

Exploring the impact of gender diversity on corporate sustainability: A PRISMA-Based Analysis

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Abstract

This systematic literature review study aims to analyze the implications of gender diversity on corporate sustainability. Since the United Nations issued the International Sustainable Development Goals (SDGs) consisting of 17 achievement criteria, countries, including companies, have begun to build their productivity to achieve them. Sustainability reports made by companies also provide achievements regarding the SDGs besides the annual reports. Gender issues have started to receive attention related to indicators in SDG 5, namely gender equality. Companies have begun to pay attention to women's rights by providing welfare services and placing women in important positions in the company, especially at the managerial and commissioner levels. The emotional level of women, which is different from men, is considered to be able to reach more sharply regarding environmental, economic, and social issues in the company's sustainability program. This study uses PRISMA as a measuring instrument in a literature review method. Data collection was done by analyzing articles for the last two years, around 2023-2024, taking a post-COVID background. The article's source comes from the ScienceDirect database which was processed into 18 selected articles through a screening process. The results of this study explain the positive and negative implications of gender diversity in achieving corporate sustainability.

Keywords: Gender Diversity, Corporate Sustainability, Literature Review

INTRODUCTION

The increasing growth of manufacturing companies has an impact on environmental problems (Assakhaa Wisesa, 2024). Climate change and environmental pollution have caused a lot of damage due to industrial activities. Climate change occurs due to the increasing concentration of carbon dioxide and other gases in the atmosphere which causes the greenhouse effect (Usman et al., 2024). To overcome this, companies issue several policies through their sustainability reports. Thus, companies not only play a role in increasing profits but also ensure their sustainability in environmental, economic, and social aspects.

From a corporate perspective, sustainability issues play a critical role in various financial areas, from investment decision-making to optimal capital structure and corporate dividend policy (Rojo-Suárez et al., 2024). The United Nations' sustainable development goals (SDGs) include gender equality and some goals are related to environmental sustainability (Wang et al., 2023). In today's business developments, an organization's environmental sustainability performance provides benefits for climate improvement and organizations that carry out environmentally conscious initiatives.

Several theories have been put forward about how gender diversity on boards of directors can help improve an organization's environmental performance. For example, agency theory states that gender diversity on boards of directors provides benefits to the company (García-Sánchez, Monteiro, et al., 2023). Another study explained that gender diversity reforms for corporate boards of directors, where there was an increase in the number of female directors, resulted in a decrease in corporate carbon emissions (Barroso et al., 2024). Additionally, several family businesses in the UK have found that CEOs with daughters are more likely to adopt climate-integrated business strategies and set emissions reduction targets compared to CEOs with only sons (Homroy, 2023).

Having female directors in a company can provide a number of benefits, especially in the context of sustainability. Female directors bring different perspectives to decision-making, which can enrich discussions and company strategies. This diversity often results in more innovative and effective solutions to sustainability challenges. Research shows that women tend to care more about social and environmental issues. The presence of women in leadership positions can encourage companies to pay more attention to sustainable practices and social responsibility.

Companies with gender diversity on their boards are often viewed as more progressive and responsible. This can enhance a company's reputation with customers, investors, and the public, which in turn can contribute to its long-term performance. By involving women in decision-making, companies can better understand and serve the needs of female consumers, a significant market. Studies show that companies with gender diversity at the management level tend to have better financial performance. Solid performance can free up more resources to invest in sustainability practices. The diverse backgrounds and experiences of female directors can drive sustainability innovation. New approaches to sustainability issues can emerge from more inclusive collaboration. Thus, increasing female representation on boards not only provides social benefits but can also contribute significantly to a company's sustainability and growth.

The importance of economic and social diversity has long been emphasized. For example, demographic, human, and social diversity generates economic competitive advantage, corporate innovation, knowledge, opportunities, levels of economic development, and corporate strategic change (Kizys et al., 2023). This diversity has finally brought about innovations related to gender equality, especially in organizations. The characteristics of the board of directors have a positive and significant relationship with the level of EFP (Environmental Friendly Production). A larger board size, a greater proportion of board independence, and the presence of industry expertise on the board of directors have a significant and positive influence on the level of EFP (Almaqtari et al., 2023). In the business market, companies must encourage women's involvement and contribution to renewing sustainability innovation (Adams et al., 2023). So, it is certain that women have brought positive changes in business decisions. Women's empowerment will increase the sustainability value of the company to be better than before. This proves that gender diversity helps build the company and determines a safer sustainable future.

This study uses an explicit and systematic method to compile and synthesize research findings that discuss the formulation of questions in the rules of literature review. PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) is used to compile this literature review. PRISMA is a guideline designed to improve transparency and quality of reporting in systematic reviews (Rahayuningrat et al., 2024). PRISMA provides a structured checklist and flowchart that researchers can follow when conducting a systematic review. This guideline aims to improve the clarity and completeness of systematic review reporting, which ultimately facilitates critical assessment and interpretation of research findings by researchers and readers (Rahayuningrat et al., 2024).

PRISMA was used to examine the results of studies investigating the transparency of reporting from published reviews (Page et al., 2021). By using PRISMA, data can be filtered and evaluated in detail using prepared items. This study uses a literature review design to reveal the implications of gender diversity on corporate sustainability. Article data was taken in the most recent period, namely 2023 and 2024. A total of 150 articles have been collected through the ScienceDirect database. The 150 articles collected were processed and screened to become a sample of 19 articles ready for analysis. The results of the analysis will show the positive and negative impacts of gender diversity on corporate sustainability.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

From a corporate perspective, sustainability issues play an important role in various areas of finance, from investment decision-making to optimal capital structure (Rojo-Suárez et al., 2024). Starting with Corporate Social Responsibility (CSR), corporate sustainability has become an essential part of business practices. CSR is considered to be a value that influences the level of investment of investors (Elbardan et al., 2023). So, after the company's sustainability report was implemented, the CSR

function began to be refined. The criteria in the sustainability report have an index that supports environmental, social, and economic improvements in line with the SDGs. Stakeholders such as suppliers and investors intend to maximize their profits, without exacerbating the risk of environmental, social, and governance issues so that they do not only assess financial health through annual reports (Ma & Ahmad, 2024). ESG (Environmental, Social, and Governance) disclosures, which are part of sustainability reports, are highly needed by various stakeholders. According to a recent survey of institutional investors, up to 89 percent of stakeholders want ESG reporting as a mandatory requirement (Nguyen & Nguyen, 2023).

Concerning corporate sustainability, the election of directors is considered important as a benchmark for good policymakers. The election of boards of directors, commissioners, and managers from gender diversity can increase the value of corporate sustainability. Differences in decision-making between male and female leadership are considered to influence the development of programs that encourage corporate sustainability more efficiently. Several previous studies have implied that women are generally more concerned than men about environmental issues (Almaqtari et al., 2023). Women on corporate boards have a positive impact on environmental performance and a greater proportion of gender diversity can influence a company's sensitivity to social and environmental issues (Almaqtari et al., 2023). Another study involving 3928 companies during the period 2010-2020 globally confirmed that companies with greater representation of women on their boards (both in number and percentage) are more proactive in terms of investing in innovation to mitigate climate change (García-Sánchez, Monteiro, et al., 2023). This is also supported by research on 4,089 other multinational companies during the period 2015–2018 that analyzed the role played by female leaders in implementing sustainability strategies. The proportion of women affects the achievement of points in the SDG gender equality (García-Sánchez, Aibar-Guzmán, et al., 2023).

However, on the other hand, gender diversity in companies also creates weaknesses and problems. The weaknesses of gender diversity in companies can include several aspects, for example in some cases, gender diversity can cause cultural conflicts, especially if the values and norms in the company do not support diversity. Differences in communication and thinking can cause misunderstandings and challenges in team collaboration. Some team members may feel uncomfortable or face resistance to changes in more inclusive norms. If leaders are not trained or are not sensitive to diversity issues, this can hinder the development of an inclusive culture. Although the goal of diversity is to reduce bias, in some companies, gender diversity can cause new tensions and biases. If diversity is not managed properly, it can create dissatisfaction among employees, which can affect productivity and retention. Understanding these weaknesses is important so that companies can take strategic steps to minimize the negative impacts and maximize the benefits of gender diversity.

Some data also support some negative impacts of gender diversity on corporate boards. A study of 8,365 companies from 37 countries between 2002 and 2017 found a negative impact of gender diversity on waste production (waste recycling), and this impact was particularly pronounced when there were two or more female directors on the board. The impact was driven primarily by independent female directors rather than executive directors. The relationship was moderated by the national cultural dimension of masculinity vs. femininity (Gull et al., 2023). This is also supported by other research which explains that the positive effects of sustainability do not require a large proportion of female directors. The effectiveness decreases when the percentage of board seats held by women is higher than 46.78%, the proportion associated with the presence of five or more female directors. Furthermore, female directors influence climate change innovation mainly through their involvement in management as executive directors, not through the monitoring and advisory roles that characterize independent directors (García-Sánchez, Monteiro, et al., 2023). Another study involving 54 of the largest banks showed a negative relationship between gender diversity on boards of directors and the amount of bank financing for fossil fuel companies (Cosma et al., 2024). In addition, even if companies have female directors, if they do not improve the system internally, it will not bring much change. The lack of standard procedures, unaudited sustainability reports, and the absence of a global regulatory body to monitor sustainability reports encourage corporate greenwashing behavior, namely falsifying ESG disclosures (Ma & Ahmad, 2024). It can be concluded

that the sustainability of the company is also determined by the company's vision, mission, and ability to be ready to face internal risks.

Another issue that causes gender diversity is when the corporate climate does not support the emancipation of women in business. Female leaders promote socially and environmentally responsible policies and strategies, but they face gender stereotypes that affect interactions between them and women in their teams, limiting their ability to influence corporate decisions regarding engagement with the SDGs (García-Sánchez, Aibar-Guzmán, et al., 2023). The same culture also occurs in Türkiye which has low gender parity (Wang et al., 2023). These findings highlight the important role that national and cultural contexts play in the success or failure of women's representation on boards of directors for an organization's sustainability performance. In Asia, gender roles are still less well-received. While board tenure has a significant positive impact on EFP in European companies, it harms EFP in Asian companies (Almaqtari et al., 2023). Based on this, differences in perspective regarding women can be a benchmark for whether a company implements gender diversity at the top and bottom levels.

Systematic reviews in PRISMA can provide a synthesis of the state of knowledge in a field, where future research priorities can be identified; can identify problems in primary research that need to be addressed, and can generate or evaluate theories about how or why phenomena occur (Page et al., 2021). PRISMA will explore in substance the gaps that have not been reviewed in existing research. This study will analyze the differences in substance results among samples of scientific articles related to gender diversity on corporate sustainability. The results of this study are expected to summarize the implications of gender diversity in SDG 5 and what must be done in the future so that the achievement criteria can be met. In addition, this study is expected to provide a new perspective on the empowerment of female directors in areas with patriarchal cultures and low gender parity. Choosing women as leaders is not a bad choice.

METHODS

A systematic literature review (SLR) is a research method that aims to identify, evaluate, and comprehensively analyze all relevant research on a particular topic. SLR begins with a specific and clear research question, which guides the literature search. The literature search method is carried out systematically and planned, including selecting databases, keywords, and inclusion/exclusion criteria for relevant studies. Each identified research is evaluated for quality using certain criteria, ensuring that only eligible studies are included. Data from selected studies are analyzed and synthesized to draw conclusions and highlight patterns or trends. With this approach, SLR helps reduce bias, provides a comprehensive picture of existing research, and supports evidence-based decision-making in a particular scientific field. Systematic reviews serve many critical roles. They can provide syntheses of the state of knowledge in a field, from which future research priorities can be identified; they can address questions that otherwise could not be answered by individual studies; they can identify problems in primary research that should be rectified in future studies; and they can generate or evaluate theories about how or why phenomena occur (Page et al., 2021).

The method in this study uses the PRISMA literature review analysis tool. Over the past decade, advances in systematic review methodology and terminology have necessitated an update to the guideline. The PRISMA 2020 statement replaces the 2009 statement and includes new reporting guidance that reflects advances in methods to identify, select, appraise, and synthesize studies (Page et al., 2021). PRISMA 2020 is intended for use in systematic reviews that include syntheses such as paired meta-analyses or other statistical synthesis methods (Page et al., 2021). In the PRISMA method, the articles compiled are entered into a checklist to explore information such as title, abstract, methods, results, and conclusion. Then the collected articles will be analyzed using the PRISMA flow diagram. The following is a list of selected articles used for analysis:

Table 1. List of Articles

Year	Title
2024	Unveiling the link between female directors' attributes, ownership concentration, and integrated reporting strategy in Malaysia
2024	The impact of women's empowerment and access to finance on greenhouse gas emissions: A framework for securing environmental tranquility
2024	Regulating board gender diversity in Europe: The influence of cultural, governmental, and women's institutions
2024	Influence of gender and age diversity of boards on financial and market performance of banks
2024	Gender diversity and audit fees: Insights from a principal-principal agency conflict setting
2024	From diversity to sustainability: Environmental and social spillover effects of board gender quotas
2024	Does gender matter in financing SMEs in green industry?
2024	Environmental accounting in public sector: systematic literature review
2024	Board gender diversity reform and corporate carbon emissions
2024	Board gender diversity and debt utilization: Evidence from the global microfinance industry
2024	Banks' fossil fuel divestment and corporate governance: The role of board gender diversity
2024	Are innovative firms more circular when women hold upper positions?
2023	Women leaders and female same-sex groups: The same 2030 Agenda objectives along different roads
2023	Investigating how board gender diversity affects environmental, social and governance performance: Evidence from the utilities sector
2023	Gender diversity on boards: Determinants that underlie the proposals for female directors
2023	Climate change innovation: Does board gender diversity matter?
2023	Can patriarchal attitudes moderate the relation between women on boards and firm economic performance?
2023	Board gender diversity and organizational environmental performance: An international perspective
2023	Board gender composition and waste management: Cross-country evidence

Sources: ScienceDirect

The articles analyzed were searched in the ScienceDirect database using keywords. The keywords used by the researcher were "gender diversity", "corporate sustainability", and "gender diversity implications". The articles that were successfully collected during the search process were 150 articles. These articles are still random and need to be screened to integrate narrower criteria.

The 150 articles cannot all be categorized according to the criteria. The articles selected by the researcher were only articles with a theme that matched gender diversity and corporate sustainability. Many articles with gender relevance that did not match the topic had to be removed from the sample. For example, if this gender topic has relevance to psychology, law, medicine or health, art, and other topics outside of economics, accounting, and especially corporate sustainability. After going through the reduction process, the most appropriate articles to be used as a benchmark for analysis were 19 from the total population.

RESULT AND DISCUSSION

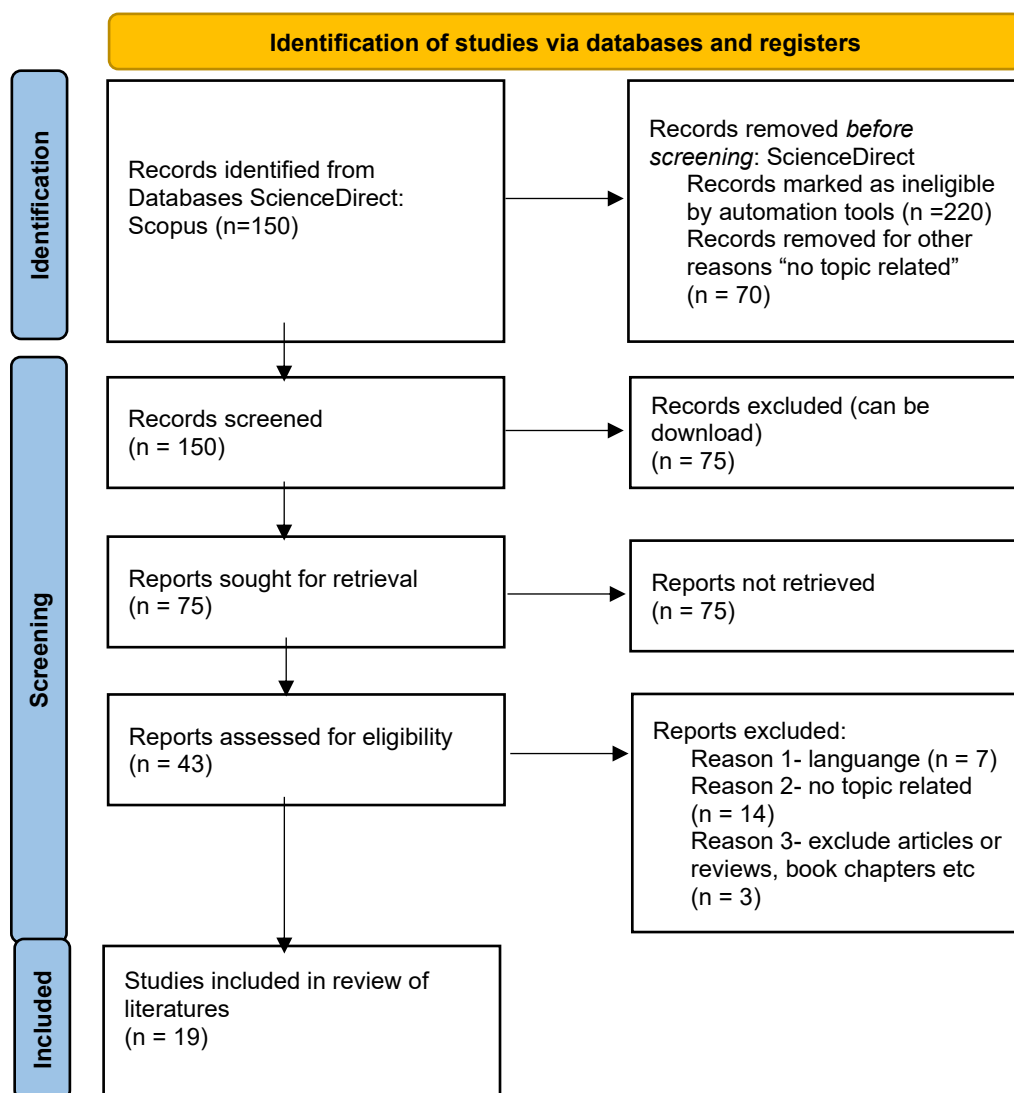
The articles analyzed were searched using the ScienceDirect database. The search for this article was conducted from August 2024 to September 2024. The total number of articles that could be collected through the database was 150. The keywords used during the article search were "gender diversity", "corporate sustainability", and "gender diversity implications".

The search through keywords from the ScienceDirect database initially produced 220 articles, but after the topic was narrowed down and the year was listed in a short range, the population obtained was 150. The researcher eliminated 70 articles that did not meet the criteria. Of the total 150 articles, there were then 75 articles that could not be accessed, failed to download, and were restricted. So, the

population was narrowed down again to only 75 articles. The 75 available articles were then analyzed. Of the total 75 articles, 43 articles could be fully accessed, namely articles displaying abstracts, introductions, methods, and complete results. The others were articles that did not display all the data or were still in the form of reviews that had not been fully published. Finally, the remaining articles to be analyzed for their substance were 43.

43 articles that have gone through several screening processes were not immediately analyzed. Researchers focused on more detailed sampling criteria. Of the total 43 articles that have been selected, 7 articles had language problems. Researchers focused on articles that were indexed by Scopus and did not use languages other than English. Then, 14 articles had to be removed from the sample because they contained inappropriate topics. The general topics in the 14 articles discussed the influence of gender but were not related to corporate sustainability. The article discussed other scientific fields that were not discussed in this study. Furthermore, 3 articles were scientific papers or not research so they had to be removed from the sample. Finally, 19 articles were analyzed in detail with actual and relevant material. The following is a PRISMA flowchart for the analysis of 150 articles that can be found:

Figure 1. Overview Results- PRISMA Flow Diagram



Sources: PRISMA-Statement

During the screening and analysis process, it can be seen that in various countries, the implementation of standards and regulations related to gender equality is increasing. Gender diversity in a business environment has brought good developments for the future and sustainability of the company. The composition of female directors provides a different matrix in decision-making, especially related to the social, economic, and environmental scope. However, gender equality also gets negative stereotypes from environments that do not prioritize women's emancipation. So, gender diversity still has many obstacles even though it has advantages in several aspects.

Various elements influencing the social evolution towards gender equality and its derivation for the business world have attracted the attention of researchers and given rise to more and more theories, hypotheses, and findings (Castro et al., 2023). Organizations play a critical role in advancing gender equality and environmental sustainability. Increasing the number of women on corporate boards has been proposed as a means to improve an organization's environmental sustainability (Wang et al., 2023). Research shows that actions taken by companies to maintain and preserve the right ecosystem conditions for sustainable human development are strongly driven by the vision and knowledge brought by female directors to the board. Corporate environmental and social performance improved after quotas increased female representation on the board (Schoonjans, 2024). Empirical evidence supports the theoretical approach that gender diversity on boards of directors improves the overall decision-making process (Enciso-Alfaro & García-Sánchez, 2024). The significant positive correlation between governance quality and women's participation in the labor market, business, and parliament also indicates increased efficiency for the government (Martinez-Garcia et al., 2024).

Gender diversity improves decision-making and the quality of corporate governance practices (Gull et al., 2023). In Malaysia, increasing the percentage of female directors improves Integrated Reporting Quality (IRQ), in line with agency and resource dependence theories (Qaderi et al., 2024). Research conducted in 37 countries around the world with different company samples explains that gender diversity leads to improvements in financial performance (Gull et al., 2023). In addition, gender diversity on the board of directors can increase the profits of companies in the world after being calculated using accounting analysis and ROA (Castro et al., 2023). Higher gender diversity on the board is considered to be able to make decisions in using lower levels of debt across various debt instruments. This empirical evidence strengthens the idea that women who are generally considered to be risk-averse contribute to a more careful evaluation of potential risks. In the field of auditing, the presence of female directors is in high demand because they are considered superior in monitoring more effective corporate governance (Bona-Sánchez et al., 2024). The presence of female board members is correlated with increased transparency, improved governance, and decision-making processes within the organization (Sharma et al., 2024).

Gender diversity can improve the sustainability of a company. This explains that women will be more emotionally concerned with decisions related to the environment, society, and economy, not just financial matters. Female directors tend to have an introspective and protectionist approach when it comes to mitigating environmental risks and shifting from a linear economic model to a circular economic model that respects the biophysical capacity of the earth (Enciso-Alfaro & García-Sánchez, 2024). Studies from various countries implementing gender diversity reforms have found that increasing the number of female directors has had a positive impact on reducing corporate carbon emissions (Barroso et al., 2024). The study underlines that women's empowerment is correlated with emission reductions in the range of \$3.77 million to \$14.71 million (Li et al., 2024). Other studies have also found a positive effect of gender diversity on boards of directors on bank divestment from fossil fuel companies. Subsample analysis revealed that the effect of gender diversity on boards of directors was significant for countries lagging in environmental performance. These results highlight that greater gender diversity in board composition can promote sustainability and facilitate business models that prioritize environmental goals (Cosma et al., 2024). Other findings also show that gender diversity plays a key role in corporate environmental performance.

Increasing competition in the market and pressure from regulators, such as the UN Agenda 2030, have made it necessary for companies to address stakeholder issues at a broader level (Mehmood et al., 2023). Gender diversity of a company's board reflects its inclusivity and social orientation, which

can attract investors and stakeholders who value diversity and social responsibility (Sharma et al., 2024).

However, gender diversity does not always have a positive impact on some items contained in corporate sustainability. Research literature using a sample of 8365 companies from 2002–2017 from 37 countries provides new empirical evidence that gender diversity on the board of directors significantly increases waste production (waste recycling) in companies. This effect is especially visible if there are two or more female directors on the board of directors (Gull et al., 2023). Research on the global banking industry shows no significant relationship between gender diversity and corporate financial performance. Investors do not view gender diversity as different from other human capital issues on boards and may not expect significant financial benefits from gender diversity (Grishunin et al., 2024). Another study of 3928 companies over the period 2010–2020 (35,199 observations) also confirmed that companies with greater female board representation (both in number and percentage) are more proactive in terms of investing in innovation to mitigate climate change. However, this positive effect does not require a large number of female directors and decreases when the percentage of board seats held by women is higher (García-Sánchez, Monteiro, et al., 2023). So women are still not allowed to hold authority and dominate the proportion of male directors. On the other hand, some women in Turkey often face challenges in achieving economic, work, and political power, thus suppressing their potential on the company's board of directors (Wang et al., 2023). This is also supported by research results in Italy which explain that the composition of female leaders in the medium industry has resulted in low-risk aversion and increased skepticism from creditors (Arcuri et al., 2024).

Although the presence of women on boards of directors has increased in recent years, the reality still shows a stark difference between men and women in occupying board seats. Studies show that the presence of women on boards of directors increases with the number of male nominees, meaning that the presence of women occurs as a result of the increase in the size of the board of directors, not just the replacement of male directors (López-Cabarcos et al., 2023). In conclusion, the relationship between gender diversity in boards of directors and sustainability performance remains elusive and less empirically clear in some findings (Wang et al., 2023). Female directors influence climate change innovation primarily through their involvement in management as executive directors, not through the monitoring and advisory roles that characterize independent directors so that women's decisions under the auspices of independent directors do not influence change at all (García-Sánchez, Monteiro, et al., 2023).

Based on the results of this study, it can be seen that female members of the company's board of directors each have positive and negative responses. However, from all the results of the discussions collected, the benefits of placing female directors as a goal of achieving corporate sustainability are still superior to not placing them at all.

CONCLUSION

The increasing growth of manufacturing companies has an impact on environmental problems (Assakhaa Wisesa, 2024). From a corporate perspective, sustainability issues play a critical role in a variety of financial areas, from investment decision-making to optimal capital structure and corporate dividend policy (Rojo-Suárez et al., 2024).

Increasing the number of women on corporate boards has been offered as a means to improve the environmental sustainability of organizations (Wang et al., 2023). Studies show that companies with gender diversity at the management level tend to have better financial performance. Solid performance can provide more resources for investment in sustainability practices. This explains that women will be more emotionally concerned with decisions related to the environment, society, and economy, not just financial matters. The gender diversity of a company's board reflects its inclusiveness and social orientation, which can attract investors and stakeholders who value diversity and social responsibility (Sharma et al., 2024). Thus, increasing female representation on boards not only provides social benefits but can also contribute significantly to corporate sustainability and growth.

Based on the summary of research results that have been collected through PRISMA analysis, gender diversity supports corporate sustainability. This can be proven by increasing performance, profits, environmental mitigation, and other developments that affect social and economic. Psychologically, women are considered capable of tracking aspects that are benchmarks for sustainability because women will emotionally pay more attention to decisions related to the environment, society, and economy, not just financial matters (they are more empathetic). Studies also support that the achievement of corporate performance includes increasing the IRQ index, ROA, and investment. The gender diversity of a company's board of directors reflects its inclusivity and social orientation, which can attract investors and stakeholders who value diversity and social responsibility (Sharma et al., 2024).

However, gender diversity in some literatures has also been found to have no significant impact on company performance. Female directors on the board have been shown to be unable to respond to environmental issues by failing to achieve the expected carbon emission levels. In addition, the problem of stereotypes against women in several regions also interferes with women's performance so that company achievements are not carried out properly. This stereotype against women also affects creditors by not being given debt financing as if the company were led by men. Female directors are considered a trend but do not provide significant implications for sustainability. Investors do not consider gender diversity to be different from other human capital issues on the board of directors and may not expect significant financial benefits from gender diversity (Grishunin et al., 2024).

Based on the results of this study, it can be seen that female members of the company's board of directors each have positive and negative responses. However, from all the results of the discussions collected, the benefits of placing female directors as a goal of achieving corporate sustainability are still superior to not placing them at all.

REFERENCES

- Adams, K., Attah-Boakye, R., Yu, H., Johansson, J., & Njoya, E. T. (2023). Female board representation and coupled open innovation: Evidence from emerging market multinational enterprises. *Technovation*, 124. <https://doi.org/10.1016/j.technovation.2023.102749>
- Almaqtari, F. A., Elsheikh, T., Al-Hattami, H. M., & Mishra, N. (2023). The impact of board characteristics on environmentally friendly production: A cross country study in Asia and Europe. *Journal of Cleaner Production*, 392. <https://doi.org/10.1016/j.jclepro.2023.136257>
- Arcuri, M. C., Di Tommaso, C., & Pisani, R. (2024). Does gender matter in financing SMEs in green industry? *Research in International Business and Finance*, 69. <https://doi.org/10.1016/j.ribaf.2024.102222>
- Assakhaa Wisesa, S. (2024). *The Impact of Environmental Management Accounting on Environmental Performance and Financial Performance of Manufacturing Companies in Indonesia*. 1(1).
- Barroso, R., Duan, T., Guo, S. (Sarina), & Kowalewski, O. (2024). Board gender diversity reform and corporate carbon emissions. *Journal of Corporate Finance*, 87. <https://doi.org/10.1016/j.jcorpfin.2024.102616>
- Bona-Sánchez, C., Fleitas-Castillo, G. C., Pérez-Alemán, J., & Santana-Martín, D. J. (2024). Gender diversity and audit fees: Insights from a principal-principal agency conflict setting. *International Review of Financial Analysis*, 96. <https://doi.org/10.1016/j.irfa.2024.103614>

- Castro, P., Tascón, M. T., & Corral, S. (2023). Can patriarchal attitudes moderate the relation between women on boards and firm economic performance? *European Research on Management and Business Economics*, 29(3). <https://doi.org/10.1016/j.iedeen.2023.100222>
- Cosma, S., Galletta, S., Mazzù, S., & Rimo, G. (2024). Banks' fossil fuel divestment and corporate governance: The role of board gender diversity. *Energy Economics*, 139. <https://doi.org/10.1016/j.eneco.2024.107948>
- Elbardan, H., Uyar, A., Kuzey, C., & Karaman, A. S. (2023). CSR reporting, assurance, and firm value and risk: The moderating effects of CSR committees and executive compensation. *Journal of International Accounting, Auditing and Taxation*, 53. <https://doi.org/10.1016/j.intaccudtax.2023.100579>
- Enciso-Alfaro, S. Y., & García-Sánchez, I. M. (2024). Are innovative firms more circular when women hold upper positions? *Journal of Innovation and Knowledge*, 9(4). <https://doi.org/10.1016/j.jik.2024.100556>
- García-Sánchez, I. M., Aibar-Guzmán, C., Núñez-Torrado, M., & Aibar-Guzmán, B. (2023). Women leaders and female same-sex groups: The same 2030 Agenda objectives along different roads. *Journal of Business Research*, 157. <https://doi.org/10.1016/j.jbusres.2022.113582>
- García-Sánchez, I. M., Monteiro, S., Piñeiro-Chousa, J. R., & Aibar-Guzmán, B. (2023). Climate change innovation: Does board gender diversity matter? *Journal of Innovation and Knowledge*, 8(3). <https://doi.org/10.1016/j.jik.2023.100372>
- Grishunin, S., Yarantseva, A., & Karminsky, A. (2024). Influence of gender and age diversity of boards on financial and market performance of banks. *Procedia Computer Science*, 242, 372–379. <https://doi.org/10.1016/j.procs.2024.08.172>
- Gull, A. A., Atif, M., & Hussain, N. (2023). Board gender composition and waste management: Cross-country evidence: Board gender diversity and waste management. *British Accounting Review*, 55(1). <https://doi.org/10.1016/j.bar.2022.101097>
- Homroy, S. (2023). GHG emissions and firm performance: The role of CEO gender socialization. *Journal of Banking and Finance*, 148. <https://doi.org/10.1016/j.jbankfin.2022.106721>
- Kizys, R., Mamatzakis, E. C., & Tzouvanas, P. (2023). Does genetic diversity on corporate boards lead to improved environmental performance? *Journal of International Financial Markets, Institutions and Money*, 84. <https://doi.org/10.1016/j.intfin.2023.101756>
- Li, J., Li, J., Nassani, A. A., Naseem, I., & Zaman, K. (2024). The impact of women's empowerment and access to finance on greenhouse gas emissions: A framework for securing environmental tranquility. *Borsa Istanbul Review*, 24(2), 341–351. <https://doi.org/10.1016/j.bir.2024.01.008>
- López-Cabarcos, M. Á., Vizcaíno-González, M., & López-Pérez, M. L. (2023). Gender diversity on boards: Determinants that underlie the proposals for female directors. *Technological Forecasting and Social Change*, 190. <https://doi.org/10.1016/j.techfore.2023.122417>
- Ma, Y., & Ahmad, M. I. (2024). Do board characteristics impact greenwashing? Moderating role of CSR committee. *Heliyon*, 10(20). <https://doi.org/10.1016/j.heliyon.2024.e38743>
- Martinez-Garcia, I., Terjesen, S., & Gomez-Anson, S. (2024). Regulating board gender diversity in Europe: The influence of cultural, governmental, and women's institutions. *Journal of Business Research*, 182. <https://doi.org/10.1016/j.jbusres.2024.114782>

- Mehmood, A., De Luca, F., & Quach, H. (2023). Investigating how board gender diversity affects environmental, social and governance performance: Evidence from the utilities sector. *Utilities Policy*, 83. <https://doi.org/10.1016/j.jup.2023.101588>
- Nguyen, L. T. M., & Nguyen, P. T. (2023). The board profiles that promote environmental, social, and governance disclosure—Evidence from S&P 500 firms. *Finance Research Letters*, 55. <https://doi.org/10.1016/j.frl.2023.103925>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. In *The BMJ* (Vol. 372). BMJ Publishing Group. <https://doi.org/10.1136/bmj.n71>
- Qaderi, S. A., Ghaleb, B. A., Qasem, A., & Wan-Hussin, W. N. (2024). Unveiling the link between female directors' attributes, ownership concentration, and integrated reporting strategy in Malaysia. *Borsa Istanbul Review*, 24(5), 1031–1045. <https://doi.org/10.1016/j.bir.2024.05.012>
- Rahayuningrat, P. S., Ardiani, G. T., Alisa, J., Sugiarti, R., & Taufik, N. (2024). The Effectiveness of Instagram Advertising for Digital Marketing Strategy: Systematic Literature Review. *International Journal of Tourism and Hospitality in Asia Pasific (IJTHAP)*, 7(1), 1–13. <https://doi.org/10.32535/ijthap.v7i1.2888>
- Rojo-Suárez, J., Alonso-Conde, A. B., & Gonzalez-Ruiz, J. D. (2024). Does sustainability improve financial performance? An analysis of Latin American oil and gas firms. *Resources Policy*, 88. <https://doi.org/10.1016/j.resourpol.2023.104484>
- Schoonjans, E. (2024). From diversity to sustainability: Environmental and social spillover effects of board gender quotas. *Journal of Economic Behavior and Organization*, 222, 314–331. <https://doi.org/10.1016/j.jebo.2024.04.026>
- Sharma, A., Chauhan, S., Mia, M. A., Sangwan, S., Siddiqui, S. A., & Kumar, S. (2024). Board gender diversity and debt utilization: Evidence from the global microfinance industry. *Borsa Istanbul Review*, 24(3), 530–548. <https://doi.org/10.1016/j.bir.2024.02.012>
- Usman, A., Mediaty, Handayanto, A. B., Tahang, R. A., & Salim, R. R. (2024). *Carbon Management Accounting: A Systematic Literature Review* (pp. 772–783). https://doi.org/10.2991/978-94-6463-400-6_57
- Wang, Y., Ones, D. S., Yazar, Y., & Mete, I. (2023). Board gender diversity and organizational environmental performance: An international perspective. *Current Research in Ecological and Social Psychology*, 5. <https://doi.org/10.1016/j.cresp.2023.100164>