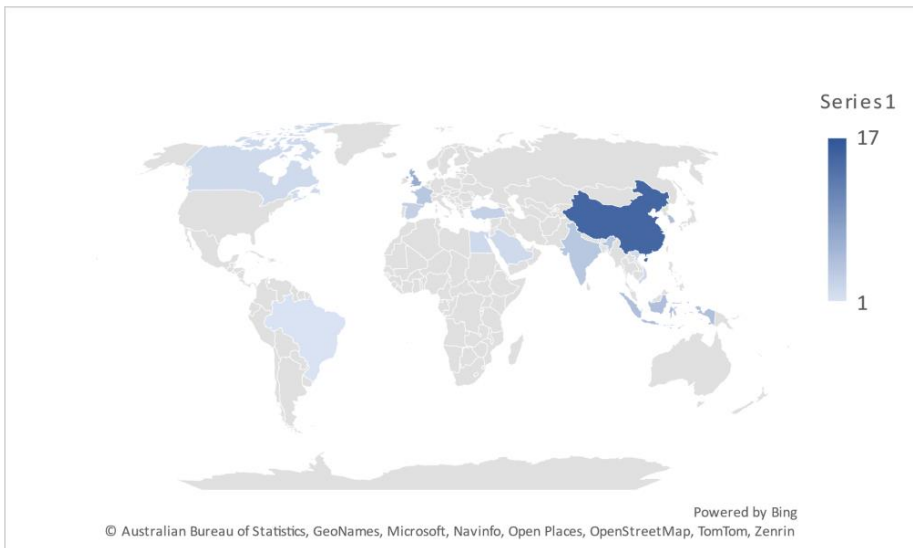


Fig. 6. Geochart of the number of articles by country

4 Results and Discussion

RQ1: What are the key trends in environmental reporting identified in the literature review over the past decade, and how do these trends affect firm value?

Trends in Environmental Reporting	Author
Increased Transparency and Accountability	[32,33,34]
Use of Global Reporting Initiative (GRI) Guidelines	[35,36]
Influence of Environmental Regulations	[5,4,37,38,39]
ESG (Environmental, Social, and Governance)	[40,41,42,43,44,45,46,47]

Reporting	
Environmental Performance Reporting	[48,49,50,51,52,40]
Green Accounting and Sustainability Reporting	[53,54,55,56,57]

Table 1. Trends in Environmental Reporting

Environmental sustainability reporting has become an important tool for companies to improve their transparency and accountability. Various studies have shown that environmental sustainability reporting practices have a significant positive impact on company value, especially when supported by an independent board of directors [32]. This trend reflects the increasing attention of companies to social and environmental responsibility, which is considered a key factor in attracting investor interest as in table 1.

On the other hand, many large companies, especially in Germany, have adopted the Global Reporting Initiative (GRI) guidelines in their sustainability reporting. However, studies have shown that higher levels of compliance with the GRI guidelines do not always correlate positively with increased company value [35]. This indicates that although international standards provide a good framework, effective implementation and the relevance of the reported information remain important factors influencing investor perceptions.

In developing countries such as China, regulations requiring environmental disclosure have shown a significant impact on firm value, especially for non-state-owned enterprises [5, 4]. In addition, Environmental, Social, and Governance (ESG) reporting has also emerged as a major trend, with studies showing that ESG reporting and gender diversity on boards of directors can increase firm value, especially in environmentally sensitive industries [40, 58]

Globally, environmental performance measured through various dimensions such as material inputs and non-product outputs shows varying impacts on firm value. Some dimensions have a positive impact, while others are insignificant or even negative [48]. The implementation of green accounting and sustainability reporting in various countries also shows that green accounting can increase firm value, while sustainability reporting sometimes shows negative results because increased reporting does not always align with increased firm value [53].

Overall, the key trends in environmental reporting over the past decade include increased transparency, adoption of international standards, and increasing regulatory influence. Despite significant progress, challenges remain in ensuring that disclosures actually add value to companies and attract investor attention.

The Effect of Trend Reporting on Company Value	Author
Increase competitive advantage	[32,59,60,51]
Helps access capital & reduces the cost of capital	[61,45,62,63,64]
Improve the company's good image	[65,51,66,67,68]
Improve relationships & trust with stakeholders	[69,70,47,71,72,73,74,75]
Provides a positive relationship to the company's financial performance	[42,76,77,78,79,80,58]
Minimize company risk	[81,43,82,83,84,55,85,64,86]
Increase company legitimacy	[87,88,89,90]
Reduce information asymmetry	[91,92,93,39,94,54,95]
Encourage the company's innovation capacity	[96,97,98,63]

Table 2. Influence of Environmental Reporting Trend

The growing trend of environmental reporting in the past decade has had a significant impact on firm value across multiple dimensions as shown in Table 2. First, one of the most striking influences is its ability to increase competitive advantage. Companies that actively disclose information related to their environmental performance not only demonstrate a commitment to sustainability, but also manage to attract the attention of consumers and investors who are increasingly concerned about environmental issues. This creates differentiation in the market, where companies that are transparent about their sustainability practices are often able to strengthen their position and outperform less transparent competitors [99, 59].

Furthermore, good environmental reporting also plays an important role in helping companies access capital more easily. In the context of investment, investors tend to be more interested in investing in companies that demonstrate a real commitment to sustainability. This not only increases the amount of investment received, but also contributes to a reduction in the cost of capital. The lower risk associated with environmental non-compliance creates trust among stakeholders, which makes the company more attractive in the eyes of investors [63, 43].

In addition, the increased accountability resulting from transparent environmental reporting is crucial in building the company's image. This positive image not only serves to attract consumer attention, but can also increase customer loyalty. Companies that successfully build a good reputation among the public often enjoy benefits in the form of increased sales and long-term relationships with consumers. In the competitive business world, having a strong image can be a decisive factor in attracting and retaining customers, as well as improving overall financial performance [65, 51].

In addition, transparent environmental reporting plays an important role in improving relationships and trust with other stakeholders, including employees, local communities and suppliers. When companies demonstrate a commitment to environmentally friendly practices, it can strengthen their relationships with surrounding communities and reduce the risk of conflicts that may arise due to social protests. Good communication and engagement with stakeholders can create a more favorable environment for company operations, which in turn can increase productivity and innovation [42, 79].

Finally, good disclosure of environmental performance also serves to minimize the risks faced by companies. By proactively communicating the environmental impacts of their operations, companies can identify and address potential issues before they become crises. This is crucial in avoiding social protests or sanctions from regulators, which can be detrimental to the value of the company. By creating stability through good risk management, companies not only protect their value, but also create a sustainable competitive advantage in a market that increasingly prioritizes sustainability [66, 43]. Overall, the trend of environmental reporting is not just about meeting regulatory demands, but also becoming an important strategy to increase corporate value, competitiveness and sustainability in the future [96].

RQ2. What methodologies were used in previous studies to evaluate the impact of environmental reporting on firm value?

From 2015 to 2024, various methodologies have been used to study the impact of Corporate Social Responsibility (CSR) on firm value. Some of the most common methods include the Analytic Hierarchy Process (AHP) combined with Goal Programming, which allows researchers to identify and prioritize various CSR dimensions based on the company's strategic goals [100]. The combination of AHP and Goal Programming is used to assess the market value of companies by combining economic and CSR dimensions [101, 102]. This method relies on publicly available data, such as sustainability reports based on the Global Reporting Initiative. With this approach, researchers can evaluate company performance in the context of sustainability, while ensuring that the data used is transparent and accessible to all stakeholders. This not only increases accountability, but also encourages companies to be more committed to responsible business practices [103].

In addition, the use of Structural Equation Modeling (SEM) based on Partial Least Squares (PLS) is becoming an important method in analyzing the complex relationship between Corporate Social Responsibility (CSR) and firm value, as this method provides deep insights into the interactions between variables and enables an understanding of how various factors influence each other in the context of CSR and firm performance [100]. PLS-SEM is applied to explore the relationship between corporate governance, profitability, and CSR disclosure on firm value holistically [104]. This research has been conducted in comparative studies in Indonesia, China, and India, showing that CSR disclosure has a positive impact and serves as a mediating variable [105, 106]. These findings highlight the importance of transparency in CSR practices, which not only improves financial performance but also the company's reputation in the eyes of investors. Thus, companies that actively disclose CSR activities are likely to gain more trust from investors, which can increase their market value, while showing that the integration of CSR principles in business strategy is a strategic move that brings long-term benefits [72, 73].

Panel data methods are also frequently used, allowing the analysis of data from a wide range of companies over an extended period of time, thus helping to identify trends and patterns in the relationship between CSR and firm value [107]. and consumers. Research suggests that CSR disclosure may serve as a mitigating mechanism to weaken the negative relationship between earnings management and firm market value, especially in state-owned firms that engage in CSR activities [108]. In addition, CSR disclosure can also add value to the firm, especially in more market-oriented private firms [23]. In emerging markets such as India, CSR disclosures tend to have a negative effect on profitability and firm value, which are influenced by environmental and social disclosure scores [109]. Thus, companies that are active in disclosing their CSR activities tend to have a higher market value.

In addition, multiple linear regression analysis is often applied to measure the direct relationship between CSR and firm value by considering various control factors [110]. Research shows that CSR has a significant effect on firm value, either directly or through the mediation of other variables such as financial performance and good corporate governance [111, 112]. For example, research in Europe found that CSR can increase firm value if environmental, social, and governance (ESG) scores exceed a certain threshold [111]. In addition, research in India shows that CSR can moderate the relationship between green accounting and firm value, providing new insights into how environmental and social responsibility policies can affect organizational

efficiency [113]. In China, the effect of CSR on firm value increased over time, especially after the government adopted a high-quality growth strategy [114]. Other studies have also found that CSR news reports can increase firm value through word of mouth effects and advertising expenditures [20]. Thus, CSR not only plays an important role in enhancing corporate image but also in enhancing corporate value.

RQ3. What future research directions are suggested to deepen the understanding of the relationship between environmental reporting and company value, and what factors should be considered in subsequent studies?

The suggested directions for future research to deepen the understanding of the relationship between environmental reporting and company value include several important aspects. First, future research is advised to pay more attention to the use of market-based proxies in investigating the relevance of value from environmental reporting. Previous studies have shown that corporate environmental disclosure (CED) has a significant positive relationship with firm value measured using Tobin's Q (TBQ) in Gulf Cooperation Council (GCC) countries [115]. Therefore, the use of market-based proxies such as TBQ can provide more accurate insights into how the market values environmental disclosure.

Furthermore, it is important to explore the role of independent directors in strengthening the relationship between environmental sustainability practices and company value. A study in Saudi Arabia found that the presence of independent directors on corporate boards significantly moderates the relationship between environmental sustainability reporting and company value [32]. This indicates that independent directors can enhance accountability and transparency in environmental reporting, which in turn can strengthen stakeholder trust and increase company value.

The quality of environmental information disclosure in annual reports also needs to be a focus of future research. Research in China shows that the length and readability of annual report texts positively moderate the relationship between environmental information disclosure and company value [4]. Therefore, it is important to explore how the textual characteristics of annual reports can influence investor perception. In addition, the influence of company ownership on the relationship between environmental disclosure and company value must also be considered. A study in China found that the impact of the quality of environmental information disclosure on company value is more significant in non-state-owned enterprises compared to state-owned enterprises, indicating that ownership structure can affect how environmental disclosures are received by the market.

Studies in Korea show that only a few individual environmental performance indicators are relevant to value, while most environmental performance constructs have a significant impact on company value [116]. Thus, the use of more comprehensive environmental performance indicators can provide a more complete picture of how environmental performance affects company value. Integrating all these aspects will provide a more holistic understanding of the relationship between environmental reporting and corporate value.

5 Conclusion

This systematic literature review has revealed several important findings regarding trends in corporate environmental reporting and its impact on company value over the past decade. First, there are key trends emerging in corporate environmental reporting practices. The trend includes an increase in reporting transparency along with the growing environmental awareness of the community. In addition, more and more companies are adopting international reporting standards such as GRI to enhance the credibility of the reports they prepare. The third factor is the increasing influence of regulations and government policies on corporate environmental reporting practices.

Second, the research results generally indicate a positive impact of good environmental reporting on company value. This positive impact includes an enhanced company image in the eyes of stakeholders, the creation of competitive advantages within the industry, and easier access for the company to funding from investors. However, the magnitude of the impact of environmental reporting on company value still depends on various contextual factors such as industry characteristics, company size, and regulations in the country where it operates.

Thirdly, there is a methodological gap in research to date, where various analytical approaches such as regression, market differentiation, and event study methods have been used, but there is still no comprehensive framework. This indicates the need to develop a more robust research methodology. Finally, further long-term research is needed to develop an effective reporting framework and to analyze the long-term impact of reporting on the financial performance of companies. A joint commitment from various parties is essential to support sustainable development.

References

1. M. T. Hussain and M. A. Baig, "Global and Local Environmental Issues," *Int. J. Res. Appl. Sci. Eng. Technol.*, vol. 10, no. 11, pp. 629–632, 2022, doi: 10.22214/ijraset.2022.47376.
2. L. Kuo, C.-C. Yeh, and H.-C. Yu, "Disclosure of corporate social responsibility and environmental management: Evidence from China," *Corp. Soc. Responsib. Environ. Manag.*, vol. 19, no. 5, pp. 273–287, 2012.
3. A. M. Gerged, E. Beddewela, and C. J. Cowton, "Is corporate environmental disclosure associated with firm value? A multicountry study of Gulf Cooperation Council firms," *Bus. Strateg. Environ.*, vol. 30, no. 1, pp. 185–203, 2021, doi: 10.1002/bse.2616.
4. R. Cai, T. Lv, C. Wang, and N. Liu, "Can Environmental Information Disclosure Enhance Firm Value?—An Analysis Based on Textual Characteristics of Annual Reports," *Int. J. Environ. Res. Public Health*, vol. 20, no. 5, 2023, doi: 10.3390/ijerph20054229.
5. Y. Yang, J. Wen, and Y. Li, "The impact of environmental information disclosure on the cost of debt: evidence from China," *J. Appl. Econ.*, vol. 27, no. 1, 2024, doi: 10.1080/15140326.2023.2301280.
6. A. P. B. Pedron, C. B. Macagnan, D. S. Simon, and D. F. Vancin, "Environmental disclosure effects on returns and market value," *Environ. Dev. Sustain.*, vol. 23, no. 3, pp. 4614–4633, 2021, doi: 10.1007/s10668-020-00790-2.
7. K. Wang, W. Cui, M. Mei, B. Lv, and G. Peng, "The Moderating Role of Environmental Information Disclosure on the Impact of Environment Protection Investment on Firm Value," *Sustain.*, vol. 15, no. 12, 2023, doi: 10.3390/su15129174.

8. G. S. Megananda and A. Prastiwi, "the Role of Profitability in the Relationship Between Environmental Disclosure and Firm Value," *AKUMULASI Indones. J. Appl. Account. Financ.*, vol. 1, no. 1, pp. 63–74, 2022, doi: 10.20961/akumulasi.v1i1.316.
9. E. Patrusheva, E. Sapir, and I. Karachev, "Assessing the Stakeholders' Contribution to Business Value," in *SHS Web of Conferences*, 2020, vol. 89, p. 2003.
10. S. R. Barakat, J. M. G. Boaventura, and M. L. D. S. Gabriel, "Organizational capabilities and value creation for stakeholders: evidence from publicly traded companies," *Manag. Decis.*, vol. 60, no. 8, pp. 2311–2330, 2022.
11. T. Barko, M. Cremers, and L. Renneboog, *Shareholder Engagement on Environmental, Social, and Governance Performance*, vol. 180, no. 2. Springer Netherlands, 2022.
12. G. Attanasio, N. Preghenella, A. F. De Toni, and C. Battistella, "Stakeholder engagement in business models for sustainability: The stakeholder value flow model for sustainable development," *Bus. Strateg. Environ.*, vol. 31, no. 3, pp. 860–874, 2022.
13. D. Jin, "Is Stakeholder Value a Barrier for Shareholder Value?," *Lect. Notes Educ. Psychol. Public Media*, 2023, [Online]. Available: <https://api.semanticscholar.org/CorpusID:266070053>.
14. E. Jeroh, "Firms attributes, corporate social responsibility disclosure and the financial performance of listed companies in Nigeria," *Asian Econ. Financ. Rev.*, vol. 10, no. 6, p. 727, 2020.
15. P. Velte, "Meta-analyses on corporate social responsibility (CSR): a literature review," *Manag. Rev. Q.*, vol. 72, no. 3, pp. 627–675, 2022.
16. I. Ali, S. Lodhia, and A. K. Narayan, "Value creation attempts via photographs in sustainability reporting: a legitimacy theory perspective," *Meditari Account. Res.*, vol. 29, no. 2, pp. 247–263, 2021.
17. R. Biloslavo, C. Bagnoli, M. Massaro, and A. Cosentino, "Business model transformation toward sustainability: the impact of legitimation," *Manag. Decis.*, vol. 58, no. 8, pp. 1643–1662, 2020.
18. A. M. Trujillo, M. A. Gonzalez-Perez, and J. J. Baena-Rojas, "Sustainable strategy as a lever for corporate legitimacy and long-term competitive advantage: an examination of an emerging market multinational," *Eur. Bus. Rev.*, vol. 36, no. 1, pp. 112–139, 2024.
19. Y. Feng, K. Lai, and Q. Zhu, "Legitimacy in operations: How sustainability certification announcements by Chinese listed enterprises influence their market value?," *Int. J. Prod. Econ.*, vol. 224, p. 107563, 2020.
20. J. Seok, Y. Lee, and B.-D. Kim, "Impact of CSR news reports on firm value," *Asia Pacific J. Mark. Logist.*, vol. 32, no. 3, pp. 644–663, 2020.
21. A. Rashid, "Corporate social responsibility reporting: meeting stakeholders expectations or efficient allocation of resources?," *Int. J. Account. & Inf. Manag.*, vol. 29, no. 2, pp. 280–304, 2021.
22. A. Tsang, W. Hu, and X. Li, "CSR and firm value: A comparative study of CSR performance measures," *China Account. Financ. Rev. Forthcom.*, 2020.
23. S. Xu, X. Chen, A. Li, and X. Xia, "Disclosure for whom? Government involvement, CSR disclosure and firm value," *Emerg. Mark. Rev.*, vol. 44, p. 100717, 2020.
24. M. Nerantzidis, M. Pazarskis, G. Drogalas, and S. Galanis, "Internal auditing in the public sector: a systematic literature review and future research agenda," *J. Public Budgeting, Account. Financ. Manag.*, vol. 34, no. 2, pp. 189–209, 2022, doi: 10.1108/JPBAFM-02-2020-0015.
25. A. H. Busalim and others, "Understanding social commerce: A systematic literature review and directions for further research," *Int. J. Inf. Manage.*, vol. 36, no. 6, pp. 1075–1088, 2016.
26. E. A. Firmansyah and U. H. Umar, "Metaverse in business research: a systematic literature review," *Cogent Bus. Manag.*, vol. 10, no. 2, 2023, doi: 10.1080/23311975.2023.2222499.

27. S. Salih *et al.*, "Prioritising organisational factors impacting cloud ERP adoption and the critical issues related to security, usability, and vendors: A systematic literature review," *Sensors*, vol. 21, no. 24, 2021, doi: 10.3390/s21248391.
28. M. R. W. Hiebl, "Sample Selection in Systematic Literature Reviews of Management Research," *Organ. Res. Methods*, vol. 26, no. 2, pp. 229–261, 2023, doi: 10.1177/1094428120986851.
29. C. J. C. de Geus, A. Ingrams, L. Tummars, and S. K. Pandey, "Organizational citizenship behavior in the public sector: A systematic literature review and future research agenda," *Public Adm. Rev.*, vol. 80, no. 2, pp. 259–270, 2020.
30. M. A. Kuhail, N. Alturki, S. Alramlawi, and K. Alhejori, *Interacting with educational chatbots: A systematic review*, vol. 28, no. 1. Springer US, 2023.
31. A. B. Handayanto, G. T. Pontoh, and M. Irdam, *The Future of Accounting : Triple-Entry Accounting Enabled by Blockchain The Future of Accounting : Triple-Entry Accounting Enabled by Blockchain According to a thorough empirical examination utilising a substantial sample size*, no. May. Atlantis Press International BV, 2024.
32. M. A. Ammer, M. M. Aliedan, and M. A. Alyahya, "Do corporate environmental sustainability practices influence firm value? The role of independent directors: Evidence from Saudi Arabia," *Sustain.*, vol. 12, no. 22, pp. 1–21, 2020, doi: 10.3390/su12229768.
33. F. Caputo, S. Pizzi, L. Ligorio, and R. Leopizzi, "Enhancing environmental information transparency through corporate social responsibility reporting regulation," *Bus. Strateg. Environ.*, vol. 30, no. 8, pp. 3470–3484, 2021, doi: 10.1002/bse.2814.
34. T. Angela and N. Sari, "The Effect of Environmental, Social, and Governance Disclosure on Firm Value," *E3S Web Conf.*, vol. 426, 2023, doi: 10.1051/e3sconf/202342601078.
35. T. T. D. Nguyen, "An empirical study on the impact of sustainability reporting on firm value," *J. Compet.*, vol. 12, no. 3, pp. 119–135, 2020, doi: 10.7441/joc.2020.03.07.
36. C. Kuzey and A. Uyar, "Determinants of sustainability reporting and its impact on firm value: Evidence from the emerging market of Turkey," *J. Clean. Prod.*, vol. 143, pp. 27–39, 2017, doi: 10.1016/j.jclepro.2016.12.153.
37. W. Du, M. Li, and Z. Wang, "The impact of environmental regulation on firms' energy-environment efficiency: Concurrent discussion of policy tool heterogeneity," *Ecol. Indic.*, vol. 143, no. March, p. 109327, 2022, doi: 10.1016/j.ecolind.2022.109327.
38. Y. Agyabeng-mensah, E. Afum, D. Faibil, F. Abdel, and M. Abdoulaye, "Examining the correlations between stakeholder pressures, green production practices, firm reputation, environmental and financial performance; Evidence from manufacturing SMEs," *Sustain. Prod. Consum.*, 2020, [Online]. Available: <https://doi.org/10.1016/j.spc.2020.10.015>.
39. L. Qiu, D. Hu, and Y. Wang, "How do firms achieve sustainability through green innovation under external pressures of environmental regulation and market turbulence?," *Bus. Strateg. Environ.*, vol. 29, no. 6, pp. 2695–2714, 2020, doi: 10.1002/bse.2530.
40. I. M. Igbinoia and B. O. Agbadua, "Environmental, Social, and Governance (ESG) Reporting and Firm Value in Nigeria Manufacturing Firms: The Moderating Role of Firm Advantage," *J. Din. Akunt. dan Bisnis*, vol. 10, no. 2, pp. 149–162, 2023, doi: 10.24815/jdab.v10i2.30491.
41. M. A. Qureshi, S. Kirkeud, and T. Ahsan, "The impact of sustainability (ESG) disclosure and board diversity on firm value: The moderating role of industry sensitivity.," *Bus. Strateg. Environ.*, pp. 1199–1214, 2020.
42. M. F. Alsayegh, R. A. Rahman, and S. Homayoun, "Corporate economic, environmental, and social sustainability performance transformation through ESG disclosure," *Sustain.*, vol. 12, no. 9, 2020, doi: 10.3390/su12093910.
43. A. M. Habib, "Do business strategies and environmental, social, and governance (ESG) performance mitigate the likelihood of financial distress? A multiple mediation model," *Heliyon*, vol. 9, no. 7, p. e17847, 2023, doi: 10.1016/j.heliyon.2023.e17847.

44. A. Aouadi and S. Marsat, "Do ESG Controversies Matter for Firm Value? Evidence from International Data," *J. Bus. Ethics*, vol. 151, no. 4, pp. 1027–1047, 2018, doi: 10.1007/s10551-016-3213-8.
45. W. C. Wong, J. A. Batten, A. H. Ahmad, S. B. Mohamed-Arshad, S. Nordin, and A. A. Adzis, "Does ESG certification add firm value?," *Financ. Res. Lett.*, vol. 39, p. 101593, 2021, doi: 10.1016/j.frl.2020.101593.
46. S. C. Pulino, M. Ciaburri, B. S. Magnanelli, and L. Nasta, "Does ESG Disclosure Influence Firm Performance?," *Sustain.*, vol. 14, no. 13, pp. 1–18, 2022, doi: 10.3390/su14137595.
47. B. Yoon, J. H. Lee, and R. Byun, "Does ESG performance enhance firm value? Evidence from Korea," *Sustain.*, vol. 10, no. 10, 2018, doi: 10.3390/su10103635.
48. B. Effendi, "The Impact of Environmental Performance on Firm Value: Evidence from Indonesia," *Proc. 7th Reg. Account. Conf. (KRA 2020)*, vol. 173, no. Kra 2020, pp. 155–161, 2021, doi: 10.2991/aebmr.k.210416.021.
49. A. K. Gupta and N. Gupta, "Effect of corporate environmental sustainability on dimensions of firm performance – Towards sustainable development: Evidence from India," *J. Clean. Prod.*, vol. 253, p. 119948, 2020, doi: 10.1016/j.jclepro.2019.119948.
50. Y. Qiu, A. Shaukat, R. Tharyan, S. Court, and R. Drive, "Environmental and Social Disclosures: Link with Corporate Financial Performance Environmental and Social Disclosures: Link with Corporate Financial Performance," *Br. Account. Rev.*, vol. 48, no. 1, pp. 102–116, 2014.
51. S. K. Singh, J. Chen, M. Del Giudice, and A. N. El-Kassar, "Environmental ethics, environmental performance, and competitive advantage: Role of environmental training," *Technol. Forecast. Soc. Change*, vol. 146, no. May, pp. 203–211, 2019, doi: 10.1016/j.techfore.2019.05.032.
52. X. Su, A. Xu, W. Lin, Y. Chen, S. Liu, and W. Xu, "Environmental Leadership, Green Innovation Practices, Environmental Knowledge Learning, and Firm Performance," *SAGE Open*, vol. 10, no. 2, 2020, doi: 10.1177/2158244020922909.
53. T. A. Astari, S. Laurens, A. Wicaksono, and A. Sujarminto, "Green Accounting and Disclosure of Sustainability Report on Firm Values in Indonesia," *E3S Web Conf.*, vol. 426, 2023, doi: 10.1051/e3sconf/202342602024.
54. C. Xing, Y. Zhang, and D. Tripe, "Green credit policy and corporate access to bank loans in China: The role of environmental disclosure and green innovation," *Int. Rev. Financ. Anal.*, vol. 77, no. March 2020, p. 101838, 2021, doi: 10.1016/j.irfa.2021.101838.
55. L. Liu, "Green innovation, firm performance, and risk mitigation: evidence from the USA," *Environ. Dev. Sustain.*, vol. 26, no. 9, pp. 24009–24030, 2024, doi: 10.1007/s10668-023-03632-z.
56. K. Asiaei, N. Bontis, R. Alizadeh, and M. Yaghoubi, "Green intellectual capital and environmental management accounting: Natural resource orchestration in favor of environmental performance," *Bus. Strateg. Environ.*, vol. 31, no. 1, pp. 76–93, 2022, doi: 10.1002/bse.2875.
57. K. H. Lee and B. Min, "Green R&D for eco-innovation and its impact on carbon emissions and firm performance," *J. Clean. Prod.*, vol. 108, pp. 534–542, 2015, doi: 10.1016/j.jclepro.2015.05.114.
58. Y. Abdi, X. Li, and X. Càmara-Turull, "Exploring the impact of sustainability (ESG) disclosure on firm value and financial performance (FP) in airline industry: the moderating role of size and age," *Environ. Dev. Sustain.*, vol. 24, no. 4, pp. 5052–5079, 2022, doi: 10.1007/s10668-021-01649-w.
59. K. Govindan, M. Kilic, A. Uyar, and A. S. Karaman, "Drivers and value-relevance of CSR performance in the logistics sector: A cross-country firm-level investigation," *Int. J. Prod. Econ.*, vol. 231, no. November 2019, p. 107835, 2021, doi: 10.1016/j.ijpe.2020.107835.

60. H. Latan, C. J. Chiappetta Jabbour, A. B. Lopes de Sousa Jabbour, S. F. Wamba, and M. Shahbaz, "Effects of environmental strategy, environmental uncertainty and top management's commitment on corporate environmental performance: The role of environmental management accounting," *J. Clean. Prod.*, vol. 180, pp. 297–306, 2018, doi: 10.1016/j.jclepro.2018.01.106.
61. S. El Ghoul, O. Guedhami, and Y. Kim, *Country-level institutions, firm value, and the role of corporate social responsibility initiatives*, vol. 48, no. 3. 2017.
62. M. Atif and S. Ali, "Environmental, social and governance disclosure and default risk," *Bus. Strateg. Environ.*, vol. 30, no. 8, pp. 3937–3959, 2021, doi: 10.1002/bse.2850.
63. N. S. Trelopoulos, T. A. Tsalis, K. I. Evangelinos, K. P. Tсарarakis, K. I. Vatalis, and I. E. Nikolaou, "The influence of environmental regulations on business innovation, intellectual capital, environmental and economic performance," *Environ. Syst. Decis.*, vol. 41, no. 1, pp. 163–178, 2021, doi: 10.1007/s10669-021-09802-6.
64. A. M. Habib and N. Mourad, "The Influence of Environmental, Social, and Governance (ESG) Practices on US Firms' Performance: Evidence from the Coronavirus Crisis," *J. Knowl. Econ.*, vol. 15, no. 1, pp. 2549–2570, 2024, doi: 10.1007/s13132-023-01278-w.
65. R. M. Dangelico and P. Pontrandolfo, "Being 'Green and Competitive': The Impact of Environmental Actions and Collaborations on Firm Performance," *Bus. Strateg. Environ.*, vol. 24, no. 6, pp. 413–430, 2015, doi: 10.1002/bse.1828.
66. N. H. Wellalage and V. Kumar, "Environmental performance and bank lending: Evidence from unlisted firms," *Bus. Strateg. Environ.*, vol. 30, no. 7, pp. 3309–3329, 2021, doi: 10.1002/bse.2804.
67. Q. Zhang and Y. Ma, "The impact of environmental management on firm economic performance: The mediating effect of green innovation and the moderating effect of environmental leadership," *J. Clean. Prod.*, vol. 292, p. 126057, 2021, doi: 10.1016/j.jclepro.2021.126057.
68. S. P. Chuang and S. J. Huang, "The Effect of Environmental Corporate Social Responsibility on Environmental Performance and Business Competitiveness: The Mediation of Green Information Technology Capital," *J. Bus. Ethics*, vol. 150, no. 4, pp. 991–1009, 2018, doi: 10.1007/s10551-016-3167-x.
69. C. J. García Martín and B. Herrero, "Do board characteristics affect environmental performance? A study of EU firms," *Corp. Soc. Responsib. Environ. Manag.*, vol. 27, no. 1, pp. 74–94, 2020, doi: 10.1002/csr.1775.
70. A. Helfaya and T. Moussa, "Do Board's Corporate Social Responsibility Strategy and Orientation Influence Environmental Sustainability Disclosure? UK Evidence," *Bus. Strateg. Environ.*, vol. 26, no. 8, pp. 1061–1077, 2017, doi: 10.1002/bse.1960.
71. E. Grisales and J. Caracuel, "Environmental, Social and Governance (ESG) Scores and Financial Performance of Multilatinas: Moderating Effects of Geographic International Diversification and Financial Slack," *J. Bus. Ethics*, vol. 168, no. 2, pp. 315–334, 2021, doi: 10.1007/s10551-019-04177-w.
72. M. H. Shakil, "Environmental, social and governance performance and financial risk: Moderating role of ESG controversies and board gender diversity," *Resour. Policy*, vol. 72, no. May 2020, p. 102144, 2021, doi: 10.1016/j.resourpol.2021.102144.
73. P. Baier, M. Berninger, and F. Kiesel, "Environmental, social and governance reporting in annual reports: A textual analysis," *Financ. Mark. Institutions Instruments*, vol. 29, no. 3, pp. 93–118, 2020, doi: 10.1111/fmii.12132.
74. M. Taliento, C. Favino, and A. Netti, "Impact of environmental, social, and governance information on economic performance: Evidence of a corporate 'sustainability advantage' from Europe," *Sustain.*, vol. 11, no. 6, 2019, doi: 10.3390/su11061738.
75. S. Z. Khan, Q. Yang, and A. Waheed, "Investment in intangible resources and capabilities spurs sustainable competitive advantage and firm performance," *Corp. Soc. Responsib. Environ. Manag.*, vol. 26, no. 2, pp. 285–295, 2019, doi: 10.1002/csr.1678.

76. H. Jo, H. Kim, and K. Park, "Corporate Environmental Responsibility and Firm Performance in the Financial Services Sector," *J. Bus. Ethics*, vol. 131, no. 2, pp. 257–284, 2015, doi: 10.1007/s10551-014-2276-7.
77. I. B. A. Purbawangsa, S. Solimun, A. A. R. Fernandes, and S. Mangesti Rahayu, "Corporate governance, corporate profitability toward corporate social responsibility disclosure and corporate value (comparative study in Indonesia, China and India stock exchange in 2013-2016)," *Soc. Responsib. J.*, vol. 16, no. 7, pp. 983–999, 2020, doi: 10.1108/SRJ-08-2017-0160.
78. T. Naseem, F. Shahzad, G. A. Asim, I. U. Rehman, and F. Nawaz, "Corporate social responsibility engagement and firm performance in Asia Pacific: The role of enterprise risk management," *Corp. Soc. Responsib. Environ. Manag.*, vol. 27, no. 2, pp. 501–513, 2020, doi: 10.1002/csr.1815.
79. C. Newman, J. Rand, F. Tarp, and N. Trifkovic, "Corporate Social Responsibility in a Competitive Business Environment," *J. Dev. Stud.*, vol. 56, no. 8, pp. 1455–1472, 2020, doi: 10.1080/00220388.2019.1694144.
80. B. Buchanan, C. X. Cao, and C. Chen, "Corporate social responsibility, firm value, and influential institutional ownership," *J. Corp. Financ.*, vol. 52, no. June, pp. 73–95, 2018, doi: 10.1016/j.jcorpfin.2018.07.004.
81. A. P. Abeysekera and C. S. Fernando, "Corporate social responsibility versus corporate shareholder responsibility: A family firm perspective," *J. Corp. Financ.*, vol. 61, 2020, doi: 10.1016/j.jcorpfin.2018.05.003.
82. J. M. Price and W. Sun, "Doing good and doing bad: The impact of corporate social responsibility and irresponsibility on firm performance," *J. Bus. Res.*, vol. 80, no. July, pp. 82–97, 2017, doi: 10.1016/j.jbusres.2017.07.007.
83. G. C. Landi, F. Iandolo, A. Renzi, and A. Rey, "Embedding sustainability in risk management: The impact of environmental, social, and governance ratings on corporate financial risk," *Corp. Soc. Responsib. Environ. Manag.*, vol. 29, no. 4, pp. 1096–1107, 2022, doi: 10.1002/csr.2256.
84. N. Raimo, A. Caragnano, M. Zito, F. Vitolla, and M. Mariani, "Extending the benefits of ESG disclosure: The effect on the cost of debt financing," *Corp. Soc. Responsib. Environ. Manag.*, vol. 28, no. 4, pp. 1412–1421, 2021, doi: 10.1002/csr.2134.
85. A. Alshehhi, H. Nobanee, and N. Khare, "The impact of sustainability practices on corporate financial performance: Literature trends and future research potential," *Sustain.*, vol. 10, no. 2, 2018, doi: 10.3390/su10020494.
86. S. Bose, S. Shams, M. J. Ali, and D. Mihret, "COVID-19 impact, sustainability performance and firm value: international evidence," *Accounting and Finance*, vol. 62, no. 1, pp. 597–643, 2022, doi: 10.1111/acfi.12801.
87. D. Cormier and M. Magnan, "The Economic Relevance of Environmental Disclosure and its Impact on Corporate Legitimacy: An Empirical Investigation," *Bus. Strateg. Environ.*, vol. 24, no. 6, pp. 431–450, 2015, doi: 10.1002/bse.1829.
88. E. D'Amico, D. Coluccia, S. Fontana, and S. Solimene, "Factors Influencing Corporate Environmental Disclosure," *Bus. Strateg. Environ.*, vol. 25, no. 3, pp. 178–192, 2016, doi: 10.1002/bse.1865.
89. E. Clementino and R. Perkins, "How Do Companies Respond to Environmental, Social and Governance (ESG) ratings? Evidence from Italy," *J. Bus. Ethics*, vol. 171, no. 2, pp. 379–397, 2021, doi: 10.1007/s10551-020-04441-4.
90. A. Danso, S. Adomako, T. Lartey, J. Amankwah-Amoah, and D. Owusu-Yirenkyi, "Stakeholder integration, environmental sustainability orientation and financial performance," *J. Bus. Res.*, vol. 119, pp. 652–662, 2020, doi: 10.1016/j.jbusres.2019.02.038.

91. J. J. Cordeiro and M. Tewari, "Firm Characteristics, Industry Context, and Investor Reactions to Environmental CSR: A Stakeholder Theory Approach," *J. Bus. Ethics*, vol. 130, no. 4, pp. 833–849, 2015, doi: 10.1007/s10551-014-2115-x.
92. R. B. Deswanto and S. V. Siregar, "The associations between environmental disclosures with financial performance, environmental performance, and firm value," *Soc. Responsib. J.*, vol. 14, no. 1, pp. 180–193, 2018, doi: 10.1108/SRJ-01-2017-0005.
93. J. Cui, H. Jo, and H. Na, "Does Corporate Social Responsibility Affect Information Asymmetry?," *J. Bus. Ethics*, vol. 148, no. 3, pp. 549–572, 2018, doi: 10.1007/s10551-015-3003-8.
94. D. Z. X. Huang, "Environmental, social and governance (ESG) activity and firm performance: a review and consolidation," *Account. Financ.*, vol. 61, no. 1, pp. 335–360, 2021, doi: 10.1111/acfi.12569.
95. Y. Tan and Z. Zhu, "The effect of ESG rating events on corporate green innovation in China: The mediating role of financial constraints and managers' environmental awareness," *Technol. Soc.*, vol. 68, p. 101906, 2022, doi: 10.1016/j.techsoc.2022.101906.
96. C. Eze, J. R C Nurse, and H. Jassim, "Does Corporate Social Responsibility Impact Firms' Innovation Capacity. The Indirect Link between Environmental & Social Governance Implementation and Innovation Performance," *Comput. Human Behav.*, vol. 2, pp. 197–206, 2020.
97. J. Wang, L. Wang, and X. Qian, "Revisiting firm innovation and environmental performance: New evidence from Japanese firm-level data," *J. Clean. Prod.*, vol. 281, no. xxxx, p. 124446, 2021, doi: 10.1016/j.jclepro.2020.124446.
98. F. Hermundsdottir and A. Aspelund, "Sustainability innovations and firm competitiveness: A review," *J. Clean. Prod.*, vol. 280, p. 124715, 2021, doi: 10.1016/j.jclepro.2020.124715.
99. Z. Li, G. Liao, and K. Albitar, "Does corporate environmental responsibility engagement affect firm value? The mediating role of corporate innovation," *Bus. Strateg. Environ.*, vol. 29, no. 3, pp. 1045–1055, 2020, doi: 10.1002/bse.2416.
100. W. Li, G. Xu, D. Zuo, and J. Zhu, "Corporate social responsibility performance-evaluation based on analytic hierarchy process-fuzzy comprehensive evaluation model," *Wirel. Pers. Commun.*, vol. 118, pp. 2897–2919, 2021.
101. L. Yi, T. Li, X. Wang, G. Ge, and T. Zhang, "Corporate social responsibility performance evaluation from the perspective of stakeholder heterogeneity based on fuzzy analytical hierarchy process integrated TOPSIS," *Corp. Soc. Responsib. Environ. Manag.*, vol. 29, no. 4, pp. 918–935, 2022.
102. Wang, Zhang, H. Ding, and Zhang., "Applied Mathematics and Nonlinear Sciences," *Appl. Math. Nonlinear Sci.*, vol. 8, no. 2, pp. 3383–3392, 2023.
103. Michelon, Rodrigue, and Trevisan, "Michelon , G ., Rodrigue , M ., & Trevisan , E . (2020). The marketization of a social movement: Activists , shareholders and CSR disclosure .," 2020.
104. M. H. Binsawad, "Corporate social responsibility in higher education: a PLS-SEM neural network approach," *IEEE Access*, vol. 8, pp. 29125–29131, 2020.
105. I. Z. Rela, A. H. Awang, Z. Ramli, Y. Taufik, S. Md. Sum, and M. Muhammad, "Effect of corporate social responsibility on community resilience: Empirical evidence in the nickel mining industry in Southeast Sulawesi, Indonesia," *Sustain.*, vol. 12, no. 4, 2020, doi: 10.3390/su12041395.
106. C. Wang, R. Hu, and T. (Christina) Zhang, "Corporate social responsibility in international hotel chains and its effects on local employees: Scale development and empirical testing in China," *Int. J. Hosp. Manag.*, vol. 90, 2020, doi: 10.1016/j.ijhm.2020.102598.
107. K. S. Bardos, M. Ertugrul, and L. S. Gao, "Corporate social responsibility, product market perception, and firm value," *J. Corp. Financ.*, vol. 62, p. 101588, 2020.

108. T. Garanina, "CSR disclosure and state ownership: implications for earnings management and market value," *J. Account. Emerg. Econ.*, vol. 14, no. 3, pp. 513–547, 2024, doi: 10.1108/JAEE-06-2022-0175.
109. P. Fahad and S. A. Busru, "CSR disclosure and firm performance: evidence from an emerging market," *Corp. Gov.*, vol. 21, no. 4, pp. 553–568, 2020, doi: 10.1108/CG-05-2020-0201.
110. M. Jihadi, E. Vilantika, S. M. Hashemi, Z. Arifin, Y. Bachtiar, and F. Sholichah, "The effect of liquidity, leverage, and profitability on firm value: Empirical evidence from Indonesia," *J. Asian Financ. Econ. Bus.*, vol. 8, no. 3, pp. 423–431, 2021.
111. A. Hakimi, R. Boussaada, and M. Karmani, "Corporate social responsibility and firm performance: a threshold analysis of European firms," *Eur. J. Manag. Bus. Econ.*, 2023, doi: 10.1108/EJMBE-07-2022-0224.
112. H. Ben Fatma and J. Chouaibi, "The mediating role of corporate social responsibility in good corporate governance and firm value relationship: evidence from European financial institutions," *Meditari Account. Res.*, 2023, [Online]. Available: <https://api.semanticscholar.org/CorpusID:266331426>.
113. M. A. K. Tausif Ahmad lone, "Role of Corporate Social Responsibility (CSR) in the relationship between Green Accounting and Firm Value: Evidence from Indian Companies," *Tuijin Jishu/Journal Propuls. Technol.*, vol. 44, no. 4, pp. 149–171, 2023, doi: 10.52783/tjjpt.v44.i4.807.
114. F. Zhang and J. Y. Jung, "Changes in the influence of social responsibility activities on corporate value over 10 years in China," *Sustain.*, vol. 12, no. 22, pp. 1–17, 2020, doi: 10.3390/su12229506.
115. A. M. Gerged, E. Beddewela, and C. J. Cowton, "Is corporate environmental disclosure associated with firm value? A multicountry study of Gulf Cooperation Council firms," *Bus. Strateg. Environ.*, vol. 30, no. 1, pp. 185–203, 2021.
116. H. Choi, I. Han, and J. Lee, "Value relevance of corporate environmental performance: A comprehensive analysis of performance indicators using korean data," *Sustain.*, vol. 12, no. 17, 2020, doi: 10.3390/su12177209.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

