

20. Preliminary research findings on the impact of gender diversity in boards on sustainable development policies

ALICJA HADRYŚ

<https://orcid.org/0000-0003-2684-9910>

Poznań University of Economics and Business
alicja.hadrys@ue.poznan.pl

MONIKA GUZEK

<https://orcid.org/0000-0003-3864-0137>

Poznań University of Economics and Business
info@monikaguzek.com

AGATA LINKIEWICZ

<https://orcid.org/0000-0002-9581-2372>

Poznań University of Economics and Business
agata.linkiewicz@ue.poznan.pl

Abstract: Board gender diversity is investigated as a potential driver of sustainable development policies in enterprises. The chapter combines a review of sustainability, gender equality and corporate-leadership literature with a CAWI study of managers from medium-sized firms in the Wielkopolska region. Companies were compared according to whether at least one woman served on the board or management body. Firms with female board participation reported stronger implementation of social sustainability goals and higher average environmental-sustainability scores, while differences in the economic dimension were small. The chapter links these patterns with broader stakeholder orientation, cooperation, creativity and attention to sustainable alternatives. Because the sample is limited, the evidence remains exploratory. Even so, it suggests that women's presence in top management may strengthen the practical adoption of sustainability policies.

Keywords: gender diversity, women on board, sustainable development, SDG's.

Suggested citation: Hadryś, A., Guzek, M., & Linkiewicz, A. (2026). Preliminary research findings on the impact of gender diversity in boards on sustainable development policies. In J. Cabańska, I. Musiałkowska & E. Mińska-Struzik (Eds.), *Resilient and transforming Europe* (pp. 285–295). Poznań University of Economics and Business Press. <https://doi.org/10.18559/978-83-8211-309-9/20>



This book is available under the Creative Commons 4.0 license—Attribution-NonCommercial-NoDerivative 4.0 International

Introduction

Sustainable development has become an increasingly important element of contemporary business strategies, requiring companies to integrate economic, social, and environmental objectives into their decision-making processes. At the same time, growing attention is being paid to the role of diversity in corporate leadership and its potential influence on organisations' strategic priorities and sustainability practices. In particular, the presence of women on management boards may contribute to broader stakeholder orientation, greater sensitivity to social and environmental issues, and the development of more sustainable approaches to business.

Against this background, the aim of this chapter is to explore the relationship between gender diversity in corporate leadership and the implementation of sustainable development policies. The chapter combines a review of the literature on sustainable development and gender diversity with preliminary empirical findings from medium-sized enterprises in the Wielkopolska region. Particular attention is paid to differences in the social, economic, and environmental dimensions of sustainability between companies with female representation in their management bodies and those without women in top management positions.

20.1. Sustainable development – selected aspects

In the 1980s, the World Commission on Environment and Development defined the concept of sustainable development as meeting the basic needs of the present generation without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987). "The 2030 United Nations Agenda," adopted in 2015, assumed that long-term collaborative efforts are essential for sustainable development. These efforts focus on implementing the 17 Sustainable Development Goals, which involve addressing challenges that mitigate the negative effects of human activities (United Nations, 2015). This is a universal set of tasks that UN member states should implement into their national programmes and policies by 2030. Goals 1–6 are a continuation of the Millennium Development Goals, which were set in 2000, while goals 7–17 constitute a new proposal for actions and policies (Hák et al., 2016).

The sustainable development of economic entities requires maintaining a balance between three related areas: environmental, economic and social, in accordance with the Triple Bottom Line (TBL) concept (Elkington, 1994). In the TBL definition, Elkington used three terms – profit, people and planet – because

the concept referred to measuring the results of American corporations. In doing so, it did not limit itself to financial and economic indicators, but verified the company's activities with social and environmental factors, specifically, improving people's lives and the planet's well-being. According to the TBL assumptions, companies operate in a sustainable manner if, in addition to profits reflected in the profit and loss account, they also take people into account in their activities, engage in socially responsible activities, and take the planet into account by undertaking pro-environmental activities. TBL therefore posits that economic and social development must coexist with the preservation and protection of the environment (Goel, 2010).

According to the TBL concept, enterprises that consider how their activities impact on the environment and society should be oriented in two ways – towards the entity's development and towards sustainable development. The economic dimension of TBL refers to how an organisation's business practices impact on the economic system (Elkington & Rowlands, 1999), and developing the organisation while supporting future generations (Spangenberg, 2005). Meanwhile, the social dimension of TBL refers to beneficial and fair business practices towards employees, customers and communities (Elkington & Rowlands, 1999). There is a shift away from prioritising investors or shareholders, shifting attention to stakeholders potentially not financially involved in the company but still closely connected to its activities and results. The environmental dimension of TBL refers to engaging in practices that do not threaten environmental resources for future generations. When analysing the activities of companies in this area, it is important to focus on the options available to the entity. Often, a company must choose between a cheaper option and a more environmentally friendly alternative. Common measures of environmental impact are related to such aspects as reducing greenhouse gas emissions, the amount of waste generated, and the use of energy or fossil fuels (Alhaddi, 2015).

Economic entities often adopt sustainable practices as a result of tightening environmental regulations, which impose numerous restrictions on enterprises and influence their implementation of ecological business methods (Zheng et al., 2019). Coercive pressure plays a key role (Murphy & Gouldson, 2020), because environmental policy is one of the main mechanisms for governments to participate in environmental governance (Wang et al., 2020). The reasons for companies engaging in sustainable development extend beyond compliance. One important factor is financial benefits; an analysis conducted among American companies showed that during the economic downturn, organisations that applied practices focused on environmental protection and improving social well-being, while at the same time maintaining shareholder added value, outperformed other entities (A. T. Kearney, 2009). Moreover, studies show that undertaking actions in

accordance with TBL can foster the emergence of new business opportunities (Wagner, 2010). Increased customer awareness of environmental protection and social well-being encourages companies to focus on sustainable business practices to increase stakeholder trust (Zaman & Shamsuddin, 2017), which affects the creation of corporate value and competitive advantage (Bhaskaran et al., 2020; Qureshi et al., 2019).

The characteristics of the company also matter. Ones with smaller, more independent and gender-diverse boards are more likely to establish trusting and cooperative relationships with stakeholders, thus strengthening their sustainability efforts. Nadeem et al. (2017) argue that it is necessary to consider the characteristics of top managers to understand their strategic choices. Moreover, greater diversity can lead to increased creativity and the creation of new, sustainable alternatives (Torchia et al., 2011).

20.2. The role of women in driving sustainable development

In today's world, sustainable development has become a vital issue that concerns not only the environment but also the social and economic aspects of life. In this context, the role of women cannot be overestimated. As key decision-makers in many communities, women play a fundamental role in shaping the future of sustainable development. The first step in understanding this role is to recognise that women are not only beneficiaries of sustainable development policies, but also active participants and leaders of change. In many countries, women constitute the majority of the agricultural workforce, making them essential to ensuring food security and protecting natural resources. Women's unique perspectives and experiences contribute to innovative solutions for sustainable development, while their involvement in environmental protection and education and in promoting of sustainable lifestyles impacts local and global communities. Therefore, investing in the education of women and girls has a direct impact on sustainable development, as educated women are more likely to take action to protect the environment, health and well-being of communities. In the context of national policies and decisions, women should have equal access to decision-making positions; diversity in governance and decision-making leads to more sustainable and equitable solutions. In short, the role of women in sustainable development is not merely important but crucial. By supporting their actions, we can achieve the Sustainable Development Goals that will benefit all of humanity.

20.2.1. Overview of the importance of gender diversity in corporate leadership

Nowadays, gender diversity in corporate leadership has become a key focus of management discourse. Introducing gender diversity into the highest levels of management brings numerous benefits for both the organisation and for society. First of all, diverse teams of leaders are more innovative and creative, since different perspectives, experiences and approaches to solving problems enable organisations to respond better to changing market conditions. Moreover, empirical research shows that companies with greater gender diversity on the boards achieve superior financial results. Another important aspect is diversity's impact on organisational culture: introducing women to leadership roles promotes equality and fairness, which translates into greater employee satisfaction and engagement. Thus, such balanced gender representation in leadership creates an inclusive environment in which everyone feels appreciated and heard.

Furthermore, the impact on company image is significant. Organisations that actively support gender diversity are perceived as more modern and socially responsible. In this way, they may attract talent seeking jobs where their values are aligned with the employer's. It should also be noted that implementing gender diversity in leadership is not simply a matter of ethics but also of business strategy. Companies that are able to adapt to diverse customer needs gain a competitive advantage. Thus, understanding different demographic groups, including women, is crucial for effective marketing and sales.

In summary, gender diversity in corporate management is far from a passing trend; it is a necessity. Investing in gender diversity yields tangible benefits for companies and for society as a whole. By boosting the representation of women in leadership roles, organisations can safeguard their success in the long term.

The term SDG refers to three main areas of activity for companies, organisations, and investors, within which they should be guided by the principles of sustainable development and apply responsible business practices that respect the broad interests of individual stakeholders. In practice, this means that companies and organisations that implement SDG requirements consider, measure, report on the environmental, social, and governance (Corporate Governance) aspects of their operations. In terms of environmental issues, the presence of women in top management roles is associated with several key indicators, two of which are the development of eco-friendly products and the commitment to resource reduction (Burkhardt et al., 2020). High board gender diversity is associated with lower corporate carbon emissions and higher stock returns to climate activism (Kordsachia et al., 2023).

The influence of women is weaker in firms with a lower environmental performance and in firms with high-growth opportunities because these firms are likely to prioritise their own development. In line with social role theory, this suggests that women also adapt to the role that organisations expect from them. Some scholars argue that women's degree of risk aversion may lessen once they have broken through the glass ceiling and have adapted to a male-dominated culture. Firms with a higher proportion of women in top management positions achieve higher environmental scores. In addition, these firms register a higher product innovation score, reflecting their considerable investment in green technologies, along with a greater capacity to reduce waste and develop new products with extended durability. Companies with greater female representation in top management roles are also more committed to reducing their consumption of natural resources and are less likely to be involved in environmental controversies (Burkhardt et al., 2020; Huluka, 2022). Thus, high board gender diversity is associated with lower corporate carbon, handling of environmental threads is one channel through which gender-diverse boards can create shareholder value. A positive relationship exists between female board members and CSR performance (Bennouri et al., 2018; Kirsch, 2018), because there is a strong association between female board representation and the reduction in residual corporate carbon emissions (Kordsachia et al., 2023). In the case of the CSR dimensions, women valued all the dimensions more than men.

20.3. Gender diversity in boards on sustainable development policies

To assess the level of sustainable development in businesses, a scale measuring corporate social responsibility was employed, which was based on the assumption that each organisation naturally aligns with the 17 Sustainable Development Goals set by the UN. Following Gallardo-Vázquez et al. (2021), it was presumed that corporate social responsibility and sustainable development share certain features and synergies, complementing each other despite originating from different theoretical backgrounds. The implementation of sustainable development in the social, economic and environmental domain was evaluated using a scale of different statements. During interviews, participants were asked to subjectively assess each statement. The authors conducted a qualitative study using a computer-assisted web interview (CAWI). In February 2024, interviews using a Likert scale were conducted with six female managers who were mem-

bers of the boards of medium-sized enterprises from the Wielkopolska region. A comparative sample of six male managers in companies without women on their boards were also interviewed.

To help maintain intergenerational balance, it is important to respect and implement the principles of operation in accordance with the Triple Bottom Line concept (Elkington, 1998). According to TBL assumptions, sustainable development of enterprises is only possible when social, environmental and economic goals are treated as equivalent. Therefore, the interviews touched upon the social, economic and environmental dimensions of sustainable development.

20.3.1. Social dimension

The level of sustainable development in the environmental area was assessed using a scale of 12 statements. The statements measuring the implementation of the environmental aspect of sustainable development included:

1. Support for hiring individuals at risk of social exclusion.
2. Appreciating the contributions of people with disabilities to the business world.
3. Awareness of our employees' quality of life.
4. Employee compensation is tied to their skills and performance.
5. Health and safety standards surpass the legal minimum requirements.
6. We promote and support the career development of our employees.
7. We facilitate the balance between professional and personal lives for our employees.
8. Employee initiatives are considered seriously in management decisions.
9. All employees have equal opportunities.
10. Engagement in activities that benefit the local community.
11. Encourage our employees to volunteer or collaborate with non-governmental organisations.
12. Active communication with our employees.

Companies with at least one female board or management member rated the average implementation of social sustainability goals at 4.5 on a scale of 1 to 5, while those without female members scored an average of 3.32. These results suggest that the presence of women on the board positively influences the implementation of social sustainability principles.

20.3.2. Economic dimension

The level of sustainable development in the environmental area was assessed using a 7-point scale. The statements measuring the implementation of the environmental aspect of sustainable development included:

1. Great emphasis on delivering high-quality products and services to our customers.
2. Products and services adhere to both national and international quality standards.
3. Ensuring consumer rights is a top priority for our management team.
4. To provide our customers with precise and comprehensive information about our products and services.
5. The aim is to build stable relationships with our suppliers, focusing on co-operation and mutual benefits.
6. Cultivate business relationships with other companies within our region.
7. The sustainability of our company is one of the most important goals.

Companies with at least one female member on the management board rated their implementation of sustainable development's economic goals at an average of 4.3 on a 1–5 scale. Those without female members gave a slightly lower average score of 4.25. These findings suggest that adherence to and implementation of the economic principles of sustainable development are not significantly influenced by the presence of women in management.

20.3.3. Environmental dimension

The level of sustainable development in the environmental area was assessed using a scale of 8 statements. The statements measuring the implementation of the environmental aspect of sustainable development included:

1. Being able to minimise our negative impact on the environment.
2. Save energy to improve our efficiency.
3. The use of alternative energy sources is of great importance.
4. Use raw materials and materials for production and service provision that have a low impact on the natural environment.
5. Participation in activities related to the protection and improvement of our natural environment.
6. The importance of planning necessary investments to reduce the company's negative environmental impact.

7. Supporting the reduction of gas emissions and waste production and the use of recycling materials.
8. Willing to use, purchase, or produce environmentally friendly goods.

Companies that declared having at least one female member on the management board or management bodies assessed the average level of implementation of environmentally sustainable development goals at 4.35 on a scale of 1–5. Companies whose management body had no female members received a lower score – 3.7. The results indicate that respect for and implementation of environmentally sustainable development principles are on average higher when there is at least one woman in a company's management body.

Conclusions

The presence of women in top management is associated with several key indicators, including the development of eco-friendly products and commitment to reducing resource use. Some research findings reveal a nuanced relationship between gender diversity and environmental performance: the influence of women is weaker in firms with lower environmental performance and stronger in firms with high-growth opportunities because these firms are likely to prioritise their own development. This highlights the alignment between women's leadership and the prioritisation of sustainable practices in firms focused on driving their own growth and competitiveness in dynamic markets. Women leaders bring unique perspectives and insights that can drive positive change and contribute to the success of organisations committed to sustainable growth and competitiveness in today's global economy.

These results are consistent with several studies that find a positive relationship between female board members and CSR performance (Bennouri et al., 2018; Kirsch, 2018).

The interaction between female board members and sustainable development policies contributes to firm performance. Specifically, the higher the percentage of women on the board or the presence of at least one woman on the board, the stronger the positive association between sustainable development. In other words, gender diversity strengthens the positive effect of sustainable development policies on firm performance.

Our results should be viewed in the light of several limitations. Firstly, our sample is constrained, which limits the generalisability of the study. Secondly, we cannot definitively infer that gender-diverse boards add value to companies' management. The board of directors is responsible for the firms' strategic posi-

tioning along multiple dimensions, and the net effect of board gender diversity on firms' financial performance remains a subject for academic debate (Kord-sachia et al., 2023).

References

- Alhaddi, H. (2015). Triple bottom line and sustainability: A literature review. *Business and Management Studies*, 1(2), 6–10. <https://doi.org/10.11114/bms.v1i2.752>
- A. T. Kearney. (2009). *Green winners: The performance of sustainability-focused companies during the financial crisis*. https://www.kenarney.com/documents/291362523/291365012/green_winners.pdf
- Bennouri, M., Chtioui, T., Nagati, H., & Nekhili, M. (2018). Female board directorship and firm performance: What really matters? *Journal of Banking & Finance*, 88, 267–291. <https://doi.org/10.1016/j.jbankfin.2017.12.010>
- Bhaskaran, R. K., Ting, I. W. K., Sukumaran, S. K., & Sumod, S. D. (2020). Environmental, social and governance initiatives and wealth creation for firms: An empirical examination. *Managerial and Decision Economics*, 41(5), 710–729. <https://doi.org/10.1002/mde.3131>
- Burkhardt, K., Nguyen, P., & Poincelot, E. (2020). Agents of change: Women in top management and corporate environmental performance. *Corporate Social Responsibility and Environmental Management*, 27(4), 1591–1604. <https://doi.org/10.1002/csr.1907>
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100. <https://doi.org/10.2307/41165746>
- Elkington, J. (1998). Partnerships from cannibals with forks: The Triple Bottom Line of 21st-century business. *Environmental Quality Management*, 8(1), 37–51. <https://doi.org/10.1002/tqem.3310080106>
- Elkington, J., & Rowlands, I. H. (1999). Cannibals with forks: The triple bottom line of 21st century business. *Alternatives Journal*, 25(4), 42–43.
- Gallardo-Vázquez, D., Hourneaux Jr., F., da Silva Gabriel, M. L. D., & Valdez-Juárez, L. E. (2021). On earth as it is in heaven: Proxy measurements to assess sustainable development goals at the company level through CSR indicators. *Sustainability*, 13(2), 914. <https://doi.org/10.3390/su13020914>
- Goel, P. (2010). Triple bottom line reporting: An analytical approach for corporate sustainability. *Journal of Finance, Accounting & Management*, 1(1), 27–42.
- Hák, T., Janoušková, S., & Moldan, B. (2016). Sustainable development goals: A need for relevant indicators. *Ecological Indicators*, 60, 565–573. <https://doi.org/10.1016/j.ecolind.2015.08.003>
- Huluka, A. T. (2022). Is there any gender difference in environmental concern? Evidence from the smallholder farmers in Oromia regional state of Ethiopia. *Cogent Social Sciences*, 8(1), 2103284. <https://doi.org/10.1080/23311886.2022.2103284>

- Kirsch, A. (2018). The gender composition of corporate boards: A review and research agenda. *The Leadership Quarterly*, 29(2), 346–364. <https://doi.org/10.1016/j.leaqua.2017.06.001>
- Kordsachia, O., Bassen, A., Fieberg, C., & Wolters, K. (2023). Market perceptions on the role of female leadership in adapting to climate change. *Journal of Risk Finance*, 24(4), 424–448. <https://doi.org/10.1108/JRF-08-2022-0217>
- Murphy, J., & Gouldson, A. (2020). Environmental policy and industrial innovation: Integrating environment and economy through ecological modernisation. In A. P. J. Mol, D. A. Sonnenfeld, & G. Spaargaren (Eds.), *The ecological modernisation reader* (pp. 275–294). Routledge. <https://doi.org/10.4324/9781003061069-19>
- Nadeem, M., Zaman, R., & Saleem, I. (2017). Boardroom gender diversity and corporate sustainability practices: Evidence from Australian Securities Exchange listed firms. *Journal of Cleaner Production*, 149, 874–885. <https://doi.org/10.1016/j.jclepro.2017.02.141>
- Qureshi, M. A., Kirkerud, S., Theresa, K., & Ahsan, T. (2019). The impact of sustainability (environmental, social, and governance) disclosure and board diversity on firm value: The moderating role of industry sensitivity. *Business Strategy and the Environment*, 29(3), 1199–1214. <https://doi.org/10.1002/bse.2427>
- Spangenberg, J. H. (2005). Economic sustainability of the economy: Concepts and indicators. *International Journal of Sustainable Development*, 8(1–2), 47–64. <https://doi.org/10.1504/IJSD.2005.007374>
- Torchia, M., Calabrò, A., & Huse, M. (2011). Women directors on corporate boards: From tokenism to critical mass. *Journal of Business Ethics*, 102, 299–317. <https://doi.org/10.1007/s10551-011-0815-z>
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. <https://sdgs.un.org/2030agenda>
- Wagner, M. (2010). Corporate social performance and innovation with high social benefits: A quantitative analysis. *Journal of Business Ethics*, 94(4), 581–594. <https://doi.org/10.1007/s10551-009-0339-y>
- Wang, K., Yan, M., Wang, Y., & Chang, C. P. (2020). The impact of environmental policy stringency on air quality. *Atmospheric Environment*, 231, 117522. <https://doi.org/10.1016/j.atmosenv.2020.117522>
- World Commission on Environment and Development. (1987). *Our common future*. Oxford University Press.
- Zaman, K., & Shamsuddin, S. (2017). Green logistics and national scale economic indicators: Evidence from a panel of selected European countries. *Journal of Cleaner Production*, 143, 51–63. <https://doi.org/10.1016/j.jclepro.2016.12.150>
- Zheng, H., Wang, L., Peng, W., Zhang, C., Li, C., Robinson, B. E., & Daily, G. C. (2019). Realizing the values of natural capital for inclusive, sustainable development: Informing China's new ecological development strategy. *Proceedings of the National Academy of Sciences*, 116(17), 8623–8628. <https://doi.org/10.1073/pnas.1819501116>