
BOARD GENDER DIVERSITY AND CORPORATE ENVIRONMENTAL SUSTAINABILITY: A RESEARCH AGENDA

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Abstract

Environmental sustainability as a pillar of corporate sustainability has gained increasing prominence in policy and academic discourses (Birindelli, Iannuzzi, & Savioli, 2019).

The rise of regulatory frameworks, combined with stakeholder pressures to discourage actions that are harmful to the community and the environment, are driving companies to respond to the increased demand for environmental sustainability as a means to enhance their reputation and sustain their business over time.

Consequently, scholarly research has expanded its scope beyond the focus on economic sustainability to include the determinants and enabling conditions of social and environmental sustainability (Cohen, Smith, & Mitchell, 2008; Hall, Daneke, & Lenox, 2010; Cohen & Winn, 2007; York, O’Neil, & Sarasvathy, 2016).

Recent research has focused on the role of internal corporate governance mechanisms in corporate environmental sustainability (CES) (Cordeiro & Sarkis, 2008; Calza, Profumo, & Tutore, 2016; Lu & Herremans, 2019; Ortiz-de-Mandojana & Aragón-Correa, 2015;

Ortiz-de-Mandojana, Aragón-Correa, Delgado-Ceballos, & Ferrón-Vílchez, 2012; Walls, Berrone, & Phan, 2012). An important subset of this research specifically concentrates on the impact of board characteristics (de Villiers, Naiker, & van Stade, 2011; Kock, Santaló, & Diestre, 2012; Post, Rahman, & McQuillen, 2015; Quintana-García & Benavides-Velasco, 2016).

Board gender diversity is one such characteristic of board structure that is believed to promote CES. It is argued that female directors are beneficial to CES by virtue of being more socially responsibly oriented than men, more interested in community service and philanthropic activities, as well as by bringing different perspectives to the board, encouraging more open conversations and enhancing the decision-making process related to CES.

Motivated by the growing interest in the relation between board gender diversity and CES, this study aims to survey the empirical literature that has analyzed this potential association and set out an agenda for future research.

Using the Scopus database, we collected and content-analyzed empirical articles on board gender diversity and CES published over the years 2015–2021. As a result of this search, we came up with 40 empirical papers.

This analysis aims to answer three main research questions:

RQ1: What are the main research strands and emerging topics?

RQ2: What are the main theoretical perspectives and methodological approaches?

RQ3: What are the possible future directions of research?

With respect to *RQ1*, we identified three different research areas:

- gender diversity and corporate environmental performance;
- gender diversity and corporate environmental disclosure;
- gender diversity and corporate environmental investments.

With respect to *RQ2*, it emerges that the existing research on gender diversity and environmental sustainability draws on a range of theoretical perspectives, including:

- agency theory;
- stakeholder theory;
- resource dependence theory;
- legitimacy theory;
- gender socialization theory;
- gender role theory;
- upper echelon theory;
- critical mass theory.

From an agency theory perspective, scholars suggest that female directors are more effective monitors of managerial actions, as they tend to be more aware of ethical issues concerning environmental practices

(Burkhardt, Nguyen, & Poincelot, 2020; Cumming, Leung, & Rui, 2015; Nekhili & Gatfaoui, 2013).

From a stakeholder theory perspective, board gender diversity is argued to increase pressure on firms to adopt different environmental practices in order to meet the expectation of stakeholders (Haque & Ntim, 2018; McGuinness, Vieito, & Wang, 2017, Michelin, 2011).

Studies based on the resource dependence perspective suggest that female directors can bring critical advice and resources that affect corporate decisions in adopting sustainable environmental strategies and mitigating environmental damage (Haque & Jones, 2020; Tourigny, Han, & Baba, 2017; Glass, Cook, & Ingersoll, 2016; Byron & Post, 2016; Mallin & Michelin, 2011; Bear, Rahman, & Post, 2010).

Alternatively, the legitimacy theory perspective focuses on how board gender diversity and environmental performance are used by companies to obtain approval from the broader society, which is expected to enable companies to be successful and sustainable (Elmagrhi, Ntim, Elamer, & Zhang, 2019; Haque & Ntim, 2018; Torchia, Calabrò, & Huse, 2011).

Empirical studies based on gender socialization theory found that females exhibit greater positive attitudes towards environmental responsibility than males (Hunter, Hatch, & Johnson, 2004; Zelezny, Chua, & Aldrich, 2000) and that they are generally socialized to be more passionately sensitive, value other's need, demonstrate ethics of care and show altruism (Beutel & Marini, 1995; Gilligan, 1982). Similarly, the gender role theory suggests that women may take a more holistic view of the world and be more concerned about the environment than men (Brough, Wilkie, Ma, Isaac, & Gal, 2016; Hyde, 2014; Polk, 2003; Simićević, Milosavljević, & Djoric, 2016).

The upper echelon theory posits that managers' demographic characteristics (such as age, education, organizational tenure and functional background) and psychological characteristics — particularly their personal values — have an impact on organizational outcomes (Rahman & Post, 2012; Samdahl & Robertson, 1989; Grunert & Kristensen, 1992; Diamantopoulos, Schlegelmilch, Sinkovics, & Bohlen, 2003).

Finally, proponents of the critical mass theory propose and empirically test the hypothesis that only once the number of female directors has reached three or more, they become influential in decision making (Konrad, Kramer, & Erkut, 2008; Joecks, Pull, & Vetter, 2013; Jia & Zhang, 2013; Owen & Temesvary, 2018; Atif, Hossain, Alam, & Goergen, 2021). This contention is validated among others by Post, Rahman, and Rubow (2011), who find that firms with three or more female directors have higher scores for corporate environmental responsibility than other firms.

The analyzed studies with a few exceptions tend to rely on a single theoretical perspective to frame their analysis and explain the findings.

Therefore, future studies should increasingly rely on a multi-theoretical approach to explain the potential association between board gender diversity and environmental sustainability.

Overall, the results of this study may contribute to a better understanding of the role of board gender diversity in corporate environmental sustainability, outlining the current state of research and providing an agenda for future research.

Specifically, based on the findings of our review, we suggest that future research could deepen the analysis regarding 1) the role of the professional background of female directors; 2) the role of their previous experience with environmental practices; and 3) the role of national culture and institutional environment in the relation between gender diversity and environmental sustainability. Additionally, studies should be devoted to assess the actual willingness of female directors and executives to invest in environmental protection activities possibly distinguishing between emerging and advanced economies, and to examine whether a greater presence of women in board positions is associated with a greater quality of corporate environmental disclosure or less frequent and less severe environmental incidents.

Finally, from a methodological viewpoint, most of the surveyed research is quantitative and tends to focus on single countries rather than attempting cross-country assessments. This suggests the need for more qualitative, mixed-methods and cross-country studies.

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