The European Banking Union: integrating supervisory approaches

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Handbook of Corporate Governance and Social Responsibility

Chapter: Corporate Governance and Environmental Disclosures

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Abstract

This chapter provides an overview of the literature that covers research that investigates the role of corporate governance as a driver of environmental disclosure and research that examine corporate governance as a factor in moderating the relationship between environmental disclosure and its impacts on businesses and society. In particular, we review studies that examine how internal, institutional, and market mechanisms influence corporate environmental disclosures and how these mechanisms moderate the relationship between corporate environmental transparency and firm outcomes, such as firm value and earnings quality, and societal impact. We conclude the chapter by critically reflecting upon the potential risks and limitations of traditional corporate governance mechanisms in regulating firm environmental transparency and discussing potential alternatives to overcome these limitations.

1. Introduction

Accounting researchers *extensively* investigate Corporate Governance (CG)'s role in shaping environmental disclosures and their impacts. In this chapter, we review CG research related to environmental disclosures published in quality journals within management, accounting and finance.[1] We define CG as "the system of checks and balances, both internal and external to companies, which ensures that companies discharge their accountability to all their stakeholders and act in a socially responsible way in all areas of their business activity" (Solomon, 2007, p. 14). This notion of CG moves beyond the single objective of shareholder wealth maximisation and extends to corporate accountability to the whole of society, future generations and the natural world. We begin with section 2 and illustrate the trends and evolution in firm environmental disclosures and shed light on different environmental topics studied. Section 3 explains why and how CG drives environmental disclosures by discussing the CG mechanisms that have been found to enhance the extent and quality of environmental disclosures. Next, in section 4, we discuss the potential impacts of environmental disclosures on businesses and society and how CG moderates them. We rely on the conceptual framework presented in Figure 1 to review and summarize relevant literature. We conclude in section 5 by providing a critical reflection upon the potential limitations of traditional CG mechanisms in regulating firm environmental transparency and discussing potential alternatives to overcome these limitations.

[Insert Figure 1 here]

2. Recent trends in corporate environmental disclosures

Corporate environmental disclosure has substantially changed over the last decades, with corporations worldwide providing more extensive disclosures to discharge their environmental accountability. The most dated studies analyse corporate environmental disclosure by focusing on the disclosure of general environmental information. Only more recently, the literature started focusing on the disclosure of information related to more specific environmental issues, such as climate change, biodiversity and water management.

2.1. General environmental reporting

Overall, there is a common agreement that the extent of environmental reporting is increasing over time (Arvidsson & Dumay, 2022; Cho et al., 2015). However, this has not been found to be necessarily associated with increases in the quality of disclosures and firms' environmental performance. Arvidsson and Dumay (2022), report an increase in both quantity and quality (but not substantial) of environmental reporting over time, which, however, is not accompanied by increases in environmental performance. The study urges companies to provide data that are more timely, credible and comparable and that demonstrate improved performance. The evidence produced by the literature on environmental reporting also points out that environmental reporting is too general, incomplete and inconsistent and that is biased and lacks objectivity, as it seems to be mostly driven by the need to obtain legitimacy (Borgstedt et al., 2019; Cho et al., 2015) and obfuscate negative news (Cho et al., 2010). In contrast, Albertini (2014) documents that environmental disclosure has become more technical and precise over time, with companies referring more frequently to the concrete environmental practices adopted.

2.2. Carbon reporting

Carbon reporting refers to the dissemination of non-financial information related to the emission of CO2 resulting from commercial activities. Corporations start disclosing such information as the result of pressure from various groups of stakeholders (including investors) concerned about the risks of climate change (Hrasky, 2012). While companies in most parts of the world are reporting carbon information on a voluntary basis, with no mandatory standard existing to support the enhancement of credibility and comparability of disclosed information, some countries have taken a step forward in introducing mandatory carbon reporting regulations to large corporations (e.g., UK, EU, North America, Australia, Japan and South Africa).

Several studies analyse carbon reporting by corporations, mostly via platforms such as annual reports, sustainability reports and environmental reports. Consistent with the trend in general environmental disclosures, these studies show improvements in the extent of disclosures on carbon emissions over time, which however are not necessarily accompanied by increases in their quality (Comyns & Figge, 2015). Carbon disclosures are found to lack standardisation (Caritte et al., 2015), being mostly symbolic (Hrasky, 2012) and being used for legitimacy reasons (Ferguson et al., 2016). However, there is also evidence of disclosure reflecting substantive actions, particularly in more carbon-intensive sectors (Hrasky, 2012) and of disclosures that are not used to achieve legitimacy but to reproduce and shape the field in which companies operate (Ferguson et al., 2016).

Several articles on carbon reporting focus on an alternative communication channel to corporate reports, the formerly Carbon Disclosure Project (CDP) which, every year, collects carbon data from the largest companies through a questionnaire. These studies report improvements over time in the extent of carbon disclosures for all types of emissions, but improvements in the quality of disclosure only for Scope 2 emissions (Matisoff et al., 2013). They also find increases over time in the number of firms that engage with the CDP questionnaires, disclose information about their emissions, and the methodology used to account for them. However, several firms answer the questionnaire without disclosing information about their emission amounts or how they account for them (Stanny, 2013). Interestingly, carbon disclosure provided via the CDP is found to be inconsistent with the information disclosed in corporate reports, as the GHG amounts disclosed in corporate reports are significantly lower than those disclosed via the CDP (Depoers et al., 2016).

2.3. Biodiversity reporting

Biodiversity reporting refers to the disclosure of information on how organizations impact the variety of all life found on our planet. Biodiversity has gained prominence only in the last two decades after the United Nations declared the period 2011-2020 the ‘Decade on Biodiversity’ to promote the implementation of a Strategic Plan for Biodiversity and its overall vision of living in harmony with nature (Roberts et al., 2021).

Overall, the literature on biodiversity reporting finds it to be limited and minimalistic (Adler et al., 2018; Boiral, 2016; Hassan et al., 2022). In line with studies on general environmental reporting and carbon reporting, the studies on biodiversity reporting also provide evidence of disclosure being generic, vague, biased and aimed at managing stakeholder impressions (Boiral, 2016; Hassan et al., 2022), thus questioning whether corporate reports represent a reliable tool to evaluate the biodiversity accountability of corporations. Hassan et al. (2022) also compare the information disclosed in corporate reports with that found on corporate websites, finding that companies do not use corporate websites to disclose their accountability to biodiversity, despite websites representing an ideal platform to communicate this type of information. This contrasts with the findings of Adler et al. (2018) who instead find many companies reporting biodiversity on their corporate websites.

2.4. Water-management reporting

The literature on water-management disclosure mostly focuses on companies operating in the water industry (Cooper & Slack, 2015). Only more recently, studies have analysed this reporting practice outside the water industry (Zhang et al., 2021).

Studies examining water-management reporting in the water industry find companies to provide extensive disclosure in line with the guidelines issued by water regulators (Stray, 2008). Whereas studies conducted outside the water industry generally find such reporting to be limited and deficient (Zhang et al., 2021). The results of Ben-Amar and Chelli (2018), who analyse a sample of nonfinancial companies that voluntarily provided water-related information to the CDP, also reveal that water disclosure tends to be higher in common law countries than in civil law countries. Cooper and Slack (2015) investigate the evolution in the use of impression management in the disclosure of water leakage performance, focusing on companies operating in the UK water industry. Their findings show that the level, nature and presentation of leakage disclosures change depending on how companies performed against the performance targets set by regulation authorities, with companies underperforming using presentational methods consistent with impression management.

3. CG as a determinant of environmental disclosures

CG plays an important role in enhancing environmental transparency to allow stakeholders to evaluate firms' activities. Consequently, extensive academic literature examines a broad range of governance mechanisms that drive firm environmental reporting practices. The following section provides an overview of this stream of literature by summarising how various CG mechanisms influence the extent, content and quality of corporate environmental disclosure. Following Gillan (2006), we split these governance mechanisms into three broad classifications – internal, institutional, and market mechanisms. Internal mechanisms are policies and procedures implemented within a firm, including the board of directors, managerial incentives and attributes, capital structure and internal control systems. Institutional mechanisms are country-level characteristics that shape the institutional environment in which the firm operates. Market mechanisms are external checks that are determined by the market.

3.1. Internal governance

The most studied internal mechanism that is found to drive corporate environmental disclosure is the board of directors. The board of directors is a company's main governing body that guides and monitors top managers to ensure their alignment with shareholder interests. However, this function has been expanded to include issues such as balancing different stakeholder interests and overseeing sustainability policies due to the increased public attention.[2] Given that the board is responsible for enacting and supervising corporate disclosure strategies to reduce information asymmetry, it is widely acknowledged that the board plays an important role in shaping a firm's overall environmental transparency (Liao et al., 2015; Mallin et al., 2013). We identified three board attributes that are widely studied in the CG and environmental reporting literature: 1) board composition, 2) board structure, and 3) board leadership.

3.1.1. Board composition

Board composition reflects the monitoring intensity of the board in regulating top management's behaviours and the ability of directors to bring critical resources, such as knowledge, ties, and legitimacy that are vital to the firm's viability and growth. Prior studies show that various aspects of board compositions, such as board independence, gender diversity, the presence of community influential directors and interlocking directorships, jointly influence firm environmental disclosures. However, the two most studied dimensions are board independence and board diversity.

Board independence refers to the presence of directors who are not directly involved in the day-to-day running of the business. They act as the check and balance mechanism that safeguards board objectivity, disciplines self-serving management and guides the firm to consider the interests of both shareholders and stakeholders (Haniffa & Cooke, 2005). Given independent directors' diverse backgrounds and a lack of financial stake in the firm, they tend to hold a strong stakeholder orientation and a long-term perspective of the firm's operation (Liao et al., 2015; Mallin et al., 2013). Hence they are more prone to pursue sustainable development and to be more sensitive to stakeholder interests beyond the mere goal of profit maximisation (Haniffa & Cooke, 2005). Furthermore, independent directors are more interested in developing and maintaining the social responsibility of the firm as active corporate disclosures would signal to stakeholders that the firm is well-governed hence enhancing directors' prestige and honour in society (Michelon & Parbonetti, 2012). As a result, independent directors are expected to induce firms to disclose a wide range of environmental information to stakeholders, thus ensuring the congruence between organisational decisions and actions and societal values and corporate legitimacy (Haniffa & Cooke, 2005).

Board diversity is defined as the existence of differences in board members' traits (Prado-Lorenzo & Garcia-Sanchez, 2010). While diversity involves different aspects, such as gender, ethnicity, sexuality and age etc, academic studies and regulatory recommendations (e.g. UK CG Code) have mainly focused on the role of female directors on the board (i.e. gender diversity). Two main arguments explain the role of gender diversity in promoting environmental transparency. First, it is assumed that female directors are more committed and diligent since their behaviours as women and mothers would encourage open discussion and greater participation hence reducing the level of conflict in the board and creating a good atmosphere (Nielsen & Huse, 2010). Second, women are said to be more ascribed to communal characteristics than men, exhibiting greater sensitivity toward the welfare of other people (Mallin & Michelon, 2011). Female directors are generally more concerned than men with social and environmental issues and more inclined to communicate with stakeholders to discharge accountability and reduce perceived environmental risks (Liao et al., 2015; Mallin & Michelon, 2011). However, empirical evidence is still mixed and some argue that there might be a critical mass of the number of female directors (three or above) on the board to generate substantive impacts (Bear et al., 2010).

3.1.2. Board structure

A company's board structure reflects the internal organisation and division of activities among sub-committees and assigns directors responsibilities to implement various activities of material issues (Zahra & Stanton, 1988). The board can establish an environmental committee that reviews policies and practices concerning the firms' commitments to environmental issues and oversees the environmental reporting process (Liao et al., 2015; Michelon & Parbonetti, 2012). The presence of an environmental committee can enhance employee awareness of environmental issues and set up ambitious targets and monetary and non-monetary rewards that would incentivise employees to improve firms' environmental records (Liao et al., 2015). Studies generally provide empirical support to the argument that the presence of an environmental committee would enhance environmental disclosures (Liao et al., 2015; Zhang et al., 2021). Nevertheless, Rodrigue et al. (2013) argue that the environmental committee might be a symbolic mechanism as it focuses too much on avoiding reputational damage instead of driving substantive changes to environmental operations.

3.1.3. Board leadership

Board leadership is mainly concerned with combining/separating the role of the CEO and chairman of the board. CEO duality occurs when one individual serves as both chairman of the board and CEO. According to agency theory, CEO duality may increase management entrenchment risk that would constrain board independence and undermine its effectiveness in mitigating management's opportunistic behaviours. As a result, the overall accountability and transparency for both shareholders and stakeholders would be severely compromised (Haniffa & Cooke, 2005; Michelon &

Parbonetti, 2012). However, organisation theory argues that stakeholder demands and manager interests may sometimes converge. Thus CEO duality could help a firm maintain its relationships with stakeholders by showing it has strong leadership with a clear direction, hence management would increase environmental disclosures to form alliances with stakeholders (Prado-Lorenzo & Garcia-Sanchez, 2010). Empirical evidence examining the impact of CEO duality on environmental disclosures is largely inconclusive as some find a positive effect (Prado-Lorenzo & Garcia-Sanchez, 2010) while many find no relationship (Liao et al., 2015; Michelon & Parbonetti, 2012).

3.2. Institutional governance

According to institutional theory, business organisations are influenced by broader social structures such as public and private regulation, national culture, religion and industry norms which affect the company's activity and mode of operation (Campbell, 2007). An institutional perspective of environmental reporting suggests that firms do not make decisions regarding environmental disclosures purely ‘‘on the basis of instrumental decision making, but that such decisions are framed vis-à-vis a broader social context'' (Jackson & Apostolakou, 2010, p. 374). Therefore, various studies have employed this theory to explain the influences of country-level characteristics on firm environmental reporting practices.

3.2.1. Political and legal systems

Political and legal systems such as laws, regulations, legal regimes and political agenda play an important role in facilitating a corporation's engagement with the state, as well as with its key stakeholders (Campbell, 2007). With the increasing attention being paid to environmental issues in recent years, a plethora of formal regulations and accounting initiatives have been proposed and implemented by both national and international policymakers to enhance corporate environmental transparency, particularly on climate change. [3] However, reporting requirements on environmental topics other than climate change are still scarce and firms often disclose such information on a voluntary basis.

A country's legal regime may also influence how companies report on environmental activities when there is no explicit requirement in place. For example, a common law regime that is associated with liberal market economies may encourage individualism, market competition and corporate discretion. Hence, these countries place more emphasis on shareholder rights protection and shareholder value maximisation. In contrast, a civil law regime, which is associated with coordinated market economies, values collectivism and solidarity and takes a stakeholder-orientated approach to environmental issues (Liang & Renneboog, 2017; Matten & Moon, 2008). Since countries with coordinated market economies can implement both formal regulations and informal norms to govern firms' environmental engagement, firms may only report implicitly or remain silent about their environmental activities and cannot stand out among their peers because of their environmental performance. On the contrary, firms from liberal market economies are more likely to engage in explicit environmental reporting as the engagement with stakeholders is part of a company's strategy for building and maintaining a good reputation (Pucheta-Martínez et al., 2019). Lastly, each administration's ideology may shape the political agenda on environmental issues, thus firms may adjust their environmental reporting strategies accordingly to minimise political costs (Antonini et al., 2021).

3.2.2. Culture and religion

Differences in national cultures have important implications for ethics, corporate sustainability, organisational culture and managerial practices. As firms' actions and strategies are influenced by the cultural framework in which they operate, companies operating in countries with similar cultural dimensions will be forced to adopt sustainable behaviours that shape their standards of transparency and environmental practices. For example, Buhr and Freedman (2001) find that the collectivistic nature of Canadian society has led to a greater level of voluntary environmental disclosure in environmental reports while the litigious nature of US society led to more mandatory disclosure in the 10-K and annual reports. Some also suggest that religion has a strong implication on social norms and personal values, which, in turn, affect corporate decisions and behaviours. Certain religious affiliations have underlying beliefs and practices that are more concerned with environmental conservation while others may hold a more sceptical view. For example, Du et al. (2014) find the level of a firm's environmental disclosures may vary depending on the community's Buddhist beliefs due to its benevolent environmental attitudes.

3.2.3. Industry membership

According to legitimacy theory, corporations have incentives to use communication strategies such as environmental disclosures to potentially influence societal perceptions to gain or maintain legitimacy within the society (Deegan, 2002). The extent to which firms are exposed to legitimacy threats varies by industry and sector membership. For example, Patten (1992) finds a significant increase in annual report environmental disclosures by firms other than Exxon after the Exxon Valdez oil spill. Campbell (2003) finds that environmentally sensitive companies will disclose more environmental information in their corporate reports than less environmentally sensitive companies.[4] In the same vein, Cho and Patten (2007) show that firms operating in environmentally sensitive industries report more non-litigation-related environmental disclosures in their financial reports than firms operating in less environmentally sensitive industries.

3.3. Market governance

3.3.1. Ownership

Facing information asymmetry due to a potential agency problem, outside shareholders have incentives to request managers to voluntarily disclose material information. Over the last decade, institutional shareholders have been increasingly paying attention to firms' social and environmental information (Velte, 2022). Policymakers and regulators also emphasize the role of institutional investors in promoting corporate environmental transparency.[5] According to Michelon and Rodrigue (2015), institutional shareholders such as religious institutions, socially responsible investment (SRI) funds and pension funds are the forerunners in submitting shareholder resolutions on sustainability-related issues, accounting for 66.5% of all proposals submitted during 1996 - 2009. These activist institutional shareholders have successfully forced companies to significantly increase the extent of environmental disclosures (Flammer et al., 2021; Michelon et al., 2020) to address shareholders' environmental risk concerns and avoid adverse market reactions.

State ownership and foreign ownership are also found to influence the level of corporate environmental disclosures. Zeng et al. (2012) argue that state-owned enterprises (SOEs) are more likely to publish environmental reports and disclose more environmental disclosures than private firms as SOEs are often used as pioneers in implementing new regulations and they face greater government pressures than private firms. The demands for environmental disclosures are also higher when foreigners hold a large proportion of shares as foreign shareholders are separated from managers geographically and these investors are likely to have different values and knowledge because of their foreign market exposure (Khan et al., 2013).

While outsider shareholders generally have a positive impact on corporate environmental transparency, literature shows that insider ownership tends to have a negative influence. Since high levels of managerial ownership can provide managers with greater entrenchment, resulting in superior power and further opportunities to exercise their opportunistic behaviour, owner-managers seemed to be more concerned about their own financial interests than the need to pursue sustainable development (Gerged, 2021). In contrast to managerial ownership, family businesses face greater tensions between the benefits of fulfilling stakeholders' expectations for information and the costs associated with environmental disclosures. Arena and Michelon (2018) argue that firms in which family principals prioritise family control and influence are more reluctant to provide environmental disclosures. This is because the detrimental effects of environmental disclosure on their preservation of control overcome the gains from greater transparency. By contrast, firms with family principals that prioritize family identity are more willing to provide environmental information voluntarily to protect their status and reputation in the community. However, the impact of principals that prioritise family control or family identity on environmental disclosures will weaken at the later stage of the firm life cycle.

3.3.2. Stakeholder group pressures

Various stakeholder groups, such as employees, customers, the general public, NGOs, and the media will ask for information about a firm’s efforts to manage environmental impacts (Guenther et al., 2016). Given the rise in environmental awareness, *employees* have begun to pay attention to a company’s environmental performance because employees’ rights and interests are closely related to the firm’s environmental performance as bad environmental records would incur penalties and damage reputations, which eventually harm the firm’s prospects and undermines employees’ interests (Huang & Kung, 2010).

The increasing demand for green products and companies' environmental images is a key factor that encourages *customers* to make repeat purchases. Customers would actively seek information on what companies are doing in mitigating adverse environmental impacts before making a purchase. To accommodate such expectations, firms would hence actively disclose environmental information to highlight their environmental contributions and differentiate their products from other competitors (Huang & Kung, 2010).

Companies also face pressure from the *general public* and *environmental NGOs* to enhance their environmental records. If an organisation cannot justify its continued operation by reporting on its environmental performance, the general public may revoke its license to continue operations (Deegan, 2002). Environmental NGOs may also initiate public protests, issue counter-accounts, and sue companies for harmful environmental practices to exert pressure and force companies to enhance environmental accountability (Thijssens et al., 2015).

Lastly, the *media* have a profound influence on stakeholder perceptions of a company's operation as the information and evaluations they provide tend to be distributed more broadly than the opinions of the average stakeholder. Consequently, managers may perceive media exposure as a reliable proxy for collective legitimacy impressions on which it can benchmark and model firms' environmental reporting strategy (Aerts & Cormier, 2009). Pollach (2014) finds that environmental content in newspapers is related to corporate environmental agendas presented in corporate environmental reports and annual reports. However, Aerts and Cormier (2009) find that negative media coverage is a driver of environmental press releases but not of annual report environmental disclosures. These studies suggest that firms release environmental information mainly for legitimacy rather than transparency purpose.

4. CG as a moderator of how environmental disclosures impact businesses and society

Environmental disclosures can impact businesses and societies in various ways. The evidence provided by the academic literature is mostly related to the impacts generated by carbon disclosure and the levels of GHG emissions on investors. These impacts are mostly assessed in terms of firm value creation (e.g., Baboukardos, 2017;

Choi and Luo, 2021; Clarkson et al., 2015) and, to a more limited extent, earnings quality and firms' risk (e.g., Benlemlih et al., 2018; Rezaee and Tuo, 2019). Limited evidence exists concerning the effects of environmental disclosures on other corporate stakeholders. This is focused mostly on the impacts of environmental disclosure on the whole society in terms of environmental performance (Qian and Schaltegger, 2017). The following sections provide an overview of the moderating role that CG can play in shaping the impacts produced by environmental disclosures, by distinguishing the CG mechanisms into internal, institutional, and market mechanisms.

4.1. Internal governance

The Board of Directors plays an important role in shaping the impact that environmental disclosure can produce for businesses and society (Cohen et al., 2017; Du, 2018; Li et al., 2018). Furthermore, CEOs are the most powerful actors among directors due to their structural power and the ability to exert control over corporate operations (Finkelstein, 1992). There is evidence that CEOs have the ability to influence disclosure policies and the quality of corporate reporting (e.g., Song & Thakor, 2006). This influence is expected to increase in presence of more powerful CEOs as disclosure released by powerful actors is perceived as more reliable. In line with these arguments, Li et al. (2018) provide evidence that the positive effects produced by environmental disclosures on firm value are enhanced by the presence of powerful CEOs, suggesting that investors and stakeholders consider the reports produced by firms managed by more powerful CEOs to reflect a greater commitment to environmental sustainability.

The composition of the Board of Directors is another CG mechanism that has been found able to influence the impact of corporate environmental disclosures. Cohen et al. (2017) evaluate CG strengths by considering, among other things, board independence and CEO duality. They show that the positive influence that environmental disclosure has on investment decisions is strengthened when firms have high CG, but only if they also have good environmental performance. In contrast, Choi and Luo (2021) provide empirical evidence that the negative effect of carbon emissions on firm value is lower in firms with more independent boards. This is because independent directors enhance the Board's ability to monitor managerial decisions which ultimately alleviates shareholders' negative perceptions of the business. The role that board composition plays in shaping the impact that environmental disclosure has is also investigated in terms of cultural diversity. Du (2018) reports that board cultural diversity strengthens the impact that environmental disclosure makes in reducing the price disparity between foreign and domestic shares in China. This is because boards characterized by cultural diversity where local and foreign directors coexist are likely to strengthen board monitoring reduce information asymmetry and improve the quality of environmental disclosure.

4.2. Institutional governance

The impact of environmental disclosure on business and society also reflects broader social and institutional structures within which businesses operate, such as political and legal systems and culture.

Regulations, legal regimes and government efficiency in place in a specific institutional environment play an important role in shaping the practices adopted by organizations in relation to environmental sustainability. The presence of stricter government regulation and higher government efficiency is likely to affect also how these impact businesses and society. Clarkson et al. (2015) and Choi and Luo (2021) show that GHG emissions are valued more negatively when related to firms operating in countries within the EU Emissions Trading System (ETS) jurisdiction. de Villiers and Marques (2016) report that the positive effects of environmental disclosure on firm values tend to be more prominent in countries with more democracy, more government effectiveness and better regulatory quality. This suggests that environmental disclosures are perceived to be more informative in countries with better and more effective regulations and where the voice of corporate shareholders and stakeholders is more likely to be heard.

National cultures can also play a role in environmental sustainability as strategies and activities pursued by firms tend to be aligned with the culture of the country in which they operate (Pucheta-Martínez & Gallego-Álvarez, 2020). Therefore, firms operating in countries characterized by certain cultures are found to engage more in sustainable activities (Parboteeah et al., 2012), disseminate more information about such engagements to markets and their stakeholders (Luo et al., 2016), and suffer less negative market reactions regarding their environmental information (Choi & Luo, 2021).

4.3. Market governance

Among the market governance mechanisms, institutional ownership has been found to enhance the positive impacts that environmental disclosure produces. In the presence of institutional investors, environmental disclosure is expected to be more informative and of higher quality. In line with this argument, Rezaee and Tuo (2019) show that institutional investor ownership enhances the positive impact that the disclosure of environmental information has on earnings quality. By contrast, Hassan (2018) finds that institutional investors' ownership does not play a significant moderating role in the relationship between environmental disclosure and firm value. By contrast, Choi and Luo (2021) provide empirical evidence that the negative impact of GHG emissions on firm value is lessened in the presence of higher levels of institutional ownership. This moderating role is explained by the effective monitoring of institutional owners which alleviates shareholders' negative perceptions.

5. Conclusions

In this chapter, we review relevant literature that examines the general trends as well as key determinants and consequences of environmental disclosures departing from a CG perspective. Our review highlights that the extent of corporate environmental disclosures increased significantly over the past decades, covering issues such as carbon, biodiversity and water management. However, the increase in environmental disclosures is not necessarily accompanied by an increase in its quality. The content of environmental reports is often found to be vague, incomplete, biased and lacking objectivity. Extensive studies support the view that CG can enhance the quality of environmental disclosures. Internal mechanisms such as the Board of Directors may enhance environmental transparency towards multiple stakeholder groups, while external mechanisms such as institutional setting, ownership and stakeholder pressures may ensure firms' environmental activities are congruent with social norms and values. Our review shows that environmental disclosures can have both economic and societal impacts. The economic consequences of environmental disclosures are more pronounced when there are strong CG mechanisms in place. These findings prove that strong CG mechanisms would further improve the information quality of environmental disclosures by enhancing information credibility and supplying decision-useful information that allows investors better evaluate firm environmental activities.

However, some studies also show that when poor environmental records are revealed, firms with stronger CG mechanisms tend to be less penalised by investors than those with weaker ones. These findings are intriguing as they suggest that instead of being implemented as pre-emptive checks to mitigate negative environmental impacts, firms may simply use environmental governance mechanisms as a means for stakeholder perceptions management (Rodrigue et al., 2013). This may be due to environmental matters not being treated by boards at the same level of depth and interest as financial matters. This argument raises an interesting debate as to the effectiveness of the traditional shareholder-centric governance approach in enhancing environmental accountability to both financial and non-financial stakeholders. There might be a need for the governance model to be adapted to enable and protect firm engagements in advancing non-financial impacts. In recent years, the emergence of sustainable enterprises such as B Corporations and/or Benefit Corporations may offer a potential solution to pave the way for a renewal of CG practices that limit the pressure for short-term profitability and protect the firm's long-term engagement for developing responsible conduct (Hiller, 2013; Stubbs, 2017). Instead of asking "who controls the corporation, and for whom", companies should address the question of "which objectives the corporation assigns to itself" (Levillain & Segrestin, 2019). In order to transit to this "profit with purpose" governance model, Levillain and Segrestin (2019) propose three innovative mechanisms: (1) defining a legal purpose beyond profit maximisation; (2) committing directors to the purpose; and (3) creating purpose-specific accountability mechanisms. While these novel governance mechanisms may look promising, they are still at the conceptual level and very few studies empirically examine their effectiveness. Therefore, we urge future studies to explore the possible applications of alternative stakeholder-centric governance models and novel sustainable corporate forms and examine whether and how they would enhance sustainability accountability to stakeholders. Only when we understand how sustainability issues can be substantively incorporated into the CG system, we can then truly examine the effect of CG mechanisms on environmental transparency and accountability to various stakeholders.

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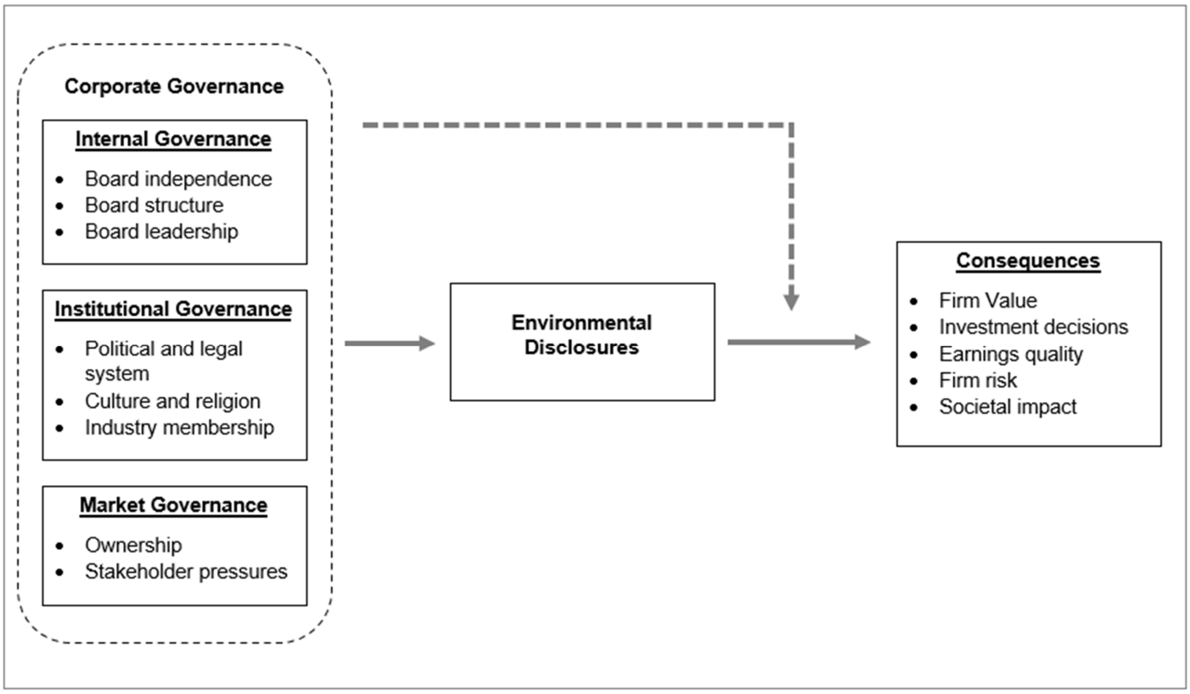
Figure 1. Determinants and consequences of environmental disclosures



Endnotes

[1] We start with a systematic literature review performed on Scopus by searching keywords with a Boolean approach: “environmental” OR “climate” OR “water” OR “GHG” OR “carbon” OR “emission” OR “pollution” OR “waste” OR “biodiversity” OR “land” OR “recycle” AND “disclosure” AND within business journals. We limit the search to ABS 3* journals to ensure that we cover the most important studies in the literature.

[2] Noticeable policies include Directive 2013/34/EU - Non-Financial Reporting Directive (NFRD), The UK Corporate Governance Code, and OECD principles of corporate governance.

[3] Examples include Task Force on Climate-related Financial Disclosures (TCFD), EFRAG’s proposal on climate change disclosures (Exposure Draft: ESRS E1 Climate change) and SEC’s enhancement and standardization of climate-related disclosures for investors (Release Nos. 33–11042; 34–94478; File No. S7–10–22).

[4] Typical environmental sensitive industries include oil and petroleum, paper, chemical and allied products, metals, utilities and manufacturing.

[5] Some noticeable initiatives include Principles for Responsible Investment (PRI)’s Investment Leadership Programme, Institutional Investors Group on Climate Change (IIGCC), and EU Taxonomy for Sustainable Activities.