

Communalizing Private Costs

Ownership Concentration, Institutions, and Corporate Environmental Performance

Arora, Punit ; Jain, Tanusree; Gaur, Ajai

Document Version

Final published version

Published in:

Global Strategy Journal

DOI:

[10.1002/gsj.1518](https://doi.org/10.1002/gsj.1518)

Publication date:

2024

License

CC BY-NC

Citation for published version (APA):

Arora, P., Jain, T., & Gaur, A. (2024). Communalizing Private Costs: Ownership Concentration, Institutions, and Corporate Environmental Performance. *Global Strategy Journal*. <https://doi.org/10.1002/gsj.1518>

[Link to publication in CBS Research Portal](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us (research.lib@cbs.dk) providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 22. Apr. 2025





Communalizing private costs: Ownership concentration, institutions, and corporate environmental performance

Punit Arora¹ | Tanusree Jain² | Ajai Gaur³

¹Department of Economics & Business, City University of New York, New York, New York, USA

²Department of Management, Society, and Communication, Copenhagen Business School, Copenhagen, Denmark

³Department of Management and Global Business, Rutgers Business School—Newark and New Brunswick, Newark, New Jersey, USA

Correspondence

Ajai Gaur, Department of Management and Global Business, Rutgers Business School—Newark and New Brunswick, Newark, New Jersey, USA.

Email: ajai@business.rutgers.edu

Abstract

Research Summary: We extend the property rights theory to show that stronger ownership control incentivizes owners to push for communalizing private environmental costs unless counterbalancing internal and external governance mechanisms are prevalent. Using a sample of 16,286 observations for 3275 firms across 43 countries between 2008 and 2017, we find robust evidence for a negative effect of ownership concentration on corporate environmental performance (CEP). However, we find that ownership concentration has a diametrically opposite effect in strong and weak governance contexts. In the presence of strong external (regulatory institutions) and internal (high board independence) governance, ownership concentration improves CEP. In contrast, it has the opposite effect in the presence of weak regulatory institutions and low board independence. We contribute to the open system logic of corporate governance for environmental sustainability.

Managerial Summary: Our study shows that ownership concentration negatively impacts corporate environmental performance in the form of increased resource usage, emissions, and ESG controversies. This

All authors contributed equally to this study.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](https://creativecommons.org/licenses/by-nc/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.
© 2024 The Author(s). *Global Strategy Journal* published by John Wiley & Sons Ltd on behalf of Strategic Management Society.

finding implies that there is a tussle over who bears environmental costs (i.e., privatized to the firms or communalized to the larger stakeholder bodies). However, we find that this negative performance outcome can be successfully mitigated by the quality of external (regulatory institutions) and internal governance (high board independence) mechanisms. Our study informs policymakers regarding the governance mechanisms through which the interests of the environment can be sincerely safeguarded in the face of short-term value-maximizing pressures from investors. These results also inform other stakeholders on how to nudge delinquent firms toward improving their CEP.

KEYWORDS

corporate environmental performance (CEP), corporate governance, cost of commons, institutional economics, ownership concentration, private or communal costs, property rights theory (PRT)

1 | INTRODUCTION

Ramsbury Invest AB has a controlling (57.5%) ownership stake in H&M (H&M, 2024), a fashion retailer, which was recently enmeshed in a major greenwashing scandal (Sierra, 2022). Similarly, Duke Energy, which has substantial concentrated ownership of the three largest mutual funds, pleaded guilty to federal environmental crimes surrounding the spilling of more than 39,000 tons of toxic coal ash in North Carolina (Fausset, 2015). While ownership concentration is the oft-prescribed remedy for resolving the misalignment between the interests of shareholders and managers (e.g., Choi, 2018; Edmans, 2009), its implications for corporate environmental performance (CEP) are unclear.

Some studies suggest that blockholders have stronger power and incentives to govern the firm in a manner that leads to positive organizational outcomes such as less self-interested managerial behavior, higher firm efficiencies, and increased innovation (Driss et al., 2021; Edmans, 2009). This may increase the sensitivity of blockholders to negative externalities such as reputation risks (e.g., Chen et al., 2020) and environmental fines and penalties for the focal firm (Walls et al., 2012). Accordingly, concentrated owners should push firms toward higher CEP.

However, a contrarian perspective suggests that the short-term value-maximizing demands of powerful concentrated owners may excessively pressure managers to avoid earnings disappointment, diverting managerial attention away from environmental actions that require substantial investments of organizational resources (Eccles et al., 2014; Slawinski & Bansal, 2015). This aligns with the well-established argument in the property rights theory (PRT) that concentrated owners have the influence, authority, and motivation to use firms' resources to maximize their own welfare. Indeed, Arora and Dharwadkar (2011), for example, report that blockholders

prioritize financial performance to the extent of not only discouraging socially responsible behavior (e.g., proactive stakeholder management) but also condoning irresponsible behavior (e.g., violation of rules and regulations).

However, recent research (Jamali et al., 2020; Nuruzzaman et al., 2024) suggests that owners often behave differently in different institutional contexts depending on the external and internal pressures they face. While some research has evaluated the growing tensions between influential owners and managers regarding CEP (e.g., Kavadis et al., 2024), to our knowledge, when and why concentrated owners influence CEP remain under-theorized and empirically under-explored.

This is an important puzzle for two reasons. One, increased ownership concentration resulting in higher shareholder power can significantly influence managerial discretion and priorities. This argument is captured by Mitchell et al. (2016, p. 268) that “management-shareholder alignment can create management-stakeholder misalignment, for example, by directing management toward short-term financial gains that might not be sustainable in the long term, much less hospitable toward other outcomes of interest to other stakeholders.” Two, despite rising global calls for corporations to act on climate change, corporate environmental irresponsibility continues to rise, signaling (arguably) the lack of an adequate corporate response (Cuervo-Cazurra et al., 2021) necessitating a systematic investigation into the conditions that influence investors (in) action on CEP. Accordingly, our study examines the impact of ownership concentration on CEP by focusing on the independent and joint effects of a firm’s external and internal governance mechanisms.

We invoke the PRT (Alchian & Demsetz, 1972; Mahoney, 2012; Schulze & Zellweger, 2021) to unravel the conditions under which concentrated owners impact CEP, thereby communalizing environmental costs. Specifically, we ask how the presence or absence of external and internal CG mechanisms, specifically regulatory quality and board independence, alter the relationship between concentrated ownership and CEP. PRT defines property rights as the norms governing the use of resources, encompassing both legal and social conventions (Furubotn & Pejovich, 1974; Kim & Mahoney, 2005). They function as social institutions, delineating the privileges granted to individuals regarding their ownership of assets, such as the ability to exclude others from using the resource, claim economic benefits, and transfer ownership (Libecap, 1989). We theorize that stock investments by block owners can be viewed as the property rights they seek to use, appropriate, and transfer in a manner that maximizes their self-interests. PRT also entitles blockholders to prevent non-stock-owning stakeholders from appropriating their property, including by altering corporate purposes. Within this framework, we theorize that CG mechanisms can determine the boundary conditions within which block owners exercise their property rights. More specifically, we argue that the quality of a firm’s external (i.e., regulatory context) and internal governance (i.e., board monitoring) environments jointly determine the welfare-maximizing choices made by blockholders.

Using fixed effects regressions and the dynamic panel generalized method of moments (GMM) methodology on a sample of 16,286 observations for 3275 firms across 43 countries between 2008 and 2017, we theorize and find robust evidence that concentrated owners are negatively associated with CEP. In addition, we demonstrate how strong external governance mechanisms (i.e., quality of regulatory institutions) and strong internal governance mechanisms (i.e., high board independence) effectively constrain the property rights of concentrated owners toward improving CEP. We also use the dynamic generalized method of moments and Hausman–Taylor regression methodologies to test causal effects.

Our study contributes to the corporate governance literature in two ways: First, by integrating insights from PRT, we theorize the mechanisms that can determine the conditions under which powerful block owners leverage their property rights of use, appropriation, and transfer toward constraining firms' environmental performance. In doing so, we expose how and through what mechanisms powerful internal actors (i.e., concentrated owners) impact the CEP of their organizations. Second, CG scholars have only recently started exploring the complementary and/or substitutive relationships between internal and external governance mechanisms (Rink et al., 2022). We add to this emerging CG research by uncovering the complementarity of external and internal CG mechanisms (e.g., Aguilera et al., 2015) in significantly reversing the adverse environmental outcomes of ownership concentration. We particularly show how external CG mechanisms are more potent than internal CG mechanisms in preventing firms from engaging in detrimental environmental behaviors (Aguilera et al., 2015; Grosman et al., 2019). This observation underpins the critical role of policymakers in promoting governance for sustainability (Delios et al., 2024; Sun et al., 2021).

We contribute to the PRT by demonstrating how the regulatory quality of national institutions, which determines the ability of governments to formulate and implement sound policies and laws (Kaufmann et al., 2008), limits the extent to which block owners can enforce their property rights (Adams et al., 2011; Ioannou & Serafeim, 2012). We also uncover that independent boards effectively shield against concentrated owners' opportunism of communalizing private environmental costs through the exercise of their property rights. In this manner, we highlight how corporate governance mechanisms create the boundary conditions for the use and exercise of property rights of concentrated owners.

Our study also has practical implications. At the outset, the grand challenge of climate change and the accompanying social movements have established corporate complicity in environmental inaction (e.g., Clark et al., 2024; Marquis, 2024). Relatedly, recent developments such as the Business Roundtable acknowledge that top management has a vital role in stakeholder value creation, including responsibility toward the environment (Jain et al., 2024). In the context of agency conflicts between powerful owners and managers, our study informs policymakers regarding the governance mechanisms through which the interests of the environment can be sincerely safeguarded in the face of short-term value-maximizing pressures from investors (e.g., Gillan et al., 2021).

2 | THEORY AND HYPOTHESES

Ownership is an important anchor for agency relationships (e.g., Jensen & Meckling, 1976). The underlying assumption of the agency theory is that managers (i.e., agents) often pursue their self-interests, even when they are at odds with those of the firms' shareholders (i.e., principals). For example, scholars posit that when managers engage in proactive social and environmental actions, they do so to pursue self-interests (Masulis & Reza, 2015), such as enhancement of their personal reputations or entrenching themselves as socially responsible managers (Petrenko et al., 2016). To reduce these conflicts, agency theory suggests that ownership concentration, also referred to as block ownership, is particularly helpful. Greater ownership concentration increases owners' incentive to monitor managerial behaviors, which, in turn, minimizes the deviations between managerial and shareholder interests and results in shareholder value maximization (Connelly et al., 2010). Further, such owners also have the power to enforce their preferences (Thomsen & Pedersen, 2000).



Extant research has documented that, in some cases, activities that further social and environmental good, such as the adoption of green technologies and emissions reductions, can positively impact firm performance by enhancing firm reputation, stakeholder reciprocation, and innovation capacity (e.g., Eccles et al., 2014). If this is the case, ownership concentration should lead to better environmental performance as it is also in the financial interest of the firm. In such cases, owners may exercise their voice to motivate management to adopt value-creating strategies (Chen et al., 2020; Zhang & Gimeno, 2016). Indeed, there is some evidence to suggest that the concentrated ownership by the “Big Three”—BlackRock, Vanguard, and State Street—in high-emission firms in the US was significantly associated with reductions in subsequent carbon emissions (Azar et al., 2021).

However, research has also documented the exact opposite in that large shareholders often focus on short-term profit maximization to the detriment of firms' CEP. That is, instead of devoting resources to reductions in environmental emissions and resource usage (Eccles et al., 2014; Slawinski & Bansal, 2015), concentrated owners use their shareholder power to force the firm toward short-term profit maximization (rather than waiting for uncertain long-term benefits of better environmental performance). Thus, the corporation risks becoming “a rent extraction vehicle for the shortest-term shareholders” (Mayer, 2013, p. 240), pressuring managers to cut corners and adopt more risky approaches, thereby negatively affecting CEP. Indeed, anecdotal evidence cited in the introduction section supports this assertion.

2.1 | Ownership concentration and CEP

Some scholars have tried to resolve this academic impasse by differentiating owners based on type, identity, time horizons, and motivations (Boyd & Solarino, 2016; Connelly et al., 2010; Federo et al., 2020). Yet, reviews on the performative impact of ownership concentration on firm-level CSR behaviors, including on CEP, find mixed results (Jain & Jamali, 2016; Zaman et al., 2022). For instance, some researchers suggest that the concentrated family-owner will likely be more socially and environmentally responsible to preserve their socioemotional wealth (SEW). However, others suggest that SEW motives may make concentrated family owners more concerned about their self-interest, as opposed to the interest of others, negatively impacting social and environmental actions (Cennamo et al., 2012). In other words, the concentrated family owner may behave differently in different contexts (Jamali et al., 2020).

Similarly, while pension funds are generally assumed to be long-term oriented and may invest some part of their portfolios based on ESG parameters, they are accountable for pension obligations. This may drive pension fund managers to chase higher returns by investing in hedge funds with a shorter-term investment horizon (Jain & Jamali, 2016). Concomitantly, other scholars emphasize the durability of investors based on their ability to exit. These studies (e.g., Schnatterly et al., 2008) argue that the largest owners within the blockholders often have the most challenging time exiting a firm without a negative impact on the value of their stock holdings. Hence, they are more likely to take a longer-term view of firm performance.

In this sense, the categorization of concentrated owners based on their type is devoid of much meaning as “by gathering information about a firm's fundamental value and impounding it into prices, block-owners encourage managers to undertake investment that increases long-run value even if it reduces interim profits” (Edmans, 2009, p. 2481). Irrespective of the perspective on the categorization of block owners and their positive or negative impact on stakeholder value, there is a broad consensus that concentrated owners profoundly influence the portfolios

of firms they own (Castañer et al., 2022). We contend that the PRT offers more nuanced insights into the relationship between OC and CEP, especially given the nature of incomplete contracting between owners and managers and the tussle of decision-making regarding CEP. We turn to this next.

2.2 | Property rights theory, ownership concentration, and CEP

Property rights lay down the “norms of behavior” (Furubotn & Pejovich, 1974; Kim & Mahoney, 2005) through which individuals are granted the privilege to use resources. This definition of property rights emphasizes not only the legal perspective of rights but also social conventions around their use. In addition, property rights are social institutions that establish the boundaries of privileges allocated to individuals concerning their private ownership of particular assets. These privileges include the entitlement to prevent non-owners from utilizing the resource, the authority to claim economic benefits derived from the utilization of the resource, and the prerogative to sell or transfer the resource to other parties (Libecap, 1989). Scholars suggest that property rights can shape the incentives guiding economic behavior within a society. It can also determine which individuals or entities hold decision-making authority, thereby determining the primary actors within an economic system. By extension, each actor is incentivized to maximize their share of economic rents (Libecap, 1989).

In earlier developments of PRT, also called the classical PRT (Alchian & Demsetz, 1972), ownership was characterized by the extent of control that owners wield over assets, including rights related to usage, appropriation, and transfer. In contrast, the modern PRT primarily defines ownership based on the possession of residual control rights (Kim & Mahoney, 2005). Schulze and Zellweger (2021, p. 491) suggest that both classical and modern PRT accord owners with power and incentives to facilitate the creation and appropriation of economic value when contracts are incomplete.

Applying property rights to firm ownership, we suggest that stockholders are entitled to economic benefits from their holdings and the right to prevent the appropriation of their property by non-stock owners. In this manner, property rights can determine the economic behavior of stockholders, the incentives behind their investments, and their appropriation rights. We reason that block owners, by virtue of their vested property rights (through block shareholding), have the power to influence managers (Arora & Dharwadkar, 2011), the authority to alter firm strategy (Foss & Klein, 2012), and the motivation to choose the path for value creation for themselves (Schulze & Zellweger, 2021). We argue that, on average, concentrated owners are likely to be incentivized against proactive environmental investments for at least two reasons: First, property rights are exercised for owner welfare. Block owners may view CEP investments as an appropriation of value for other stakeholders and, consequently, an increase in the cost of revenue generation with no certainty that such investments will necessarily create value for concentrated owners themselves. Second, even if managers have made stakeholder commitments toward the environment, block owners may exercise the power vested in their property rights to reduce those engagements in CEP, for instance, by attempting to redirect corporate attention toward shareholder value maximization as opposed to stakeholder capitalism or corporate environmentalism (Speed & Bryan, 2024).

In other words, so far as concentrated owners believe that the firms getting away with reducing their environmental performance or the costs of transferring their externalities to society in the form of fines, penalties, or reputational damages are economically cheaper than the

benefits derived from such a transfer, we argue that the PRT should predict that block owners will influence their firms to reduce CEP. Prior research provides some indication in this regard. Scholars argue that block owners can push firms toward short-term shareholder value maximization to the detriment of long-term performance (Mayer, 2013). Likewise, academic and practitioner research indicates that influential shareholders can capture value at the expense of other stakeholders, such as employees (Cobb, 2016; Useem, 1996), customers (Azar et al., 2021; George, 2015), governments (Marples & Gravelle, 2015) and the broader community (Feeley & Johnson, 2013). These studies suggest that while blockholders are better positioned to discipline corporate managers toward achieving their own goals, they could tacitly encourage them to pursue strategies that create value at the expense of other stakeholders. For instance, the splitting of Hewlett-Packard into two companies and the accompanying layoffs of up to 55,000 employees was described as “a desperate maneuver that catered to shareholder whims and the spinoff stampede rather than a well-reasoned strategic plan” (Solomon, 2014, p. 1).

Accordingly, we argue that property rights provide block owners the power, authority, and motivation to use firms' resources for the purpose of value creation for themselves. Therefore, not only will investors pursue their self-interest, but they will also allocate resources in a manner that maintains their property rights. This self-incentivizing feature of property rights provides block owners with the incentive to revoke prior firm agreements on social and environmental commitments, the power to influence the allocation of resources for appropriating benefits that maximize their own welfare, and the ability to transfer private environmental costs to society by reducing their external stakeholder commitments (Schulze & Zellweger, 2021). Driven by such incentives, we predict a negative relationship between OC and CEP.

Hypothesis 1. *Ceteris paribus*, ownership concentration is likely associated with lower CEP.

Next, we theorize how and through what mechanisms concentrated owners impact their organization's environmental behaviors. To do so, we draw on the corporate governance literature that suggests that governance mechanisms can emerge from within and outside the firm's boundary (Aguilera et al., 2015). Notably, prior literature suggests that internal and external CG mechanisms can restrict the extent to which owners can influence executives and consequently impact organizational decision-making, such as CEP (Jain & Jamali, 2016). In the following sections, we theorize how two specific governance mechanisms, namely the regulatory environment and independent board of directors, influence the exercise of concentrated owner's property rights, ultimately influencing firm-level CEP.

2.3 | External governance (regulatory environment) and CEP

Institutional economics indicates that an organization's (corporate) success depends on the institutional framework within which it is embedded. North (1990, p. 5) suggests that “both what organizations come into existence and how they evolve are fundamentally influenced by the institutional framework.” Institutions include both informal constraints (trust, customs, codes of conduct, etc.) and formal rules (laws, regulations, and constitutions). These institutional constraints are necessary to facilitate economic activities because they provide enforcement mechanisms that lower transaction costs, increase capital mobility, and diversify the risk for market participants, especially when the markets and exchanges become more complex, competitive, and impersonal (North, 1990) as well as protect property rights both for majority and minority owners (Foss & Klein, 2012).

Yet, Campbell suggests that “it is not just the presence of regulations per se that matters but also the capacity of the state to monitor corporate behavior and enforce these regulations when necessary” (Campbell, 2007, p. 954). In this vein, regulatory institutions—defined as the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development (Kaufmann et al., 2008)—are necessary to promote responsible corporate behaviors. Indeed, the external governance environment influences firms’ strategy toward balancing diverse stakeholder interests (Adams et al., 2011; Arora & De, 2020; Ioannou & Serafeim, 2012). In other words, legal protections available to stakeholders should play a critical role in determining and shaping firm strategy toward meeting their environmental commitments, especially amidst short-term value maximization pressures from blockholders.

The CG literature discusses the role of external governance mechanisms, that is, those operating outside the firm’s boundary, such as the legal and regulatory systems, the market for corporate control, stakeholder activism, and the media. It is suggested that external governance mechanisms play an essential role in shaping how organizations are governed to meet their broader stakeholders’ objectives (Aguilera et al., 2015). We argue that these institutions also impact the nature of property rights (Foss et al., 2019; Foss et al., 2023) in different ways. First, institutions determine how property rights are clearly delineated between block owners and other stakeholders. This consequently impacts the ease with which concentrated (majority) owners can appropriate firm resources for creating value for themselves. It also determines whether block owners can do so at the expense of other stakeholders, such as the environment (Monteiro & Miranda, 2023). Second, informal institutions such as social norms can determine the broad consensus (or not) on corporate environmentalism. We argue that this will likely influence the legal and general understanding of corporate purpose within a specific institutional context.

We suggest that when the quality of regulatory institutions in a country is high, governments have a stronger capacity to monitor, implement, and enforce rules, regulations, and norms. Environmental misbehaviors in such institutional contexts are likely accompanied by criminal and civil investigations, resulting in fines, penalties, and reputational and legitimacy losses for the firm. It could also result in significant devaluation of the company in the market, as was evident in the case of the VW emissions scandal (Hakim et al., 2015). We argue that corporate behaviors that result in a significant negative impact on firm value have a detrimental impact on the property rights of a concentrated owner by restricting the usage and control of assets. Therefore, block owners would be driven to consider their firm’s environmental commitments more carefully in contexts where external governance mechanisms are stronger (Thaler & Shefrin, 1981) because opportunities to communalize private costs without negative consequences are severely constrained for concentrated owners.

Contrariwise, in contexts characterized by weak external governance mechanisms such as lower quality of the regulatory environment, lack of media scrutiny, and power differences among stakeholders, firms may be able to sustain low environmental performance or even exhibit substantial environmental misdemeanors without significant formal and/or informal punitive damages (Luo & Chung, 2013). This is further facilitated through their block owners’ ties to non-market actors (such as political elites).

Taken together, weak external governance enables concentrated owners to exercise their property rights in a manner that they can appropriate value for themselves at the cost of other stakeholders, such as the environment. In other words, firms can successfully communalize private costs and negative externalities in weak governance contexts. Thus, we expect that the



relationship between ownership concentration and CEP will be moderated by the quality of the regulatory environment as follows:

Hypothesis 2. Ownership concentration is likely associated with higher (lower) CEP in stronger (weaker) regulatory environments.

2.4 | Internal environment (independent directors) and CEP

Among all internal CG mechanisms, there is wide agreement in the literature that boards of directors lie at the heart of maintaining good governance within firms (Federo et al., 2020; Neville et al., 2019). Boards help align shareholders' interests with those of the management (Kassinis & Vafeas, 2002). They do so by monitoring management, preventing idiosyncratic managerial decision-making as well as managerial wrongdoings. At the same time, boards have a fiduciary duty to curb owner opportunism toward reducing agency costs and improving firm performance (Baysinger & Hoskisson, 1990; Westphal & Fredrickson, 2001).

In the context of concentrated ownership and CEP, there emerges a rather specific set of conflicts that boards have to deal with. This conflict is centered on prioritizing or balancing two fundamentally oppositional goals: that is, maximizing short-term profits for the concentrated owner versus considering the long-term interests of the wider group of stakeholders and the society at large. From a property rights perspective, the concentrated owner emerges as a powerful actor driven by the desire to prevent other stakeholders from appropriating value from the use of firms' resources (Alchian & Demsetz, 1972). At the same time, the concentrated owner can influence the very composition and structure of the board of directors (e.g., Bhaumik et al., 2019), who are principally put in place to balance the conflicting interests of owners and stakeholders. Therefore, concentrated owners can substantially influence the governance objectives of a firm toward prioritization of short-term economic value for themselves and turning attention away from environmental externalities by impacting the monitoring of managers to serve owners' interests.

Here, we argue that boards with a higher proportion of independent directors have a particularly crucial role to play as an internal governance mechanism. Independent directors are often hired due to the valuable resources, expertise, and insights they bring to the board on meeting the needs of multiple stakeholders' perspectives toward enhancing firm value (Arora, 2018; Arora & Gaur, 2022). Thus, it is expected that a larger proportion of independent directors on boards is likely to alleviate multi-stakeholder conflicts more effectively. Furthermore, independent directors often develop a portfolio career of board positions and are heavily concerned with their own reputation in the industry. Therefore, they are likely to put increasing pressure on both managers and owners to behave more responsibly. Indeed, existing studies document the value of independent directors in reducing the likelihood of corporate financial reporting misstatements and accounting frauds and bringing greater information disclosures and higher transparency (Beasley et al., 2000).

Studies also find that independent directors can be vital in establishing and maintaining healthy external stakeholder relationships (Certo et al., 2001). For instance, independent directors are positively associated with CSR behaviors, such as with people and product aspects of CSR (Johnson & Greening, 1999), as well as with philanthropy (Ibrahim et al., 2003). Independent directors are also found to be negatively associated with irresponsible behaviors such as environmental litigations, fines, and penalties associated with misconduct (Kassinis & Vafeas, 2002).

We argue that in the presence of block owners who push for the governance of the firm in a manner that helps them retain and control their property rights, a board with more independent directors is more likely to nudge managers toward greater compliance with stakeholder expectations of better environmental performance. Concomitantly, independent boards can also better shield managers to prevent owner opportunism and prevent communalizing of private costs through a strong internal governance environment. Hence, the hypothesis:

Hypothesis 3. Ownership concentration is associated with higher (lower) CEP in stronger (weaker) internal governance contexts (i.e., high board independence).

2.5 | The joint counterbalancing effects of external and internal governance mechanisms

Although extant CG research has primarily focused on the independent effects of internal and external governance mechanisms on various facets of firm performance, there is a rising acknowledgment that these two do not operate in isolation (Aguilera et al., 2015). This stream of literature suggests that complementarities among different governance mechanisms can produce differential CG effects for firms. Notably, scholars suggest that the effectiveness of internal corporate governance mechanisms, such as the role of ownership and board structures, are likely to rest upon and be contingent on the existence of supportive external governance mechanisms. For instance, research uncovers that external governance mechanisms become critical when internal governance mechanisms are either absent or ineffective, thereby substituting as well as complementing internal governance mechanisms (Rink et al., 2022). Accordingly, it is important to examine the interplay between external and internal governance mechanisms simultaneously.

We argue that when the quality of the regulatory environment in which firms are embedded is high, and firms are governed by a highly independent board, block owners have little leverage to use their property rights for short-term personal gains. The simultaneous presence of strong external and internal governance mechanisms may increase the cost of communalizing private costs so high that the benefits of irresponsible behavior may not be worthwhile. Once concentrated owners realize that communalizing private costs is no longer lucrative, they may want to showcase their better side by exercising their property rights to improve their firms' CEP. In other words, strong external and internal governance mechanisms will not only restrain block owners from appropriating value for themselves but also encourage them to act more responsibly in the face of tight regulatory controls and sound stakeholder redressal procedures. Simultaneously, an independent board would be in a stronger position to monitor managers and push for the adoption of environmental practices that curb the communalizing of environmental costs when concentrated owners become tempted to do so.

We reason that the joint effect of a combination of strong external and internal CG, as described above, is likely to manifest in significantly higher CEP. The magnitude of this impact, we contend, will be stronger than the independent effects of a supportive regulatory environment or an independent board. In contrast, we expect the reverse situation when both external and internal governance mechanisms are weak, that is, we expect concentrated ownership to be highly significantly associated with lower CEP when both the quality of the regulatory environment is weak and when independence on boards is either absent or heavily compromised. Hence:



Hypothesis 4. The relationship between ownership concentration and CEP is moderated by the quality of regulatory institutions and board independence such that it will be highest (lowest) when both the quality of regulatory institutions and board independence are at the strongest (weakest) levels.

3 | RESEARCH DESIGN

3.1 | Study sample

Our sample comprises all firms with environmental performance ratings in the Thomson Reuters Environment, Social and Governance (TRESG) dataset, which began reporting ESG ratings in 2006. We obtained matching information on ownership from Thomson Reuters Global Ownership data, which is available from 2008 onwards. We then collect data on financial variables from Thomson Reuters DataStream and board variables from the BoardEx dataset. The intersection of these datasets provided a final sample consisting of 16,286 observations for 3275 firms from 43 countries from 2008 to 2017. Lastly, we obtained matching data on country-level institutional variables from the World Bank (Kaufmann et al., 2008). Annex OA1 provides a detailed breakdown of our sample by country, industry, and year.

3.2 | Dependent variable

3.2.1 | Corporate environmental performance

We used TRESG's overall environment performance score (EPS) as our primary variable for operationalizing CEP. These ratings capture firms' CEP using 61 indicators in three broad categories: resource use, emissions, and environmental innovation (Online Annex OA2). These ratings based on percentile rank scores are benchmarked against the firm's industry and have been widely used in the literature (e.g., Chatterji et al., 2009).¹

3.3 | Independent variables

3.3.1 | Ownership concentration

We use two measures to capture ownership concentration computed from the Thomson Reuters global stock ownership filings. First, following prior research (Arora & Dharwadkar, 2011; Mangena et al., 2020), we sum up ownership for only those shareholders that own 5% or more shares in a firm (block ownership or BLKOWN). As research suggests that the largest shareholder holds an information advantage and is thus better positioned to monitor the firm (Schnatterly et al., 2008), we used the percentage stake held by the firm's largest shareholder (MAXEQ) as an alternative measure of ownership concentration.

3.3.2 | Regulatory environment

We obtain Regulatory-environment Quality Estimates (RQE) from the World Bank's World Governance Indicators, computed annually since 2008 (Kaufmann et al., 2008). This variable captures the quality of policy implementation, including costs of excessive regulation of businesses and “associated transaction costs that result from policy intrusion by the state in private trade” (Iwanow & Kirkpatrick, 2007, p. 742).²

3.3.3 | Board independence

Following prior research, we operationalize board independence as the *proportion of independent directors in a firm*, that is, directors who have “no business relationship with the firm, are not related or interlocked with management and are not current or former employees” (Adams & Ferreira, 2009, p. 297).

3.4 | Control variables

3.4.1 | Industry structure

Following prior studies (Arora & Dharwadkar, 2011), we control for two consequential differences in industry structure that are likely to impact firm-level CEP. First, we compute industry munificence or market growth as the ratio of regression slope coefficient to mean sales, where the coefficient is derived from the regression of time against the value of total sales over the preceding 5 years. Second, we capture industry dynamism as the ratio of the standard error of the regression slope coefficient divided by the mean sales for the industry.

3.4.2 | Product differentiation

Extant research advocates controlling for product differentiation as firms that invest in socially responsible behavior are also likely to invest in product differentiation (Arora, 2008; Dupire & M'Zali, 2018). Given the unreliability of data on advertisement expenditure, we use SGA intensity, that is, the ratio of selling, general, and administrative expenses to sales ratio, as our measure of product differentiation.

3.4.3 | Firm's financial condition

In line with existing research, we control for several variables relating to profitability, liquidity, and structural rigidities (Arora, 2018; Popli et al., 2024). We use *Earnings Before Interest and Taxes (EBIT) to total assets ratio* to control for profitability. We use three ratios—*retained earnings to total assets*, *current assets to fixed assets*, and *working capital to total assets*—to preclude the effect of a firm's liquidity on its strategic choices. We control for *capital expenditure intensity*, computed as the ratio of capital expenditure to sales, as rigid capital structures can constrain a firm's strategic choices.



3.4.4 | Firm size

We control for firm size, computed as the logged value of total assets, as larger firms tend to attract greater attention and pressure and have greater leverage in negotiating the nature of compliance with institutional demands (Flammer, 2015).

3.4.5 | Corporate governance (CG) mechanisms

We control for three other governance variables associated with the firm's external legitimacy-seeking behavior and governance quality. First, we control for *board size*, which is defined as the total number of directors on the firm's board (Jain & Zaman, 2020). Second, we control for female representation on board as women on boards may amplify corporate responsible behavior (Kiefner et al., 2022). Thus, we include the proportion of women directors on a focal firm's board in our regression models. Third, we control for *CEO duality* as the CEO, who is also chair of the board, can significantly influence the board's ability to monitor firms and shape firm strategies (e.g., Arora, 2018).

Lastly, note that all CEP ratings already benchmark performance against firms in the same industry context, and as we include two specific variables for industry structure (industry munificence and volatility), we do not need to separately control for industry fixed effects, which may give rise to multilinearity concerns. Unsurprisingly, we obtain identical results if we include industry fixed effects and leave out industry structure variables. An overview of all variables used in this study is provided in the Online Annex OA3.

3.5 | Analytical and identification strategy

We use a longitudinal research design because cross-sectional snapshots can be biased and misleading (George, 2005; Maddala, 2002). The Hausman test suggested fixed-effects (FE) regressions to be more appropriate than random-effects regressions for our data ($\chi^2 = 1085.95$; $p < .001$) for our sample (Hausman & Taylor, 1981). FE regressions use “within-firm variation to identify coefficient estimates” and are “advantageous for mitigating certain endogeneity concerns and ruling out spurious relationships” (Shaver, 2019, p. 1). These also help produce unbiased regression coefficients by controlling for firm and time-specific heterogeneity (Greene, 2017) as well as for omitted time-invariant variables (Baltagi, 2008). Further, we forwarded our dependent variables by a year to mitigate concerns about simultaneity and/or reverse causality.

As endogeneity and reverse causality have been reported as major challenges for CSR and corporate governance studies, we additionally employed (1) Hausman–Taylor regression for endogenous covariates approaches and (2) dynamic panel generalized method of moments (Girod & Whittington, 2017).³ Prior research has shown Hausman–Taylor regressions (Hausman & Taylor, 1981) to be particularly effective when several explanatory variables are endogenously correlated (Baltagi et al., 2002). For these regressions, we assumed all our main variables to be endogenous. Lastly, we also employ the dynamic panel generalized method of moments (GMM), which uses internal instruments to produce consistent and unbiased results while addressing reverse causality and endogeneity concerns (Arellano & Bond, 1991).⁴ In these regressions, we used all our main independent variables and their interactions as GMM-type

instruments. Further, we used the first-difference transformation option to compute the difference between the values of variables over time for all variables. It helped eliminate the unobserved heterogeneity to examine how changes in independent variables affected changes in the dependent variable over time. Lastly, we used the collapse option to avoid instrument proliferation (Girod & Whittington, 2017).

4 | RESULTS

The average environment performance score for our sample is 46.61, with a standard deviation of 32.12 (Table 1). It is significantly related to firm size, board size, board independence, female representation on boards, and the Environmental stringency index. Table 1 provides descriptive statistics and a correlation matrix with respect to the other measures.

Table 2 provides results from our time-series fixed effects in respect of the overall environment performance score (EPS). We build the models in a hierarchical manner—Model 1 includes all control variables only, Model 2 provides results with the addition of total block ownership (BLKOWN)—our main measure for ownership concentration, Model 3 provides results for the proportion of independent directors (PID), Model 4 includes regulatory environment quality (RQE), Model 5 incorporates all main effects, and Model 6 is the complete model that includes all hypothesized direct and indirect (interaction) effects.

In Hypothesis 1, we predicted that, *ceteris paribus*, ownership concentration is negatively related to the CEP. In its support, we find that block ownership (BLKOWN) is negatively related to the EPS ($\beta = -0.052$, $p < .001$ in model 2 and $\beta = -0.057$ in models 5 and 6; $p < .001$ in all models). Nearly identical relationship patterns can be observed in Models 7–12 in Table 3, which use alternative specifications of our main explanatory variables. Thus, BLKOWN is negatively related to emissions score (EMIS; $\beta = -0.047$, $p < .001$ in model 7) and resource use score (RESUSE; $\beta = -0.045$, $p < .001$ in model 8) and positively related to ESG controversies score (ESGCS; $\beta = 0.032$, $p < .001$ in model 9). Model 10, which incorporates the environmental policy stringency index (ESI) instead of the regulatory quality environment (RQE), BLKOWN continues to be negatively related to the EPS ($\beta = 0.032$, $p < .001$). Models 11 and 12, which replace BLKOWN with the largest owners' equity (MAXEQ) also show similar patterns ($\beta = -0.047$, $p < .001$ in model 2). Thus, we find robust evidence in support of Hypothesis 1.

We must note similar strong evidence for regulatory environment and board independence, although we are interested in their main effects in this study. We find that RQE is positively related to the CEP across all models in Tables 2 and 3 ($\beta = 0.17$ and $p < .001$ in model 3) and the PID ($\beta = 0.067$, $p < .001$ in model 4). Similar results can be observed in various robustness tests (Models 7–12) with alternative measures of ownership concentration and CEP. Thus, the average effect across our sample suggests that ownership concentration is negatively related to CEP, but both internal and external good governance have the opposite effect overall.

However, our primary interest lies in exploring the contextual effect of ownership concentration. For this purpose, we include interaction effects in our regression models. Note that we standardized (i.e., mean = 0, SD = 1) all explanatory variables in our regressions to help interpret interaction effects. In interpreting these interaction terms, recall also that the significance of these interactions only implies whether the average interaction effects of the interacting variables are significant at the mean values. Econometricians suggest that it is more important to depict the marginal values to understand the nature of their relationship better at various



TABLE 1 Descriptive statistics and correlations.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
1 Environmental performance score (EPS)	1.00																					
2 Emissions reduction score	0.73	1.00																				
3 Resource use score	0.78	0.75	1.00																			
4 ESG controversies score	-0.27	-0.26	-0.29	1.00																		
5 Largest owner's equity	-0.01	-0.01	-0.02	0.02	1.00																	
6 Block ownership (BLKOWN)	-0.02	-0.02	-0.02	0.02	0.92	1.00																
7 Proportion of independent directors (PIDs)	-0.05	-0.03	-0.02	-0.04	0.01	0.03	1.00															
8 Regulatory environment quality (RQE)	0.00	0.03	0.03	-0.04	-0.14	-0.13	0.10	1.00														
9 Environmental stringency index (ESI)	0.08	0.09	0.06	0.02	-0.17	-0.19	-0.22	0.46	1.00													
10 Industry munificence	0.00	-0.01	-0.01	0.01	0.04	0.04	0.00	-0.09	-0.07	1.00												
11 Industry dynamism	0.03	0.03	0.04	0.00	0.02	0.01	-0.02	0.05	0.06	-0.65	1.00											
12 SGA intensity	0.02	0.00	0.00	0.06	0.00	-0.01	-0.24	-0.05	0.10	-0.03	0.07	1.00										

(Continues)

TABLE 1 (Continued)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
13 Capital expenditure intensity	-0.03	-0.06	-0.02	0.03	0.05	0.03	-0.12	-0.11	-0.07	0.01	0.02	0.41	1.00								
14 Current assets to fixed assets	-0.02	0.01	0.01	0.02	-0.02	-0.01	0.00	0.02	-0.01	-0.01	-0.06	0.05	-0.05	1.00							
15 Firm size (log of total assets)	0.08	0.09	0.07	-0.10	-0.01	-0.01	0.09	-0.05	0.14	0.05	-0.18	-0.46	-0.38	-0.06	1.00						
16 EBIT to total assets	-0.01	-0.01	-0.01	0.00	-0.03	-0.01	-0.02	-0.01	0.00	0.00	0.00	0.01	0.01	0.00	-0.01	1.00					
17 Retained earnings to total assets	0.01	0.01	0.01	0.00	0.00	0.00	-0.07	-0.01	0.01	0.00	0.01	-0.09	-0.10	-0.03	0.03	0.00	1.00				
18 Working capital to total assets	0.00	0.01	0.00	0.00	0.00	0.00	-0.04	0.00	0.00	0.00	-0.01	0.04	-0.11	0.04	0.02	0.00	0.98	1.00			
19 Board size	0.16	0.14	0.14	-0.09	0.06	0.05	-0.13	-0.18	0.04	0.05	0.03	-0.15	-0.11	-0.08	0.41	0.01	0.10	-0.18	1.00		
20 CEO duality	0.00	0.01	0.00	-0.06	0.02	0.02	0.04	0.01	-0.02	0.02	-0.07	-0.06	-0.07	0.00	0.12	0.00	0.00	-0.01	0.02	1.00	
21 Female representation on board (FRB)	0.17	0.17	0.22	-0.15	-0.09	-0.10	0.13	0.10	0.04	-0.01	0.04	-0.03	-0.06	0.00	0.02	0.00	0.01	0.00	0.04	-0.02	
Mean	46.61	51.33	50.87	49.73	4.15	4.89	0.78	1.25	2.73	0.00	0.02	0.10	0.05	1.53	12.95	0.08	0.08	0.14	9.99	0.38	
SD	32.12	28.94	28.37	20.15	10.94	13.92	0.18	0.62	0.79	0.07	0.05	0.17	0.12	4.45	3.53	7.11	6.51	2.67	3.57	0.48	

Note: Correlations above 0.03 are significant at $p < .05$.



TABLE 2 Main results: Time-series fixed effects models.

DV: Environmental performance score	Model 1			Model 2			Model 3			Model 4			Model 5			Model 6			
	β	SE	p	β	SE	p	β	SE	p	β	SE	p	β	SE	p	β	SE	p	
Control variables																			
Industry munificence	-0.060	(0.009)	.000	-0.052	(0.008)	.000	-0.059	(0.008)	.000	-0.066	(0.009)	.000	-0.056	(0.009)	.000	-0.056	(0.009)	.000	
Industry dynamism	-0.002	(0.012)	.889	0.000	(0.012)	.992	0.001	(0.012)	.921	-0.014	(0.014)	.289	-0.008	(0.013)	.543	-0.008	(0.013)	.543	
SGA intensity	0.026	(0.009)	.004	0.021	(0.009)	.018	0.026	(0.009)	.004	0.014	(0.010)	.186	0.011	(0.010)	.288	0.011	(0.010)	.278	
Capital expenditure intensity	-0.033	(0.007)	.000	-0.029	(0.007)	.000	-0.033	(0.007)	.000	-0.032	(0.008)	.000	-0.029	(0.008)	.000	-0.030	(0.008)	.000	
Current to fixed assets	0.002	(0.007)	.767	0.000	(0.007)	1.000	0.004	(0.007)	.608	-0.005	(0.007)	.482	-0.004	(0.007)	.599	-0.004	(0.007)	.565	
EBIT to total assets	0.047	(0.010)	.000	0.042	(0.010)	.000	0.046	(0.010)	.000	-1.073	(0.445)	.016	-1.162	(0.439)	.008	-1.193	(0.439)	.007	
Retained earnings to total assets	-0.126	(0.020)	.000	-0.112	(0.020)	.000	-0.125	(0.020)	.000	-0.163	(0.030)	.000	-0.141	(0.030)	.000	-0.140	(0.030)	.000	
Working capital to total assets	-0.184	(0.069)	.008	-0.200	(0.068)	.003	-0.175	(0.068)	.011	-0.110	(0.078)	.161	-0.110	(0.077)	.154	-0.106	(0.077)	.168	
Firm size	0.820	(0.030)	.000	0.710	(0.031)	.000	0.793	(0.030)	.000	0.910	(0.037)	.000	0.770	(0.037)	.000	0.774	(0.037)	.000	
Board size	-0.013	(0.007)	.058	-0.011	(0.007)	.119	-0.011	(0.007)	.100	-0.019	(0.008)	.016	-0.014	(0.008)	.080	-0.013	(0.008)	.101	
CEO duality	-0.064	(0.010)	.000	-0.056	(0.010)	.000	-0.054	(0.010)	.000	-0.055	(0.012)	.000	-0.045	(0.012)	.000	-0.045	(0.012)	.000	
Female representation on board	0.120	(0.005)	.000	0.107	(0.005)	.000	0.112	(0.005)	.000	0.115	(0.006)	.000	0.094	(0.006)	.000	0.093	(0.006)	.000	

(Continues)

TABLE 2 (Continued)

DV: Environmental performance score	Model 1			Model 2			Model 3			Model 4			Model 5			Model 6								
	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>						
Main effects																								
Block ownership (BLKOWN)				-0.052	(0.004)	.000										-0.057	(0.004)	.000						
Regulatory environment quality (RQE)							0.170	(0.016)	.000							0.195	(0.016)	.000						
Proportion of independent directors (PID)										0.067	(0.010)	.000				0.055	(0.010)	.000						
Interaction effects																								
BLKOWN \times RQE																			-0.002	(0.003)	.422			
BLKOWN \times PID																				-0.010	(0.004)	.019		
RQE \times PID																					-0.023	(0.008)	.002	
BLKOWN \times RQE \times PID																						-0.011	(0.003)	.001
Constant	0.069	(0.006)	.000	0.068	(0.006)	.000	0.065	(0.006)	.000	0.077	(0.006)	.000	0.070	(0.006)	.000	0.070	(0.006)	.000	0.072	(0.006)	.000			
Observations	16,090			16,090			16,090			16,090			16,090			16,090			16,090					
<i>R</i> -squared	0.113			0.126			0.121			0.116			0.139			0.141			0.141					
Number of unique firms	3227			3227			3227			3227			3227			3227			3227					
<i>F</i> -test	136.0			142.8			135.5			129.5			138.5			110.6			110.6					
Prob > <i>F</i>	0.000			0.000			0.000			0.000			0.000			0.000			0.000					



TABLE 3 Endogeneity tests: Hausman–Taylor (xthtaylor) and dynamic panel generalized methods of moments (xtdpdgm).

Method	Model 7			Model 8			Model 9			Model 10			Model 11			Model 12			
	β	SE	P	β	SE	P	β	SE	P	β	SE	P	β	SE	P	β	SE	P	
DV: EPS																			
Main effects																			
Proportion of independent directors (PID)	0.056	(0.014)	.000	0.059	(0.014)	.000	0.052	(0.014)	.000	0.268	(0.070)	.000	0.293	(0.070)	.000	0.141	(0.052)	.007	
Block ownership (BLKOWN)	-0.062	(0.005)	.000				-0.039	(0.005)	.000	-0.024	(0.012)	.045				-0.021	(0.012)	.071	
Regulatory environment quality (RQE)	0.195	(0.023)	.000	0.183	(0.022)	.000				0.316	(0.051)	.000	0.475	(0.062)	.000				
Largest owner's equity (MAXEQ)				-0.051	(0.005)	.000							-0.034	(0.014)	.014				
Environmental stringency index (ESI)							0.205	(0.012)	.000							0.215	(0.029)	.000	
Lagged EPS										-0.103	(0.013)	.000	-0.118	(0.011)	.000	-0.088	(0.012)	.000	
Interaction effects																			
BLKOWN \times PID										-0.009	(0.017)	.616				-0.037	(0.021)	.078	
BLKOWN \times RQE										-0.063	(0.011)	.000							
PID \times RQE										0.096	(0.037)	.009	0.128	(0.037)	.001				
BLKOWN \times PID \times RQE										0.072	(0.017)	.000							
MAXEQ \times PID													0.025	(0.012)	.032				
MAXEQ \times RQE													0.043	(0.012)	.001				

(Continues)

TABLE 3 (Continued)

Method	Model 7			Model 8			Model 9			Model 10			Model 11			Model 12			
	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>	
DV: EPS																			
MAXEQ \times PID \times RQE																0.014	(0.012)	.231	
BLKOWN \times ESI																0.044	(0.009)	.000	
PID \times ESI																0.001	(0.025)	.969	
BLKOWN \times PID \times ESI																-0.021	(0.013)	.095	
Constant	-165.140	(23.743)	.000	-158.541	(23.263)	.000	-96.380	(9.125)	.000	0.211	(0.027)	.000	0.217	(0.027)	.000	0.191	(0.031)	.000	
Observations	16,060			16,060			13,672			12,893			12,893			11,008			
Number of unique firms	3223			3223			2747			2862			2862			2444			
All control variables	Yes			Yes			Yes			Yes			Yes			Yes			
X^2	957.05			931.47			1507.21			322.76			322.31			320.04			
$p > X^2$	0.000			0.000			0.000			0.000			0.000			0.000			

plausible values of the covariates (Maddala, 2002; Wooldridge, 2010). Thus, following the best practice recommendations of prior research (Clark et al., 2022), we use marginsplot in Stata to depict predicted values along with 95% confidence intervals, at various plausible values (± 1 standard deviations from the mean as per standard practice) of interacting variables. Thus, for example, Panel 1a in Figure 1 depicts this interaction effect by plotting 4 (2^2) combinations of BLKOWN and RQE, each ranging from -1 to $+1$ (i.e., one standard deviation above and below means).

In Hypothesis 2, we predicted that the relationship between BLKOWN and CEP depends on the regulatory institutional context. Note that Figure 1 is based on Model 6 in Table 2, which uses EPS as the variable for CEP. Panel 1a provides evidence for a very significant and discernible pattern indicating that RQE shifts the BLKOWN-EPS line upwards such that the better regulatory quality environment promotes more environmentally responsible behavior. A narrow band of 95% confidence interval around predicted values suggests the robustness of predicted values. As discussed in subsequent paragraphs, identical patterns are discernible in Figure 1d. Thus, we find strong support for our prediction that stronger regulatory environments attenuate the negative effect of ownership concentration on CEP while exacerbating this effect in weak environments. This implies that strong ownership control without regulatory checks may be associated with the communalization of private costs.

In Hypothesis 3, we predicted that the relationship between BLKOWN and CEP is moderated by director independence. Panel 1b plots the marginsplot for the interaction between BLKOWN and PID. As in the case of RQE above, an increase in board independence shifts the

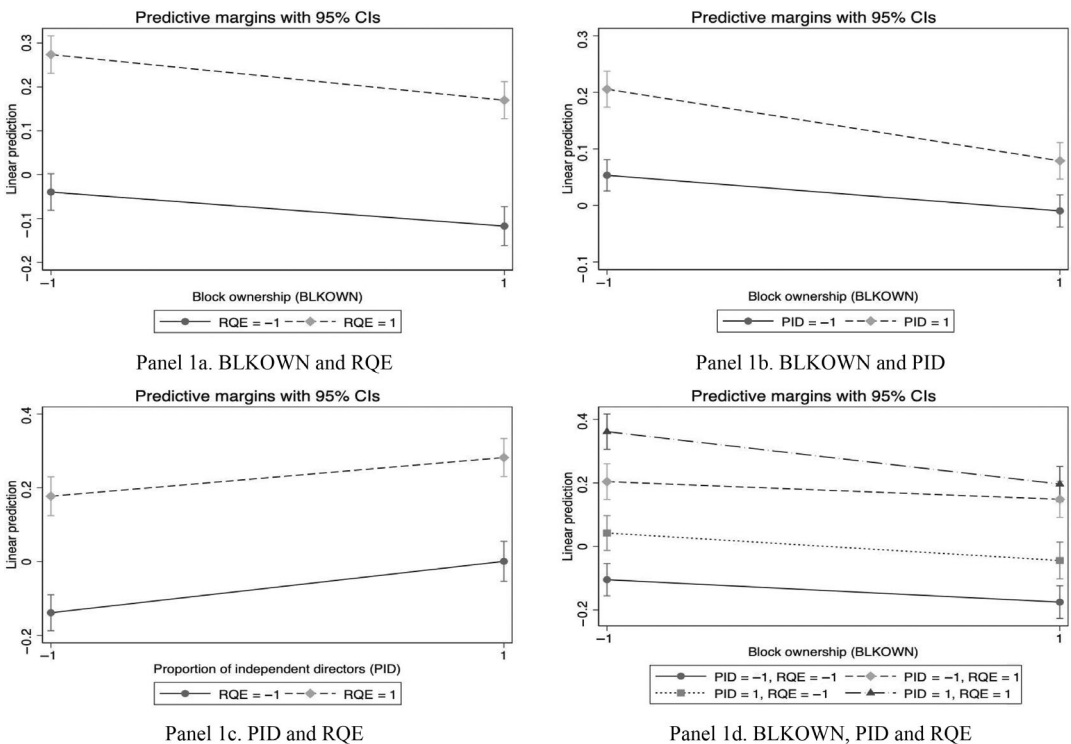


FIGURE 1 Ownership concentration (BLKOWN), director independence (PID), regulatory institutions (RQE), and EPS.

curve upwards, that is, we find that firms exhibit higher EPS when their boards include a higher proportion of independent directors. Once again, identical patterns are discernible in Figure 1d. Thus, we also find strong evidence supporting Hypothesis 3, which suggests that the negative effect of ownership concentration on CEP is curtailed in firms with stronger internal governance (i.e., high board independence), while its converse is also true.

Before testing the joint contingent effects of RQE and PID per Hypothesis 4, we explore the joint effect of RQE and PID on CEP (Panel 1c). We find that a combination of high board independence and high RQE leads to the highest CEP, and low board independence and low RQE leads to the lowest CEP.

Finally, to test Hypothesis 4, we plot the three-way interaction of BLKOWN, RQE, and PID on EPS (Panel 1d). The plot shows that a combination of low BLKOWN, high RQE, and high PID is associated with the highest EPS. Its converse is associated with the lowest EPS, while other combinations fall in between such that external governance has a stronger effect for stimulating EPS when compared with internal one.⁵

4.1 | Testing for potential causality

Models 7–9 in Table 3 provide our results from the Hausman–Taylor regressions for endogenous covariates (xthtaylor in Stata) by assuming all our main variables, that is, ownership concentration, regulatory environment, and board independence, to be endogenously related. Model 7 uses block ownership to capture ownership concentration, while Model 8 uses the largest owner's equity. Model 9 replaces RQE with ESI to capture the regulatory environment. As seen from these models, all our results are equally significant and in the expected direction.

Models 10–12 provide our dynamic panel GMM results, assuming all main variables and their interactions to be endogenous. GMM requires choosing the number of lags (moment conditions) to be used. We used two period lags as a higher number of lags can lead to weak instruments and instrument proliferation, which in turn can overfit the endogenous variables (Roodman, 2009). We further use the Hansen test for joint validity of instruments to confirm that our model did not suffer from the too-many-instruments problem. We also performed a Wald test to test the joint significance of our coefficients and the overall validity of our model, which indicated the overall appropriateness of the models ($X^2 = 90.16, p > X^{2=}$ 0.00). After confirming the appropriateness of instruments used, we next report our results. Models 10–12 are identical to Models 7–9, except that these use the GMM approach. As seen from Models 10–12, these results, including for interactions, once again confirm our findings reported earlier. As interaction plots are identical to those reported earlier, we do not include these for brevity.⁶

5 | DISCUSSION

Concentrated ownership influences a firm's strategic choices and performance. While the ownership–financial performance linkage is widely studied, there is little research on the effect of block owners on corporate environmental behaviors (Aguinis & Glavas, 2012). Focusing on the relationship between ownership concentration and CEP is theoretically important (DesJardine et al., 2023) and practically relevant for several reasons. First, concentrated ownership is an important governance mechanism for firms (Boyd & Solarino, 2016), with block owners having the power, ability, and motivation to significantly influence managerial



decisions (Aguilera & Crespi-Cladera, 2016). Accordingly, any intentional or unintentional activity that can cause environmental harm and consequently expose firms to reputational risks and significant economic costs (DesJardine et al., 2023) is, by extension, highly relevant for concentrated owners.

Second, soft regulations by the United Nations (such as UNSDGs) and hard national regulations (such as CSDDD) that penalize corporate environmental harm have squarely established firms as actors responsible for and capable of reversing environmental degradation. The power of concentrated owners in corporate decision-making thus becomes an important lever to channel corporate activities for environmental protection and preservation. However, CEP is an integrated process that goes beyond mere compliance with hard and/or soft laws, instead requiring investment in technological capabilities and processes, employee training, monitoring of logistical and supply chain activities, and active communication with and reporting to stakeholders (Russo & Fouts, 1997). Although the agency theory portrays concentrated ownership as a critical source for reducing agency conflicts, studies in the field highlight material heterogeneity among concentrated owners (Federo et al., 2020). Consequently, it is vital to establish whether and to what extent block owners trigger shareholder-stakeholder conflicts, particularly for non-human stakeholders such as the environment (Mitchell et al., 1997). We address this question in a global context where we can observe the role of formal and informal institutional peculiarities on the effects of concentrated ownership.

To illuminate this phenomenon, we ascertain the relationship between concentrated ownership and CEP by focusing on the mechanisms that influence the exercise of property rights by concentrated owners. Specifically, we integrate property rights and corporate governance theories to investigate how the presence or absence of external and internal CG mechanisms, specifically regulatory quality and board independence, impacts the relationship between concentrated ownership and CEP (Aguilera et al., 2015). At the outset, our global evidence confirms that higher ownership concentration negatively impacts CEP in the form of increased resource usage, emissions, and ESG controversies. We interpret this result as one that captures the exercise of property rights by concentrated block owners in a manner that provides significant leeway to such owners to communalize private environmental costs. Interestingly and importantly, we find that this negative performance outcome that has significant implications for society can be successfully mitigated contingent on the quality of corporate governance mechanisms.

Notably, our results reveal that when firms operate within systems that encompass sound external governance through a robust regulatory environment as well as adopt good internal governance mechanisms through higher independent board monitoring, concentrated owners no longer have the power or capacity to appropriate value solely for themselves by distorting firm stakeholder prioritization toward short-term value maximization. Instead, CEP is at its highest under conditions of both good external and internal governance.

Moreover, while existing CG research places a significant emphasis on the importance of well-structured boards (e.g., Neville et al., 2019), we find that independent boards—which are often at the epicenter of good governance—have a much smaller effect on improving CEP by themselves unless they are accompanied with a concomitant strong external governance system in the form of regulations. In stark contrast to this, we find that a strong regulatory environment has a potent effect on improving CEP, even when internal governance of the firm in the form of board independence is weaker.

Our findings contribute to the literature on corporate governance and property rights in the following ways. First, we provide robust global evidence on how and through what

mechanisms concentrated owners impact their firms' CEP. We do so by weaving insights from PRT and theorizing the governance mechanisms through which powerful block owners leverage their property rights of use, appropriation, and transfer toward constraining firms' environmental performance. Subsequently, we also uncover its antidote in terms of both external and internal governance mechanisms that can effectively restrict those property rights. In this manner, we uncover a novel complementary relationship between external and internal governance mechanisms in the context of CEP (Aguilera et al., 2015; Rink et al., 2022). Concomitantly, by highlighting the effectiveness of regulatory frameworks as external governance mechanisms (much more than internal mechanisms) in curbing firms' harmful environmental practices (Aguilera et al., 2015; Grosman et al., 2019), our paper emphasizes the importance of policymakers in fostering sustainability-focused governance (Sun et al., 2021). Second, we advance the property rights literature by showing how external corporate governance mechanisms such as national institutions' regulatory quality checks the ability of concentrated owners to unabashedly exercise their property rights (Adams et al., 2011; Ioannou & Serafeim, 2012). We also reveal how independent boards mitigate owner opportunism by preventing the communalization of private environmental costs. Collectively, our paper establishes how certain internal and external governance mechanisms can determine the boundary conditions for the use of concentrated owners' property rights.

5.1 | Limitations and future directions

Our findings and conclusions need to be qualified with some limitations. First, we explore the moderating effect of one specific bundle of the internal and external governance mechanisms. Although we control for the effect of three other factors: board size, CEO duality, and female representation on boards, it is plausible that other complex and discernible patterns remain undetected. Therefore, we call on researchers to examine the CG black box from an open systems perspective, including whether such predictions change when a firm faces media scrutiny (e.g., Hawn, 2021; Kölbel et al., 2017). Research could, similarly, help understand what roles other factors in global business, such as liability of foreignness as well as broader social systems in the context of wider social expectations, play in determining the relationship between ownership concentration and CEP (e.g., Crilly et al., 2016).

Second, given the lack of reliable global data on different types of ownership (e.g., family, pension funds, and other institutional investors), we are unable to examine differences that may arise from ownership heterogeneity and their associated investment motivations. We recommend that future scholarship should pay attention to significant differences among owner types (Berrone et al., 2010; DesJardine & Durand, 2020; Federo et al., 2020; Mariotti & Marzano, 2020) in conjunction with an open systems perspective. Similarly, our research cannot account for the influence of issues such as stakeholder salience, power, and legitimacy (David et al., 2007).

Third, we rely on ratings by an independent professional firm (i.e., TRESG data from Refinitiv) to operationalize environmental performance. Although these ratings are coded by trained professionals, are well established in the field, and are closely related to other databases such as KLD (Chatterji et al., 2009), future research could utilize other measures of environmental performance, such as waste and emissions management. This may help uncover significant differences in symbolic and substantive CEP across various regulatory regimes.



6 | CONCLUSION

Although ownership structure is one of the most critical elements of CG systems (Aguilera & Crespi-Cladera, 2016), how it creates or destroys value for stakeholders beyond shareholders remains to be explored. In this paper, we provide robust global evidence on how concentrated owners, in general, driven by property rights, are incentivized to reduce CEP (i.e., seek to communalize private costs). We also demonstrate that this negative performance effect of ownership concentration on CEP is contingent on the prevalence of other external and internal CG mechanisms, specifically regulatory quality and board independence. Importantly, negative corporate impacts on the environment can be countered best through a strong regulatory environment coupled with high board independence. Whereas previous research emphasizes the importance of board independence as an effective internal CG mechanism, our research uncovers that board independence works best in combination with external CG mechanisms. Through this research, we theorize and demonstrate the boundary conditions of PRT, while also supporting the open system logic of corporate governance. In conclusion, our research underpins the critical role of policymakers in protecting the natural environment from the tragedy of commons.

ACKNOWLEDGEMENTS

We thank Associate Editor Stephanie Wang and two reviewers for their insightful feedback.

ORCID

Punit Arora  <https://orcid.org/0000-0003-4408-1116>

Tanusree Jain  <https://orcid.org/0000-0002-7137-0880>

Ajai Gaur  <https://orcid.org/0000-0003-0792-2561>

ENDNOTES

- ¹ In addition, for robustness testing, we utilize three alternative measures, viz., *emissions reduction score (EMRS)*, *resource use score (RESUSE)*, and *ESG controversies score (ESGCS)*, which capture different dimensions of the overall EPS.
- ² For robustness tests, we obtained the OECD's Environmental-policy Stringency Index (ESI), defined as the degree to which environmental policies put an explicit or implicit price on environmentally harmful behavior. (e.g., Botta & Koźluk, 2014).
- ³ We thank an anonymous reviewer for this suggestion to use FE models as main regressions and GMM as sensitivity tests in case lagged-variable-based instrumental variables are invalid and worsen the endogeneity problem by introducing additional biases. Though we include test results to show the validity of lagged instruments used in our regressions, we concur with their argument on the higher efficiency of FE regressions.
- ⁴ Endogeneity can affect management studies due to four reasons: Omitted variable bias, measurement error, selection bias, and simultaneity/reverse causality (Wooldridge, 2010). As we include all important variables suggested in the previous research and use same measurement techniques, we do not expect the first two causes to be relevant to our study. We include all firms included in the TRESG universe, so we do not expect the third cause to be important either. We address the final source of endogeneity—simultaneity/reverse causality—as described above. In other words, we explicitly address concerns pertaining to firms in higher-quality regulatory environments with superior environmental performance being more likely to choose independent boards.
- ⁵ We notice identical patterns in Annex OA5, based on results reported in Annex OA4, which rely on alternative specifications of various variables in our empirical design. Plots 4a–c, respectively, use emissions optimization (EMIS), resource use optimization (RESUSE), and ESG controversies score (ESGCS) as dependent variables while keeping our key explanatory variables unchanged. Note that ESGCS is coded the opposite of other

measures as a higher number, in this case, indicates worse environmental performance. Plots 4d and 4f replace RQE with OECD's environmental policy stringency index (ESI), while Plot 4e replaces BLKOWN with the largest owners' equity (MAXEQ). Irrespective of the measure used, our results confirm our predictions. This provides robust support to our H4 on the joint effect of external and internal governance in curtailing the negative effect of concentrated ownership, which is generally associated with increased communalization of private costs by firms in our sample.

⁶ We conducted further tests to rule out reverse causality, that is, the possibility that firms who are interested in better environmental performance and/or operate in better regulatory environments appoint a higher proportion of independent directors (PID). Models a1–a8 and b1–b8 in Annex OA6 provide results from time-series fixed effects and dynamic panel GMM regressions, respectively. As seen from models a1–a8, PID as the dependent variable shows a very weak association with EPS ($\beta = 0.02$, $p < 0.10$ in model a1) and a negative association with block ownership ($\beta = -0.01$, $p < 0.05$ in model 4) and no relationship with RQE ($\beta = 0.03$, $p > 0.10$ in model a3). When we regress and plot their two-way and three-way interactions, these plots show either insignificant or opposite effects. More importantly, when we run GMM regressions to explore reverse causality (models b1–b8), all three predictors (EPS, BLKOWN, and RQE) reveal insignificant effects on the proportion of independent directors (models b1–b3, respectively). Their interaction effects also do not suggest that these predictors influence the expected outcome regarding appointing independent directors (see also interaction plot in Annex OA7). We discuss these in more detail in the main text.

REFERENCES

- Adams, R., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94(2), 291–309.
- Adams, R., Licht, A., & Sagiv, L. (2011). Shareholders and stakeholders: How do directors decide? *Strategic Management Journal*, 32(12), 1331–1355.
- Aguilera, R., & Crespi-Cladera, R. (2016). Global corporate governance: On the relevance of firms' ownership structure. *Journal of World Business*, 51(1), 50–57.
- Aguilera, R., Desender, K., Bednar, M., & Lee, J. (2015). Connecting the dots: Bringing external corporate governance into the corporate governance puzzle. *Academy of Management Annals*, 9(1), 483–573.
- Aguinis, H., & Glavas, A. (2012). What we know and Don't know about corporate social responsibility: A review and research agenda. *Journal of Management*, 38(4), 932–968.
- Alchian, A., & Demsetz, H. (1972). Production, information costs, and economic organization. *The American Economic Review*, 62(5), 777–795.
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies*, 58(2), 277–297.
- Arora, P. (2008). *Organizational slack and attainment discrepancy as antecedents of Corporate Social Performance*. Academy of Management Best Paper Proceedings.
- Arora, P. (2018). Financially linked independent directors and bankruptcy reemergence: The role of director effort. *Journal of Management*, 44(7), 2665–2689.
- Arora, P., & De, P. (2020). Environmental sustainability practices and exports: The interplay of strategy and institutions in Latin America. *Journal of World Business*, 55(4), 101094.
- Arora, P., & Dharwadkar, R. (2011). Corporate governance and corporate social responsibility (CSR): The moderating roles of attainment discrepancy and organization slack. *Corporate Governance: An International Review*, 19(2), 136–152.
- Arora, P., & Gaur, A. (2022). Peer directors' effort, firm efficiency and performance of diversified firms: An efficacy-based view of governance. *Journal of Business Research*, 151, 593–608.
- Azar, J., Duro, M., Kadach, I., & Ormazabal, G. (2021). The big three and corporate carbon emissions around the world. *Journal of Financial Economics*, 142(2), 674–696.
- Baltagi, B. (2008). *Econometric analysis of panel data*. John Wiley & Sons.
- Baltagi, B., Bresson, G., & Pirotte, A. (2002). Comparison of forecast performance for homogeneous, heterogeneous and shrinkage estimators: Some empirical evidence from US electricity and natural gas consumption. *Economics Letters*, 76(3), 375–382.



- Baysinger, B., & Hoskisson, R. (1990). The composition of boards of directors and strategic control: Effects on corporate strategy. *Academy of Management Review*, 15(1), 72–87.
- Beasley, M., Carcello, J., Hermanson, D., & Lapides, P. (2000). Fraudulent financial reporting: Consideration of industry traits and corporate governance mechanisms. *Accounting Horizons*, 14(4), 441–454.
- Berrone, P., Cruz, C., Gomez-Mejia, L., & Larraza-Kintana, M. (2010). Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Administrative Science Quarterly*, 55(1), 82–113.
- Bhaumik, S., Driffield, N., Gaur, A. S., Mickiewicz, T., & Valler, P. (2019). Corporate governance and MNE strategies in emerging economies. *Journal of World Business*, 54(4), 234–243.
- Botta, E., & Koźluk, T. (2014). *Measuring environmental policy stringency in OECD countries: A composite index approach*. OECD.
- Boyd, B., & Solarino, A. (2016). Ownership of corporations: A review, synthesis, and research agenda. *Journal of Management*, 42(5), 1282–1314.
- Campbell, J. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3), 946–967.
- Castañer, X., Goranova, M., Hermes, N., Kavadis, N., & Zattoni, A. (2022). Ownership and corporate governance across institutional contexts. *Corporate Governance: An International Review*, 30(6), 638–655.
- Cennamo, C., Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth and proactive stakeholder engagement: Why family-controlled firms care more about their stakeholders. *Entrepreneurship Theory and Practice*, 36(6), 1153–1173.
- Certo, S. T., Covin, J., Daily, C., & Dalton, D. (2001). Wealth and the effects of founder management among IPO-stage new ventures. *Strategic Management Journal*, 22(6–7), 641–658.
- Chatterji, A., Levine, D., & Toffel, M. (2009). How well do social ratings actually measure corporate social responsibility? *Journal of Economics & Management Strategy*, 18(1), 125–169.
- Chen, T., Dong, H., & Lin, C. (2020). Institutional shareholders and corporate social responsibility. *Journal of Financial Economics*, 135(2), 483–504.
- Choi, A. (2018). Concentrated ownership and long-term shareholder value. *Harvard Business Law Review*, 8, 53.
- Clark, C., Arora, P., & Gabaldon, P. (2022). Female representation on corporate boards in Europe: The interplay of organizational social consciousness and institutions. *Journal of Business Ethics*, 180(1), 165–186.
- Clark, C., Arora, P., Gabaldon, P., & Jain, T. (2024). Global social movements and the governance of the firm: Past, present and future. *Corporate Governance—An International Review*. <https://doi.org/10.1111/corg.12625>
- Cobb, J. A. (2016). How firms shape income inequality: Stakeholder power, executive decision making, and the structuring of employment relationships. *Academy of Management Review*, 41(2), 324–348. <https://doi.org/10.5465/amr.2013.0451>
- Connelly, B., Tihanyi, L., Certo, S. T., & Hitt, M. (2010). Marching to the beat of different drummers: The influence of institutional owners on competitive actions. *Academy of Management Journal*, 53(4), 723–742.
- Crilly, D., Ni, N., & Jiang, Y. (2016). Do-no-harm versus do-good social responsibility: Attributional thinking and the liability of foreignness. *Strategic Management Journal*, 37(7), 1316–1329.
- Cuervo-Cazurra, A., Dieleman, M., Hirsch, P., Rodrigues, S., & Zyglidopoulos, S. (2021). Multinationals' misbehavior. *Journal of World Business*, 56(5), 101244.
- David, P., Bloom, M., & Hillman, A. (2007). Investor activism, managerial responsiveness, and corporate social performance. *Strategic Management Journal*, 28(1), 91–100.
- Delios, A., Li, J., Schotter, A. P. J., & Vrontis, D. (2024). Challenging the orthodoxy in international business research: Directions for “new” research areas. *Journal of World Business*, 59(4), 101552.
- DesJardine, M., Grewal, J., & Viswanathan, K. (2023). A rising tide lifts all boats: The effects of common ownership on corporate social responsibility. *Organization Science*, 34(5), 1651–1696.
- DesJardine, M., Durand, R. (2020). Disentangling the effects of hedge fund activism on firm financial and social performance. *Strategic Management Journal*, 41(6), 1054–1082.
- Driss, H., Drobetz, W., El Ghouli, S., & Guedhami, O. (2021). Institutional investment horizons, corporate governance, and credit ratings: International evidence. *Journal of Corporate Finance*, 67, 101874.
- Dupire, M., & M'Zali, B. (2018). CSR strategies in response to competitive pressures. *Journal of Business Ethics*, 148(3), 603–623.

- Eccles, R., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), 2835–2857.
- Edmans, A. (2009). Blockholder trading, market efficiency, and managerial myopia. *The Journal of Finance*, 64(6), 2481–2513.
- Fausset, R. (2015, May 14). Duke Energy agrees to pay \$102 million for breaches. *The New York Times*. <https://www.nytimes.com/2015/05/15/us/duke-energy-agrees-to-pay-102-million-for-breaches.html>
- Federo, R., Ponomareva, Y., Aguilera, R. V., Saz-Carranza, A., & Losada, C. (2020). Bringing owners back on board: A review of the role of ownership type in board governance. *Corporate Governance: An International Review*, 28, 348–371.
- Feeley, J., & Johnson, A. (2013). BP profit push root cause of gulf spill, witness says—Bloomberg. *Bloomberg*. <https://www.bloomberg.com/news/articles/2013-02-26/bp-profit-push-root-cause-of-gulf-spill-witness-says>
- Flammer, C. (2015). Does product market competition foster corporate social responsibility? Evidence from trade liberalization. *Strategic Management Journal*, 36(10), 1469–1485.
- Foss, N., & Klein, P. (2012). *Organizing entrepreneurial judgment: A new approach to the firm*. Cambridge University Press.
- Foss, N., Klein, P., & Bjørnskov, C. (2019). The context of entrepreneurial judgment: Organizations, markets, and institutions. *Journal of Management Studies*, 56(6), 1197–1213.
- Foss, N., Klein, P., Lien, L., Zellweger, T., & Zenger, T. (2023). Ownership competence: The enabling and constraining role of institutions. *Strategic Management Journal*, (March), 44(8), 1955–1964.
- Furubotn, E. G., & Pejovich, S. (1974). *The economics of property rights*. Ballinger.
- George, B. (2015). What's behind skyrocketing drug prices—Commentary. *CNBC*. <https://www.cncb.com/2015/12/21/whats-behind-skyrocketing-drug-prices-commentary.html>
- George, G. (2005). Slack resources and the performance of privately held firms. *Academy of Management Journal*, 48(4), 661–676.
- Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, 66, 101889.
- Girod, S., & Whittington, R. (2017). Reconfiguration, restructuring and firm performance: Dynamic capabilities and environmental dynamism. *Strategic Management Journal*, 38(5), 1121–1133.
- Greene, W. (2017). *Econometric analysis* (8th ed.). Pearson.
- Grosman, A., Aguilera, R., & Wright, M. (2019). Lost in translation? Corporate governance, independent boards and blockholder appropriation. *Journal of World Business*, 54(4), 258–272.
- H&M. (2024). *Corporate Governance Report 2023*. <https://hmgroupp.com/wp-content/uploads/2024/03/HM-Corporate-governance-report-2023.pdf>
- Hakim, D., Kessler, A., & Ewing, J. (2015, September 26). As Volkswagen pushed to be no. 1, ambitions fueled a scandal. *New York Times*. <https://www.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html>
- Hausman, J., & Taylor, W. (1981). Panel data and unobservable individual effects. *Econometrica*, 49(6), 1377–1398.
- Hawn, O. (2021). How media coverage of corporate social responsibility and irresponsibility influences cross-border acquisitions. *Strategic Management Journal*, 42(1), 58–83.
- Ibrahim, N., Howard, D., & Angelidis, J. (2003). Board members in the service industry: An empirical examination of the relationship between corporate social responsibility orientation and directorial type. *Journal of Business Ethics*, 47(4), 393–401.
- Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43(9), 834–864.
- Iwanow, T., & Kirkpatrick, C. (2007). Trade facilitation, regulatory quality and export performance. *Journal of International Development*, 19(6), 735–753.
- Jain, T., & Jamali, D. (2016). Looking inside the black box: The effect of corporate governance on corporate social responsibility. *Corporate Governance: An International Review*, 24(3), 253–273.
- Jain, T., & Zaman, R. (2020). When boards matter: The case of corporate social irresponsibility. *British Journal of Management*, 31(2), 365–386.
- Jain, T., Zaman, R., & Harjoto, M. (2024). Behavioral agency model and corporate social irresponsibility: Uncovering the implication of fairness in CEO compensation. *Journal of Management*, 50(7), 2715–2754.

- Jamali, D., Jain, T., Samara, G., & Zoghbi, E. (2020). How institutions affect CSR practices in the Middle East and North Africa: A critical review. *Journal of World Business*, 55(5), 101127.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Johnson, R., & Greening, D. (1999). The effects of corporate governance and institutional ownership types on corporate social performance. *Academy of Management Journal*, 42(5), 564–576.
- Kassinis, G., & Vafeas, N. (2002). Corporate boards and outside stakeholders as determinants of environmental litigation. *Strategic Management Journal*, 23(5), 399–415.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2008). *Governance matters VII: Aggregate and individual governance indicators 1996–2007*. The World Bank.
- Kavadis, N., Hermes, N., Oehmichen, J., Zattoni, A., & Fainshmidt, S. (2024). Sustainable value creation in multinational enterprises: The role of corporate governance actors. *Journal of World Business*, 59(1), 101503.
- Kiefner, V., Mohr, A., & Schumacher, C. (2022). Female executives and multinationals' support of the UN's sustainable development goals. *Journal of World Business*, 57(3), 101304.
- Kim, J., & Mahoney, J. (2005). Property rights theory, transaction costs theory, and agency theory: An organizational economics approach to strategic management. *Managerial and Decision Economics*, 26(4), 223–242.
- Kölbel, J., Busch, T., & Jancso, L. (2017). How media coverage of corporate social irresponsibility increases financial risk. *Strategic Management Journal*, 38(11), 2266–2284.
- Libecap, G. (1989). Distributional issues in contracting for property rights. *Journal of Institutional and Theoretical Economics*, 145(1), 6–24.
- Luo, X. R., & Chung, C.-N. (2013). Filling or abusing the institutional void? Ownership and management control of public family businesses in an emerging market. *Organization Science*, 24(2), 591–613.
- Maddala, G. (2002). *Introduction to econometrics*. Prentice Hall.
- Mahoney, J. (2012). *Property rights theory*. SAGE Publications.
- Mangena, M., Priego, A., & Manzaneque, M. (2020). Bank power, block ownership, boards and financial distress likelihood: An investigation of Spanish listed firms. *Journal of Corporate Finance*, 64, 101636.
- Mariotti, S., & Marzano, R. (2020). Relational ownership, institutional context, and internationalization of state-owned enterprises: When and how are multinational co-owners a plus? *Global Strategy Journal*, 10(4), 779–812.
- Marples, D., & Gravelle, J. (2015). *Corporate expatriation, inversions, and mergers: Tax issues*. <https://crsreports.congress.gov>
- Marquis, C. (2024). *The profiteers: How business privatizes profits and socializes costs*. PublicAffairs.
- Masulis, R., & Reza, S. (2015). Agency problems of corporate philanthropy. *The Review of Financial Studies*, 28(2), 592–636.
- Mayer, C. (2013). *Firm commitment: Why the corporation is failing us and how to restore trust in it*. Oxford University Press.
- Mitchell, R., Agle, B., & Wood, D. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *The Academy of Management Review*, 22(4), 853–886.
- Mitchell, R., Weaver, G., Agle, B., Bailey, A., & Carlson, J. (2016). Stakeholder agency and social welfare: Pluralism and decision making in the multi-objective corporation. *Academy of Management Review*, 41(2), 252–275.
- Monteiro, G., & Miranda, B. (2023). Disentangling the role of the institutional environment in the ownership competence framework: A comment on Foss et al. (2021). *Strategic Management Journal*, 44(8), 1939–1954.
- Neville, F., Byron, K., Post, C., & Ward, A. (2019). Board independence and corporate misconduct: A cross-national meta-analysis. *Journal of Management*, 45(6), 2538–2569.
- North, D. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.
- Nuruzzaman, N., Makarius, E. E., Mukherjee, D., & Gaur, A. S. (2024). MNCs' corporate social irresponsibility and foreign subsidiary performance. *Global Strategy Journal*, 14(3), 509–541.
- Petrenko, O., Aime, F., Ridge, J., & Hill, A. (2016). Corporate social responsibility or CEO narcissism? CSR motivations and organizational performance. *Strategic Management Journal*, 37(2), 262–279.
- Popli, M., Raithatha, M., & Arora, P. (2024). Institutional imprints and corporate misconduct: Unravelling the interplay of economic history and firm choices on earnings manipulation in an emerging economy. *Business & Society*. <https://doi.org/10.1177/00076503241286382>

- Rink, F., de Waal, M., Veltrop, D. B., & Stoker, J. I. (2022). Managing C-suite conflict: The unique impact of internal and external governance interfaces on top management team reflexivity. *Long Range Planning*, 55(3), 102121.
- Roodman, D. (2009). A note on the theme of too many instruments. *Oxford Bulletin of Economics and Statistics*, 71(1), 135–158.
- Russo, M., & Fouts, P. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40(3), 534–559.
- Schnatterly, K., Shaw, K., & Jennings, W. (2008). Information advantages of large institutional owners. *Strategic Management Journal*, 29(2), 219–227.
- Schulze, W., & Zellweger, T. (2021). Property rights, owner-management, and value creation. *Academy of Management Review*, 46(3), 489–511.
- Shaver, J. M. (2019). Interpreting interactions in linear fixed-effect regression models: When fixed-effect estimates are no longer within-effects. *Strategy Science*, 4(1), 25–40.
- Sierra, B. (2022). H&M is being sued for “misleading” sustainability marketing. What does this mean for the future of greenwashing? *The Sustainable Fashion Forum*. <https://www.thesustainablefashionforum.com/pages/hm-is-being-sued-for-misleading-sustainability-marketing-what-does-this-mean-for-the-future-of-greenwashing>
- Slawinski, N., & Bansal, P. (2015). Short on time: Intertemporal tensions in business sustainability. *Organization Science*, 26(2), 531–549.
- Solomon, S. (2014). As activist investors gain strength, boards surrender to demands. *The New York Times*. <https://archive.nytimes.com/dealbook.nytimes.com/2014/10/14/as-activist-shareholders-gain-strength-boards-surrender-to-demands/>
- Speed, M., & Bryan, K. (2024, August 23). *Unilever's sustainability rethink cheers investors but unsettles staff*. <https://www.ft.com/content/c4379494-f647-470c-9439-a43abc0f6473>
- Sun, P., Doh, J., Rajwani, T., & Siegel, D. (2021). Navigating cross-border institutional complexity: A review and assessment of multinational nonmarket strategy research. *Journal of International Business Studies*, 52(9), 1818–1853.
- Thaler, R. H., & Shefrin, H. M. (1981). An economic theory of self-control. *Journal of Political Economy*, 89(2), 392–406.
- Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 21(6), 689–705.
- Useem, M. (1996). *Investor capitalism: How money managers are changing the face of corporate America*. Basic Books.
- Walls, J., Berrone, P., & Phan, P. (2012). Corporate governance and environmental performance: Is there really a link? *Strategic Management Journal*, 33(8), 885–913.
- Westphal, J., & Fredrickson, J. (2001). Who directs strategic change? Director experience, the selection of new CEOs, and change in corporate strategy. *Strategic Management Journal*, 22(12), 1113–1137.
- Wooldridge, J. (2010). *Econometric analysis of cross section and panel data*. MIT Press.
- Zaman, R., Jain, T., Samara, G., & Jamali, D. (2022). Corporate governance meets corporate social responsibility: Mapping the interface. *Business and Society*, 61(3), 690–752.
- Zhang, Y., & Gimeno, J. (2016). Earnings pressure and long-term corporate governance: Can long-term-oriented investors and managers reduce the quarterly earnings obsession? *Organization Science*, 27(2), 354–372.

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Arora, P., Jain, T., & Gaur, A. (2024). Communalizing private costs: Ownership concentration, institutions, and corporate environmental performance. *Global Strategy Journal*, 1–30. <https://doi.org/10.1002/gsj.1518>