

Heterogeneous stakeholder pressure^{*}

Dennis Bams ^{a,b}, Bram van der Kroft ^c, Karen Maas ^{b,d}

^aMaastricht University

^bOpen University

^cMassachusetts Institute of Technology

^dErasmus University Rotterdam

February 27, 2026

Abstract

Stakeholder theory emphasizes that firms face multiple stakeholders with divergent interests, yet research often treats stakeholder pressure as homogeneous or examines it in isolation. We place heterogeneity at the center of stakeholder theory by theorizing and measuring variation in stakeholder pressure across CSR issues and stakeholder groups. Using shareholder proposals to capture firm-level heterogeneity and LSEG data to distinguish substantive, symbolic, and compliance-oriented CSR, we analyze 785 U.S. firm-year observations in an event-study design. We find that greater heterogeneity across issues or stakeholder groups reduces subsequent substantive CSR adoption by 7.5 and 7.7 percentage points. Instrumental-variable analyses based on proposal waves support this interpretation. Heterogeneous pressure is also associated with higher emissions, more workplace accidents, lower employee satisfaction, and, for issue heterogeneity, weaker financial performance. Stakeholder collaboration and managerial or investor receptivity attenuate these effects. Our findings show that the alignment of stakeholder demands shapes firms' responses to pressure, moving the debate from *whether* to *how* stakeholder pressure affects firms.

Key words: Stakeholder theory, Shareholder proposals, Symbolic & Substantive CSR

^{*}Contact information: bramvdk@mit.edu. All authors equally contributed to this work. We thank Brad Agle, Noor Alshamma, Irene Andersen, Punit Arora, Rob Bauer, Frank de Bakker, Kevin Chuah, Petru Curseu, Dakshina De Silva, Jeroen Derwall, Philip Fliers, Edward Freeman, Bart Frijns, Irene Henriques, Julia Herzum, Ioannou Ioannis, Alan Muller, Michael Pagano, Marco Pani, Thomas Thijssens, Peter Schotman, Mark Sharfman, David Skandera, Valérie Swaen, and seminar participants of De Nederlandsche Bank, Maastricht University, Open University, Utrecht University, and VU Amsterdam. We also thank the participants of the AEA Annual Meeting, FMA Annual Meeting, Portuguese Finance Network, EURAM Annual Meeting, Business and Society Seminar, AFA Poster session, World Finance Conference, FMA Europe, GRASFI PhD workshop, Finance Symposium, and the Globally Sustainable Banking & Finance conference. We gratefully acknowledge funding from the ICPM Research Award 2021.

1 Introduction

Stakeholders frequently urge firms to adopt Corporate Social Responsibility (CSR) initiatives and improve their environmental and social performance. Stakeholder theory examines how actors who affect and are affected by firms shape managerial decision-making (Freeman, 1984). Given partial managerial adoption of stakeholder pressure (Barnett, 2019), research has increasingly explored the power dynamics between a single stakeholder and a single firm (Bundy et al., 2013; Durand, Hawn and Ioannou, 2019; Mitchell et al., 1997).

In practice, stakeholder demands differ across groups and issues: consumers may seek more sustainable products, employees improved labor conditions, and investors reduced environmental risks. This can generate heterogeneity and even disagreement in the pressures managers face. How managers react to such heterogeneity is a question central to stakeholder theory (Rowley, 1997). Accordingly, a growing body of literature examines firm behavior when stakeholders exert competing demands (Buchanan et al., 2023; Crilly and Sloan, 2012; Qian et al., 2023).¹ We build on this work and systematically examine how heterogeneity in stakeholder pressure across CSR *issues* and *stakeholders* shapes firms' CSR adoption.

Managers face heterogeneity in stakeholder pressure across CSR issues when they receive simultaneous requests to improve their performance on different CSR dimensions. We hypothesize that such heterogeneity reduces management's ability to address CSR substantively, as it is more complex to simultaneously improve multiple CSR dimensions and align them with the firm's core strategy (Ocasio, 1997; Qian et al., 2023; Ringov et al., 2026). Managers can also face stakeholder heterogeneity when multiple stakeholders pressure them to address a CSR issue to varying degrees. Similarly, we argue that heterogeneity across stakeholders reduces substantive CSR adoption, as managers cannot tailor to all stakeholders' demands equally, reducing the legitimacy, reputational, and financial benefits otherwise provided (Nardi, 2022; Zavyalova et al., 2016). Last, we propose that the influence of heterogeneous stakeholder pressure on firms' substantive CSR adoption is moderated by collaboration among stakeholders (Seo, 2025), and managers' and shareholders' receptivity to CSR (McDonnell et al., 2015;

¹For example, conflicting demands between local and federal governments, primary and secondary stakeholders, domestic and international actors, or polarized interest groups (Asmussen and Fosfuri, 2019; Barnett, 2019; Dewan et al., 2024; Wang et al., 2018).

Seo, 2025).

We empirically examine how heterogeneity in stakeholder pressure influences CSR adoption using the context of shareholder proposals. Shareholder proposals are a corporate governance mechanism through which stakeholders can bring CSR-related policies to a vote. Proposals from stakeholders without a major stake in the firm are taken equally seriously at the vote as those from institutional investors, with 26.3 vs 25.5% average support. As such, proposals are a widely used setting for studying stakeholder pressure (DesJardine et al., 2022; Flammer, 2013, 2015).²

Shareholder proposals are ideally suited to measure heterogeneity in stakeholder pressure, as they provide an overview of which stakeholders exert pressure and the range of issues on which they do so. We measure this heterogeneity at the firm level by computing a Herfindahl–Hirschman concentration index (HHI) of CSR issues and stakeholders in the same year. We find ample heterogeneity across stakeholder groups (religious organizations, labor unions, individuals, other companies, pension funds, hedge funds, and mutual funds) and CSR issues (human rights, water use, climate exposure, sustainability reporting, lobbying, discrimination, public health, and DEI). The average firm faces 2.57 proposals in our sample.

We use granular CSR information from the London Stock Exchange Group (LSEG) to determine how firms approach CSR. In a first step, we measure symbolic and substantive sustainability performance using 156 granular CSR indicators that not only capture firms’ policies, initiatives, and targets, but also their realized outcomes and controversies across similar CSR dimensions. In a second step, we use the same granular CSR data to cluster firms based on similarities in CSR performance. In every industry, we find the same three types of firms: those that pursue CSR in a substantive manner with ample substantive sustainability performance, those that pursue CSR in a symbolic manner with ample symbolic sustainability performance but little substantive sustainability performance, and those that pursue CSR in a compliance-

²SEC rule 14A8 enables stakeholders to file proposals only when they own shares in the firm. However, the threshold of shares required to file a proposal is negligible, just \$2,000 in company stock. Accordingly, proposals are predominantly filed by stakeholders with limited equity positions rather than institutional investors. To illustrate, the average proposal is sponsored by 0.82 individuals, 0.21 labor unions, 0.19 religious organizations, and 0.12 special-interest groups. Despite the low filing threshold, one could argue that stock-holding stakeholders may vary in how they target firms on CSR issues compared to non-stockholder shareholders. Our results, and those of others using shareholder proposals, are conditional on such potential differences.

oriented manner with moderate performance in both dimensions. We assert the accuracy of these measures using external data from the US Environmental Protection Agency (EPA).³ We retain an event-study sample of 785 firm-year observations for US firms.⁴

We find that greater heterogeneity in stakeholder pressure, either across issues or stakeholder groups, is associated with a decline in subsequent substantive CSR adoption. We ensure that this decline reflects suboptimal stakeholder pressure rather than stakeholder selection targeting less sustainable firms, using shareholder proposal “waves” as an instrument, following Flammer et al. (2019, 2021). Controlling for prior CSR adoption, firm characteristics, and CEO characteristics, we find that a one-standard-deviation increase in issue and stakeholder group heterogeneity corresponds to a 7.7 percentage-point and 7.5 percentage-point drop in the proportion of firms adopting substantive CSR, respectively. In other words, the less precise the pressure stakeholders pose, the less likely management is to adopt it substantively.

Heterogeneous stakeholder pressure has adverse consequences for stakeholder and stockholder welfare. In an exploratory analysis, we find that heterogeneous stakeholder pressure is associated with higher emissions, more accidents, lower employee satisfaction, and increased controversies over environmental practices, labor conditions, and consumer complaints. Moreover, we find that issue heterogeneity (though not stakeholder group heterogeneity) is associated with weaker subsequent financial performance. These findings underscore the adverse effects of heterogeneous stakeholder pressure on shareholders’ ability to influence managerial decision-making.

How can stakeholders prevent inflicting heterogeneous demands without silencing their voices? We provide two solutions. First, we show that the adverse effects of heterogeneous stakeholder pressure on substantive CSR adoption are attenuated by stakeholder collaboration. When stakeholders jointly pose their demands on firms, there is less heterogeneity. Second, we show that managerial and investor stakeholder receptivity can further mediate the impact of

³EPA data is commonly used to assess environmental performance in manufacturing, petrochemical, and utility sectors (Hsu et al., 2023; Xu and Kim, 2021). For example, in the energy sector, we classify Quanta Services as substantive (providing infrastructure for renewable energy), Occidental Petroleum as compliance-oriented (producing oil and gas while investing in carbon capture), and Chevron as symbolic (operating primarily as a conventional oil and gas firm).

⁴We explicitly focus on US firms, as firms in other countries face sufficiently larger shareholding requirements to file a proposal that multiple proposals at one meeting are extremely uncommon. As a result, we would not observe any heterogeneity in such settings.

heterogeneous stakeholder pressure. When either management or a firm's investors are more inclined to adopt CSR, heterogeneity in stakeholder pressure is less penalized. Therefore, stakeholders could target those managers more responsive.

We contribute to stakeholder theory by placing heterogeneity at the center of how stakeholder pressure operates. While stakeholder theory recognizes that firms face multiple stakeholders with divergent interests (Freeman and Reed, 1983; Rowley, 1997), empirical research has largely examined stakeholder influence in isolation or treated pressure as homogeneous. Yet in practice, stakeholder demands are rarely unified, affecting strategic decision-making (DesJardine et al., 2024; Odziemkowska and Zhu, 2025; Poliquin and Hou, 2025). We develop a systematic conceptualization and measurement of heterogeneity in stakeholder pressure across both CSR issues and stakeholder groups and show that such heterogeneity fundamentally shapes whether firms adopt CSR substantively or symbolically. By demonstrating that fragmented and diffuse pressure reduces substantive CSR adoption and undermines stakeholder and shareholder welfare, we clarify why stakeholder pressure is not always effective. In doing so, we advance a more nuanced theory of stakeholder influence in which the structure and alignment of demands, rather than their mere presence, determine their impact.

2 Theory

2.1 Theoretical background

2.1.1 Stakeholder theory and its relationship to CSR

Business operates through relationships among groups that hold a stake in the firm's activities (Donaldson and Preston, 1995; Freeman, 1984). Stakeholder theory studies how firms engage customers, suppliers, employees, investors, and regulators who affect and are affected by the firm (Freeman and Reed, 1983). To understand a firm, we must examine how these relationships operate and evolve over time (Parmar et al., 2010). This requires analyzing how stakeholders shape their relationships with firms.

CSR provides a direct setting for applying stakeholder theory. Stakeholders shape CSR ini-

tiatives, and CSR initiatives shape stakeholder outcomes (e.g., Bosse et al., 2009; Harrison and Wicks, 2013). Stakeholders often drive CSR adoption through reputational, social, and regulatory channels (Bundy and Pfarrer, 2015; Zavyalova et al., 2016). They also provide financial incentives for firms that pursue sustainability goals (Nardi, 2022). Stakeholder influence depends on the legitimacy, urgency, and power of the issues they advance (Mitchell et al., 1997).

2.1.2 Stakeholder CSR pressure

Stakeholder pressure refers to stakeholders' efforts to influence firm behavior by shaping the costs and benefits of strategic choices (Frooman, 1999). In CSR, pressure arises when stakeholders mobilize around social or environmental issues and link their demands to the firm's access to resources, legitimacy, or reputation (Agle et al., 1999). They act through regulatory advocacy, employee voice, and consumer responses (King and Soule, 2007; Baron, 2009). Through these channels, stakeholders shape managers' expectations about the economic and social consequences of addressing specific CSR issues.

The intensity of stakeholder pressure varies across issues and firms. Pressure depends on their power, legitimacy, and urgency, as well as whether stakeholders control resources, hold legal authority, or shape public discourse, and can impose costs or confer benefits (Frooman, 1999; Henisz et al., 2014; Mitchell et al., 1997). Issue characteristics also matter, with those that attract public attention and moral concern drawing broader scrutiny (Bundy and Pfarrer, 2015; Zavyalova et al., 2012). Stakeholder pressure therefore varies in strength across contexts.

2.1.3 Managerial responses to stakeholder pressure

Stakeholder pressure shapes firm decision-making. Stakeholders exert pressure through multiple mechanisms, such as offering direct financial incentives, making issues salient, attempting to replace management, supplying information, and affecting firms' reputations (Bundy et al., 2013; Connelly et al., 2024; Nardi, 2022; Ou et al., 2024; Philippe and Durand, 2011; Shin et al., 2022; Zavyalova et al., 2016). We assume managers evaluate stakeholder demands by

weighing expected benefits, costs, and constraints.⁵ A firm's response reflects its willingness and ability to address an issue in ways that support profitability (Durand, Hawn and Ioannou, 2019; Pache and Santos, 2010; Oliver, 1991).

When stakeholders apply limited pressure, firms often adopt compliance-oriented CSR because deeper engagement offers lower returns (Godfrey, 2005; Marquis and Qian, 2014). When stakeholders apply extensive pressure and full compliance is costly, firms may pursue symbolic CSR by signaling commitment without implementing change (Crilly et al., 2016; Bothello et al., 2023). Between these conditions lies an "optimal" level of stakeholder pressure.

We define this optimum as the pressure level that induces managers to substantively adopt CSR. This definition rests on three steps. First, managers choose responses to maximize profits. Second, stakeholders understand that managerial responses follow a profit-maximizing logic and can anticipate how different levels of pressure alter the relative profitability of available responses. Third, stakeholders adjust the intensity of their pressure strategically, selecting the level that makes substantive adoption the manager's profit-maximizing choice.

To elaborate, stakeholder pressure operates by shifting the payoff structure associated with managerial alternatives. As pressure increases, the costs and benefits of symbolic or compliance-oriented responses change relative to those of substantive adoption. Pressure is optimal at the point where substantive adoption becomes more profitable than alternative responses. At this level, managers' profit-maximizing behavior aligns with stakeholders' preferred outcome, making substantive CSR the equilibrium response.

Stakeholder pressure is less likely to lead to substantive adoption when firms face demands from multiple stakeholders or across multiple issues. Research on individual CSR dimensions shows how specific stakeholders interact with firms (Durand, Hawn and Ioannou, 2019; Mitchell et al., 1997). When a single stakeholder engages the firm, it can concentrate resources and calibrate pressure to induce a substantive response. In multi-stakeholder or multi-issue settings, managers must evaluate interdependent demands. When stakeholder interests diverge

⁵The logic of our paper also applies to firms guided by normative motives or non-pecuniary goals. In these cases, normative preferences raise the baseline likelihood of addressing certain issues. Firms nevertheless remain responsive to profitability shifts induced by stakeholder pressure, albeit from a higher baseline. For example, firms are more likely to address CSR issues substantively when management ideology aligns with that of stakeholders (McKean and King, 2024). We study this perspective in the third hypothesis.

and trade-offs arise, firms prioritize among pressures and allocate attention selectively (Bromley and Powell, 2012; Crilly and Sloan, 2012). How do firms interpret mixed signals? How do they weigh competing pressures across issues and stakeholders? Under what conditions do heterogeneous pressures shift firms toward substantive rather than symbolic CSR approaches?

2.2 Heterogeneous pressure across issues

In this section, we develop a framework that explains how variation in stakeholder pressure across issues and stakeholder types shapes CSR adoption. We focus on heterogeneity in pressure rather than its aggregate level. For example, one stakeholder may demand emission reductions, while another may call for improvements in labor practices. This configuration increases total CSR pressure and introduces variation across issues. By contrast, two stakeholders may both demand emission reductions. The total pressure between the two scenarios is roughly equivalent, but the variation across issues is not. It is the variation in stakeholder demands that we build our theory on. This logic extends to variation across stakeholder types. We separate the effects of heterogeneous stakeholder pressure across issues and stakeholders, as both have distinct theoretical mechanisms that drive less substantive CSR adoption.

Resource and attention constraints limit firms' ability to adopt CSR substantively across multiple issues. Firms possess finite resources and specialized capabilities. Physical, organizational, and cognitive constraints limit the number of issues they can address in depth at any given time (Penrose, 1959; Hart, 1995; Husted and de Jesus Salazar, 2006). Moreover, firms are unevenly equipped to address different CSR issues. Their capabilities, routines, and asset configurations make them more effective in some domains than in others.

When stakeholder pressure is dispersed across multiple CSR issues, managers must allocate scarce resources among them. Because substantive adoption requires meaningful investments of capital, managerial attention, and organizational change, investing in one issue reduces the firm's capacity to engage deeply with another. Managers therefore prioritize across issues, often favoring those that better align with existing capabilities. As the number and heterogeneity of demanded issues increase, the feasibility of substantive adoption across all issues declines.

Importantly, firms may still be expected to respond to each issue. When pressure extends

across multiple domains, non-response becomes costly. Yet the cumulative resource demands of substantive engagement may exceed organizational capacity. Under such conditions, firms that might have substantively addressed each issue in isolation may instead dilute their efforts or shift toward symbolic or compliance-oriented responses. Thus, dispersed stakeholder pressure can unintentionally reduce substantive CSR adoption, not because firms lack resources *per se*, but because resource fragmentation across heterogeneous issues makes deep engagement across all of them infeasible.

In addition to firms' resource constraints, managers also face attention constraints that complicate the simultaneous adoption of many CSR issues. Managers have limited attention and cannot attend to all issues (Ocasio and Joseph, 2005; Crilly and Sloan, 2012). Managers tend to emphasize issues more when they consider them strategically salient for their firm's core operations (Bansal et al., 2018), or when they align with personal views or political ideologies (Bundy et al., 2013; Gupta et al., 2017; McDonnell et al., 2015; McKean and King, 2024). When multiple issues compete for attention, each receives less focus than it would alone (Ren et al., 2023). This dynamic parallels competition for physical resources and reduces the likelihood that firms adopt CSR substantively.

Alongside managerial and firm-level constraints, stakeholders also face difficulties in eliciting substantive CSR responses when firms receive heterogeneous pressure. Inducing substantive adoption requires stakeholders to determine how much pressure to exert in order to shift managerial incentives (Durand, Hawn and Ioannou, 2019; Haack et al., 2012). This calibration process is resource-intensive: stakeholders must assess firm characteristics, estimate response thresholds, and tailor their demands accordingly.

First, stakeholder resource constraints reduce the precision of their pressure when stakeholders impose multiple demands. In such a scenario, stakeholders must divide their attention, expertise, and monitoring capacity across issues. This dispersion limits their ability to gather detailed information about firm conditions and weakens their capacity to calibrate pressure effectively (Ferraro et al., 2015). As a result, the pressure on multiple issues strains stakeholders' resources, reducing the likelihood that pressure is optimal.

Second, interdependence among stakeholders creates strategic uncertainty. When a stake-

holder presses a firm on a CSR issue, the firm reallocates resources and managerial attention in response. This reallocation alters the level of pressure required for alternative proposed CSR issues to induce substantive adoption (Barnett, 2007). These effects are often opaque: stakeholders may lack timely or complete information about others' actions, especially when pressure is uncoordinated (Dorobantu et al., 2017). Without knowledge of concurrent demands, stakeholders cannot accurately anticipate how prior pressure has shifted managerial capacity or incentives. Consequently, they are more likely to misjudge the level of pressure needed to induce substantive CSR adoption.

Although heterogeneous pressure often disperses firm resources and attention, it can also promote substantive CSR adoption when issues generate synergies. When the financial returns to adopting one issue increase with the adoption of another, simultaneous pressure can induce substantive engagement, even if pressure on either issue alone would not. For example, demands to install solar panels and to electrify a headquarters can reinforce each other. Such complementarities are rare. In most settings, we expect competition for resources and attention to outweigh these gains. We therefore expect heterogeneity in stakeholder pressure across issues to reduce the likelihood of substantive firm responses:

H_{1a} : Heterogeneous stakeholder pressure across issues leads to less substantive CSR adoption.

2.3 Heterogeneous pressure across stakeholders

How do firms respond to heterogeneity across stakeholders? Alongside heterogeneity across issues, firms also face heterogeneity in pressure across stakeholder groups. This form of heterogeneity arises when multiple stakeholders exert different levels of pressure on the same issue.

On one hand, heterogeneity implies that several stakeholders focus on the same issue. Given limited resources and attention (Crilly and Sloan, 2012; DesJardine et al., 2024; McKean and King, 2024), managers may interpret aggregated pressure as salient and intense (Oliver, 1991). Consequently, they may prioritize the issue and pursue more substantive action.

On the other hand, heterogeneity across stakeholders can reduce the gains from substantive

CSR adoption. Stakeholders often differ in their expectations of how much firms should address an issue (Odziemkowska and McDonnell, 2024). When demands differ, firms can satisfy some but not all demands simultaneously. Consequently, firms will receive less reputational and legitimacy benefits from substantively adopting the issues than from facing singular demands (Zavyalova et al., 2016; Bundy and Pfarrer, 2015). Firms therefore have weaker incentives to adopt CSR substantively when stakeholder demands vary.⁶

The adverse effects of stakeholder heterogeneity become stronger when pressure moves in opposite directions (Pache and Santos, 2010; Seo, 2025). A stakeholder who prefers a 2030 net-zero target may view a firm adopting a 2040 net-zero target as partial progress and may still lend some reputational and legitimacy benefits to the firm. However, such partial benefits are absent when stakeholders promote competing agendas, with some pressing firms to expand initiatives while others urge them to scale them back.⁷ Given the above, we argue that heterogeneity in stakeholder pressure across stakeholders reduces the likelihood of substantive CSR adoption.

H_{1b} : Heterogeneous stakeholder pressure across stakeholders leads to less substantive CSR approaches.

2.4 Collaboration

Collaboration can reduce variation in pressure across stakeholder groups. We argue that firms adopt less substantive CSR when pressure from stakeholders differs widely. Managers struggle to interpret inconsistent demands. Stakeholders, however, often coordinate (Rowley, 1997). For instance, they can submit joint shareholder proposals and form coalitions to exert pressure (Chuah et al., 2024).

Collaboration aligns demands. In joint efforts, stakeholders agree on a common target. They coordinate interests and priorities before engaging management (Grimm and Reinecke,

⁶Stakeholders differ in power, legitimacy, and urgency (Mitchell et al., 1997). Firms often prioritize more influential stakeholders. Yet heterogeneity can still reduce substantive adoption because some demands remain unmet. This effect intensifies when several influential stakeholders advance different positions.

⁷In practice, such pressures are becoming common. For instance, shareholder proposals have sought to dismantle diversity, equity, and inclusion initiatives at Apple (2025), Costco (2025), Deere & Co. (2025), Goldman Sachs (2025), Berkshire Hathaway (2025), Starbucks (2024), and Citigroup (2024). Other proposals have targeted net-zero commitments at Chevron (2025) and Duke Energy (2023). Although many proposals failed in investor votes, JPMorgan Chase reduced its DEI efforts in 2025. <https://www.sec.gov/files/corpfin/no-action/14a-8/ncpprjpmorgan4225-14a8.pdf> and <https://www.sec.gov/divisions/corpfin/cf-noaction/14a-8/2023/ncpprcocacola022123-14a8.pdf>.

2024). This leads stakeholders to resolve internal differences and align demands before sending them to management (Slager et al., 2023). Managers then receive clearer signals within a CSR issue, and perceived heterogeneity declines. We therefore expect collaboration to weaken the negative effect of heterogeneous stakeholder pressure across groups on substantive CSR adoption.

Collaboration is less likely to reduce heterogeneity across CSR issues, however. Stakeholder groups prioritize different issues, and coordination across multiple dimensions is harder to sustain (Grimm and Reinecke, 2024). Even when stakeholders coordinate across issues, managerial attention and resource constraints remain limiting (Hart, 1995; Greenwood et al., 2011; Ocasio, 1997). Accordingly, we expect collaborative pressure to reduce heterogeneity within an issue among stakeholder groups, but not across different CSR issues.

H₂: Collaboration reduces the influence of heterogeneous stakeholder pressure across stakeholders on substantive CSR approaches.

2.5 Managerial receptivity

Managerial receptivity to stakeholders can shape their responses to heterogeneous pressures. We define managerial receptivity as the extent to which top managers remain open to, attentive to, and supportive of CSR initiatives. Upper echelons theory argues that executives' values, experiences, and identities shape how they interpret environmental cues (Hambrick and Mason, 1984). In the CSR domain, managers differ in moral orientation, political ideology, and commitment to social issues. These differences shape how they prioritize stakeholder demands (McDonnell et al., 2015; Odziemkowska and McDonnell, 2024). Stakeholder pressure therefore passes through managerial interpretation rather than translating directly into firm action (Bundy et al., 2013; Durand, Hawn and Ioannou, 2019).

When pressure varies across issues or stakeholders, managers exercise discretion in selecting which demands to emphasize. Managers with low receptivity to CSR may use heterogeneity to justify symbolic responses. They can frame competing demands as evidence of disagreement and uncertainty about how to allocate resources to maintain legitimacy (Crilly and Sloan, 2012; Pache and Santos, 2010).

Managers with high receptivity could respond differently. Diverse stakeholder demands increase the salience and legitimacy of CSR (Bundy and Pfarrer, 2015). Receptive managers can use this plurality to reallocate resources and expand CSR engagement. We therefore argue that managerial receptivity moderates the effect of heterogeneous stakeholder pressure on substantive CSR adoption.

H_{3a}: Managerial CSR salience mediates the relationship between heterogeneous stakeholder pressure and substantive CSR adoption.

Shareholder receptivity to CSR can play a similar role. Under heterogeneous pressure, substantive adoption often yields lower financial returns because legitimacy gains decline and resources disperse (Philippe and Durand, 2011; Zavyalova et al., 2012). CSR thus becomes less financially attractive. Managers who focus on short-term profits may scale back substantive engagement. Some investors, however, value both financial returns and CSR performance (Durand, Paugam and Stolowy, 2019; Bauer et al., 2021). When such investors hold a larger ownership stake, managers have greater discretion to pursue CSR even when financial gains are not the primary objective. We argue that investor receptivity to CSR can therefore moderate the relationship between heterogeneous stakeholder pressure and substantive CSR adoption.

H_{3b}: Shareholder CSR salience mediates the relationship between heterogeneous stakeholder pressure and substantive CSR adoption.

3 Data & Method

How can we empirically define CSR approaches? To examine how heterogeneity in stakeholder pressure shapes firms' propensity to adopt substantive CSR, we need a measure that distinguishes firms by their CSR approach. We do so by building on the framework developed by Durand, Hawn and Ioannou (2019) and Nardi (2022). They conceptualize CSR along two dimensions: substantive and symbolic performance. This structure yields three CSR profiles: substantive, compliance-oriented, and symbolic.

We proceed in two steps. First, we apply a clustering algorithm within each industry. The algorithm groups firms by performance across more than 100 CSR indicators spanning both

substantive and symbolic dimensions. This step identifies distinct CSR profiles within an industry. Second, we interpret these profiles by ranking firms separately on substantive and symbolic indicators. Firms are classified as substantive CSR adopters if they exhibit the strongest substantive performance, as symbolic CSR firms if they lead on symbolic performance, and as compliance-oriented firms if they display moderate performance on both dimensions. This two-step approach allows us to determine how firms approach CSR without defining an explicit threshold in substantive or symbolic CSR performance.

3.1 Data

We obtain granular CSR data from LSEG (formerly Refinitiv/Asset4). LSEG reports 136 environmental, 184 social, and 146 governance indicators for 1,234 publicly traded non-financial firms. Our sample includes 5,035 firm-year observations from 2003 to 2019.

The dataset captures firms' CSR policies, targets, activities, controversies, and outcomes. It covers areas such as emissions, energy and water use, waste, ecological impact, human rights, privacy, product quality, labor practices, employee health and safety, supply chain management, business ethics, and risk management. In 2019, the covered firms represented a combined market capitalization of \$46.2 trillion. Appendix A describes the cleaned variables and explains how we classify each indicator as substantive or symbolic.

We complement the CSR data with shareholder proposal data from Institutional Shareholder Services (ISS). For each proposal, we observe the filer and the issue addressed. This information allows us to measure heterogeneity in stakeholder pressure.

We also collect firm-level accounting and stock price data from Eikon, Compustat US, Compustat Global, and CRSP. These data include sector, total assets, net income, and market capitalization. Further, we retrieve information on CEOs and their remuneration from Execucomp.

3.2 Method

3.2.1 *Clustering analysis*

We use firm-level k-means clustering to group firms by similarities in CSR performance. This unsupervised method identifies patterns in the data and partitions firms into clusters without imposing assumptions about the number or type of CSR approaches (MacQueen, 1967). It allows CSR profiles to emerge from the data. At the same time, the algorithm does not incorporate our theoretical categories. The resulting clusters therefore require interpretation.

We conduct the analysis separately by sector because CSR issues vary across industries (Ahn et al., 2024). For example, oil spills matter for petrochemical firms but not for technology firms. Cross-sector comparisons would confound issue relevance with performance. We therefore run industry-specific analyses for mining, construction, manufacturing, utilities, retail and wholesale, services, healthcare, ICT, food manufacturing, and petrochemical manufacturing.

Within each sector, we restrict the analysis to CSR issues classified as material by the Sustainability Accounting Standards Board (SASB) (Ahn et al., 2024). SASB defines industry-specific sustainability topics and informs reporting standards. This restriction ensures that each variable captures issues that matter within the sector. Our results remain stable when we include the full set of LSEG indicators. Appendices A and B report details on data cleaning, clustering procedures, and model fit. Because k-means relies on distances between variables, we also normalize and winsorize all CSR indicators at the industry level to five standard deviations (see Jain, 2010).

The clustering procedure identifies distinct CSR approaches in each industry. We determine the optimal number of clusters using the method proposed by Punj and Stewart (1983), which evaluates the incremental explanatory power of additional clusters. This procedure consistently selects three clusters per industry. The algorithm arrives at this structure without prior guidance. On average, the three-cluster solution explains 48.04

3.2.2 *Measuring Substantive and Symbolic CSR*

Having identified firms that similarly approach CSR, we develop a method to uncover the nature of these CSR approaches. We do so by evaluating their performance and creating scores for both substantive and symbolic CSR issues related to the same CSR issues.

Unlike less granular CSR measures often used in the literature, such as ESG ratings or CO_2 emissions, the granularity of LSEG data enables us to distinguish between firms' performance on substantive CSR issues (i.e., how much they do) and symbolic CSR issues (i.e., how much they claim to do). Take, for example, the CSR issue of employee health and safety. Firms will begin by setting formal policies to address employee health and safety concerns and by reporting on these issues. In line with these policies, firms will undertake activities to enhance employee safety, such as implementing training programs and establishing health and safety teams. Our data enables us to measure firms' performance on these issues using data on workplace accidents, injury rates, and occupational illnesses.

To accurately separate firms' granular CSR information into substantive and symbolic CSR scores, we define each category clearly. We follow the definition provided by Nardi (2022, p. 1), who characterizes symbolic CSR as the "adoption of low-cost activities intended to signal social responsibility without effectively benefiting society," and substantive CSR as resource-intensive initiatives intended to generate actual societal benefits. This distinction hinges on whether the CSR activity measurably improves firm performance on the relevant issue. Revisiting the earlier example of employee health and safety, we treat metrics such as workplace accident rates, injury rates, and occupational illnesses as substantive indicators, as they directly reflect outcomes. In contrast, policies, reporting practices, and training programs related to health and safety are classified as symbolic, not because they are unimportant or connected to real outcomes, but because their intended effects can be directly observed through corresponding substantive measures. For instance, two firms that implement identical health and safety policies and reporting frameworks would be scored similarly on symbolic CSR. However, if only one firm exhibits a measurable reduction in accidents, that firm would receive a higher substantive CSR score. This classification leverages the granularity of our dataset, allowing us to observe not only the presence of CSR commitments but also their realized effects.

Despite incorporating both direct performance and controversy measures, a skeptical reader might still regard firm “actions” as occupying a gray area between symbolic and substantive CSR. On one hand, actions represent observable changes in firm behavior and are more concrete than high-level commitments such as reporting policies. On the other hand, they fall short of capturing actual substantive outcomes. While such actions may indicate movement toward improved CSR performance, their presence does not guarantee that performance has actually improved, particularly since many action indicators are self-reported. As an additional validation check, we find that actions related to employee benefits, fair marketing, health and safety, supply chain health and safety, and water use are more strongly correlated with policy commitments than with outcome-based performance measures on the same dimensions. Therefore, although actions may plausibly serve as precursors to substantive CSR improvement, we classify them as symbolic rather than substantive, as our analysis measures their influence on actual performance indicators.

We measure symbolic and substantive CSR by comparing firms’ CSR reporting, policies, activities, and targets, and CSR performance and controversies aspects within the same industry using a non-parametric rank ordering method (Wittkowski et al., 2004), see Equation 1. Firm f has better sustainable performance than firm f' when it is equal or better in all aspects of CSR, $CSR_f(x)$, and strictly better in at least one aspect. For instance, with two CSR aspects, firm f has better sustainable performance when it is at least equally good in labor standards and emissions to firm f' and strictly better in either CSR aspect. Conversely, we cannot determine if firm f outperforms f' when it performs better on one of these aspects, i.e., has worse labor practices but better emissions or vice versa.

Equation 2 translates pairwise firm comparisons into overall scores for substantive and symbolic CSR by subtracting the number of firms that outperform a given firm from the number of firms it outperforms, within each dimension. These scores are computed separately for substantive and symbolic CSR, jointly incorporating information on CSR reporting, policies, activities, targets, performance, and controversies. To ensure comparability, all scores are calculated within the industry and then rescaled to range from 0 (lowest) to 10 (highest), facilitating interpretation. Because industry averages for symbolic and substantive CSR may differ, we

normalize each firm's performance by subtracting the industry average from its raw score and dividing by that same average. This normalization is applied to both symbolic and substantive CSR scores, and results are presented in Figure 1.⁸

$$CSR_f > CSR_{f'} \iff \forall x \in X : CSR_f(x) \geq CSR_{f'}(x) \wedge \exists x \in X : CSR_f(x) > CSR_{f'}(x) \quad (1)$$

$$\text{Rank}(CSR_f) = \sum_{f'} I(CSR_f > CSR_{f'}) - \sum_{f'} I(CSR_f < CSR_{f'}) \quad (2)$$

3.2.3 Validation Symbolic and Substantive CSR scores

We verify the external validity of our scores using three established datasets covering environmental pollution in US heavy manufacturing firms regulated by the EPA. First, we consider pollution prevention data from the EPA P2 dataset. Pollution prevention activities are actions that firms report to the EPA as reducing emissions. These actions are symbolic, as we can also directly measure their pollution through the EPA Toxic Release Inventory, thereby overcoming the distinction between activities and actual outcomes discussed in Barnett et al. (2020). In other words, while actions might influence subsequent performance and are to some extent substantive, we know their implications for performance; correcting for this, we absorb the substantive part to retain only the symbolic component. Last, we capture environmental fines imposed by the EPA on firms that are not compliant with environmental law. These datasets are frequently used in economics and finance as credible measures of environmental performance and are audited by the EPA (see Hsu et al., 2023; Xu and Kim, 2021). We still need our measures, as our scope extends beyond the manufacturing, petrochemical, and utility sectors to a broader range of social and environmental issues.

Table I presents validation results for our CSR scores. In Columns (1) and (2), we regress symbolic and substantive CSR scores on pollution prevention activities. The results show a positive association between symbolic CSR scores and symbolic environmental performance in the EPA dataset. In contrast, substantive CSR scores are negatively associated with pollution

⁸Appendix C provides further validation of these scores using symbolic and substantive environmental data derived from the U.S. Environmental Protection Agency's Toxic Release Inventory. We rely on LSEG data in our main analysis, as TRI coverage is limited to a subset of U.S. manufacturing, petrochemical, and utility firms.

prevention activities, consistent with the idea that more sustainable firms may have already implemented such measures and thus have fewer additional activities to report.

Columns (3) and (4) repeat the analysis using firms' toxic releases as the dependent variable. Here, we find a negative relationship between substantive CSR scores and environmental pollution, indicating that firms with higher substantive CSR scores tend to pollute less. Conversely, symbolic CSR scores are positively associated with toxic releases: firms that engage in extensive symbolic CSR tend to have poorer environmental performance.

A similar pattern emerges in Columns (5) and (6), which examine environmental penalties. Firms with higher substantive CSR scores are less likely to face EPA enforcement actions or legal penalties for noncompliance with environmental regulations. In contrast, symbolic CSR scores are positively related to environmental penalties. This could reflect firms' attempts to preempt or mitigate sanctions by announcing additional environmental targets (Godfrey et al., 2009). Alternatively, it may suggest that firms making greater symbolic commitments often underperform environmentally and thus incur more penalties. Taken together, these findings provide external validation of our symbolic and substantive CSR measures, leveraging an independent, credible dataset on the environmental behavior of major U.S. polluters.

3.2.4 Uncovering CSR approaches

We display the substantive and symbolic CSR scores of firms in Figure 1. We find a clear and consistent pattern in substantive and symbolic CSR scores across the three CSR approaches. Firms categorized as practicing substantive CSR appear in the top-left quadrant, characterized by above-average substantive and below-average symbolic CSR scores. This positioning suggests that these firms are responsive to stakeholder demands without engaging in excessive self-promotion. In contrast, firms in the bottom-right quadrant exhibit high symbolic but below-average substantive CSR scores, indicating a stronger emphasis on communication over actual sustainability performance—a pattern consistent with decoupling. CSR compliance firms cluster around the center of the figure, displaying moderate and relatively balanced scores, reflecting a compliance-driven approach. These observed patterns are consistent with theoretical distinctions among substantive CSR, CSR compliance, and symbolic CSR strategies (Durand,

Hawn and Ioannou, 2019; Nardi, 2022).⁹

These CSR approaches are robust for seven (untabulated) alternative specifications. First, we observe similar CSR approaches when we replicate the decomposition in this section for each industry separately in Appendix B. Second, we observe similar CSR approaches when we separately analyze CSR reporting, policy, activity, target, controversy, and performance scores for every industry, providing robustness to our method as well as the assignment of activity variables to symbolic CSR issues. Third, our results are not specific to k-means clustering, as we obtain similar results with a Gaussian mixture model. Fourth, our clustering persists when we perform a principal component analysis on the CSR information before clustering, a standard method for reducing dimensionality when dealing with a large number of variables. Fifth, we observe similar CSR approaches when clustering firms separately based on either their symbolic or substantive CSR information. This suggests an underlying relationship between the extent to which firms pursue CSR both substantively and symbolically. Sixth, our results persist when we cluster SASB immaterial CSR information or all CSR information, rather than using SASB material information as in the main specification. Given the above, we provide persistent evidence that firms approach CSR substantively, symbolically, and from a compliance mindset.

Last, we replicate the assignment of firms to CSR approaches without our clustering analysis (see Appendix E). It is empirically cleaner to first cluster firms by their performance on substantive and symbolic CSR issues, in a way that explains most of the data variation, and then examine how these distinct groups of firms approach CSR. However, one could also directly use substantive and symbolic CSR scores to classify CSR approaches. A downside of this approach, and the reason we cluster first, is that it would force the data to report on substantive CSR, CSR compliance, and symbolic CSR firms, whereas we are currently letting the data decide how firms approach CSR. Further, it would force us to impose cut-offs on how well

⁹Similar patterns emerge when using industry-level standard deviations to define score thresholds. The differences in substantive and symbolic CSR scores between firms in each CSR category and those in other categories are statistically significant at the 1% level. Of the 80 pairwise comparisons made—spanning two focal contrasts (substantive CSR vs. CSR compliance and substantive CSR vs. symbolic CSR), two CSR dimensions (substantive and symbolic), and 10 industries—only two comparisons do not conform to the expected pattern. Specifically, symbolic CSR firms in the construction industry show higher symbolic CSR scores than both compliance and substantive CSR firms, while scoring lower in substantive CSR relative to the latter. These two exceptions fall within the bounds of multiple hypothesis testing, which would predict roughly four (0.05×80) false positives at the 5% significance level.

firms perform on substantive and symbolic CSR issues relative to their peers, which would be arbitrary and open to interpretation. One advantage of using this classification method solely is that we do not rely on a "black box" process underlying the k-means clustering algorithm. For this analysis, we classify firms as having substantive CSR if their substantive CSR scores exceed the industry median, symbolic CSR if their symbolic scores exceed the industry median but their substantive scores fall below it, and CSR compliance if they meet neither criterion. We observe a similar effect of heterogeneous CSR pressure across issues and stakeholders on firms' tendency to adopt both substantive and symbolic CSR, as we replicate our analysis in Appendix E. Although our results replicate, we rely on our clustering-based approach throughout the paper, as it requires fewer assumptions about how much substantive and symbolic CSR must differ for it to be considered a distinct CSR approach.

3.2.5 Measuring heterogeneous stakeholder pressure

We assess heterogeneity in stakeholder pressure by examining concentration in the CSR issues and proponent types that firms face pressure from. Stakeholders frequently rely on these corporate governance mechanisms as they require only \$2,000 in stock holdings (Gantchev and Giannetti, 2021), attract investor attention (Flammer, 2015), and can be sufficiently salient to affect managerial CSR decision-making (Van der Kroft et al., 2024). As a result, firms frequently receive multiple shareholder proposals in a given year; for example, Meta received fourteen proposals, Amazon received eight, and Walmart received seven in 2025.

Stakeholder pressure is heterogeneous in shareholder proposals. Table II Panel A shows the frequency of shareholder proposals across the largest nine CSR issues (human rights, water & agriculture, climate change exposure, greenhouse gas emissions, sustainability reporting, lobbying and political contributions, discrimination, public health, and DEI initiatives) and stakeholder groups (religious organizations, unions, NGOs, individuals, other companies, socially responsible investment funds, mutual funds, pension funds, and other organizations). Pressure is highly heterogeneous across CSR issues and stakeholders. To illustrate, we observe shareholder proposals in 95.1% of CSR issue times stakeholder group categories.

We measure heterogeneity in stakeholder pressure as one minus the Herfindahl-Hirschman

Index (HHI) across CSR issues and stakeholders (Hirschman, 1964). The HHI index computes concentration as the sum of squared observations in each group, divided by the total number of observations squared. One minus this concentration index gives the level of dispersion, or heterogeneity in stakeholder pressure. We compute these measures separately for CSR issues, using the approximately 250 topics classified by ISS, and stakeholders, using ISS's classification, of individual activists, special interest groups, labor unions, religious organizations, pension funds, other firms, socially responsible investment funds, mutual funds, and a miscellaneous category. Table II Panel C shows summary statistics on these heterogeneity measures.

Let us illustrate how the measure works. Assume a firm receives two proposals on labor rights, one on carbon emissions, and one on animal welfare. In this setting, there is heterogeneity in stakeholder pressure across CSR issues of $1 - \frac{2^2+1^2+1^2}{4^2} = 0.625$. Conversely, where the firm to instead experiences nine labor rights proposals and one emission proposal, the heterogeneity would be $1 - \frac{9^2+1^2}{10^2} = 0.18$. A similar analogy holds for different stakeholder groups pressuring firms.¹⁰

A wide range of shareholder proposals is taken seriously by investors and, thus, managers. One potential concern with our heterogeneity measure is that, although shareholder proposals might be heterogeneous, proposals filed by more important stakeholders receive priority (see Mitchell et al., 1997). In contrast to this notion, we find that support for shareholder proposals is relatively persistent across CSR issues and stakeholders (see Table II Panel B). The average proposal support is highest for fellow companies (32.0%) and lowest for socially responsible investment funds (23.7%), a relatively narrow bandwidth. Furthermore, support is similarly constrained across CSR issues, with the lowest support for human rights (13.9%) and the highest support for DEI initiatives (33.6%). Across the 81 CSR issue times proponent buckets, the average support is 25.5% with a standard deviation of only 9.5%. The stability in average proposal support suggests that proposals across issues and stakeholders are similarly meaningful to management, indicating that our heterogeneous stakeholder pressure measures capture meaningful heterogeneity in pressure.

¹⁰SEC Rule 14A8 prohibits multiple proposals on the same topic in the same year from appearing on a firm's ballot. We rely on information from proposal filings, not only those that make it to the ballot, but also omitted and withdrawn proposals, in our sample. Therefore, multiple stakeholders can pressure firms on an identical aspect of CSR.

3.3 Empirical specification

To measure the influence of heterogeneous stakeholder pressure on firms' CSR approaches, we adopt the following event-study model:

$$\text{Substantive}_{i,t} = \alpha + \beta_1 * \text{Heterogeneity}_{i,t-1} + \beta_2 * \text{Sub Score}_{i,t-1} + \text{Controls}_{i,t} + \varepsilon_{i,t}$$

Here, *Substantive* is a binary indicator equal to one if firm *i* adopts a substantive CSR approach in year *t*, and zero otherwise. The key independent variable, *Heterogeneity*, is the one-year lagged measure of stakeholder pressure heterogeneity, defined as one minus the Herfindahl-Hirschman Index (HHI) of shareholder proposal concentration. *Sub Score* is the firm's lagged substantive CSR score.

The control vector *Controls* includes three sets of controls. First, we introduce management controls that capture lagged CEO age, tenure, gender, and the share of salary in total compensation. These controls partially rule out potential alternative explanations through which managerial differences explain the relationship between heterogeneity in stakeholder pressure and CSR adoption. Second, we control for a set of firm controls, including lagged firm size, leverage, and return on assets. It partially addresses potential endogeneity concerns related to firms' profitability or resource abundance, explaining the relationship between heterogeneous stakeholder pressure and substantive CSR adoption (Dimson et al., 2015). Last, we control for year- and industry-fixed effects to account for differences across industries and over time, covering potential variation in heterogeneous pressures across policy regimes or frequent stakeholder pressure targets (Margolis and Walsh, 2003). Table II shows summary statistics on these controls.

This model is estimated only for firm-year observations in which the firm received shareholder proposals. Since shareholder proposals are not issued to every firm every year, our sample size declines from 5,035 firm-years (based on CSR data availability) to 816 firm-years with observed stakeholder pressure. For ease of computation, we estimate the model using ordinary least squares (OLS). We adopt heteroskedasticity-robust (Huber-White) standard errors

as we have a binary variable as the dependent variable. As a robustness check, we re-estimate the model using a probit specification and obtain similar results (see Appendix D).

4 Results

4.1 CSR approaches and heterogeneous stakeholder pressure

Table III Panel A analyzes the impact of heterogeneous stakeholder pressure on firms' CSR approaches using the method discussed above. In Columns (1) to (4), we find that greater issue heterogeneity in stakeholder pressure is associated with a lower likelihood of firms pursuing CSR substantively using increasingly strong controls. In the most stringent specification of Column (4), a one-standard-deviation increase in issue heterogeneity (33.1%) is associated with a 7.7 percentage point (18.0%, given a 42.8 percentage point mean) decrease in the proportion of firms adopting substantive CSR. We observe similar effects for stakeholder heterogeneity in columns (5) to (8). Here, a one-standard-deviation (31.1%) increase in stakeholder heterogeneity is associated with a 7.5 percentage point (17.4%) decrease in the proportion of firms adopting substantive CSR. These results indicate that firms facing more diverse stakeholder pressure are less likely to pursue substantive CSR.¹¹

To provide the reader with additional confidence in these estimates, we instrument for stakeholder heterogeneity to address potential endogeneity concerns related to management's ability to address sustainability demands. Firms with weaker sustainability practices may be more likely to attract heterogeneous stakeholder pressure. For example, adverse CSR events, such as environmental accidents or governance failures, could simultaneously impair a firm's substantive CSR performance and increase the likelihood of shareholder proposals. In such cases, the observed negative association between stakeholder heterogeneity and substantive CSR adoption may potentially be endogenously caused by underlying deficiencies in CSR management.

We take two steps to mitigate this endogeneity concern. First, we employ an empirical specification that could address the above concerns in the observables. We control for manage-

¹¹The reference category in this analysis is firms not performing substantive CSR. We find that most firms shift from substantive to symbolic CSR rather than from substantive to CSR compliance. Results are robust using a logit regression rather than a linear probability model. We display the latter for ease of interpretation.

ment and firm characteristics as well as firms' lagged substantive CSR scores. Moreover, we adopt a specification of heterogeneous stakeholder pressure in lags to allow for contemporaneous adverse CSR events that could affect both CSR performance and stakeholder attention. However, this approach alone cannot fully eliminate concerns about unobserved confounders or intertemporal reverse causality.

Second, to more accurately address potential selection concerns, we adopt the identification strategy based on shareholder proposal waves, as introduced by Flammer et al. (2019) and Flammer et al. (2021). Stakeholders sometimes initiate coordinated campaigns in which they file nearly identical shareholder proposals across multiple firms. For example, individual activists such as John Cheveden, James McRitchie, and Kenneth Steiner regularly lead such efforts. They submit standardized proposals to a wide range of firms. Collectively, they account for over 10% of all shareholder proposals in the U.S. since 2007. According to Flammer et al. (2019) and Flammer et al. (2021), these wave-style proposals are less likely to be influenced by firm-specific CSR performance, making them a valid instrument for heterogeneity in stakeholder pressure.

We test instrument strength in Table IV, an important requirement for IV estimation. We adopt the same waterfall of controls as in Table III and test the instruments' strength for issue heterogeneity and stakeholder heterogeneity in Panels A and B, respectively. Given issue and stakeholder heterogeneity, we observe F-statistics of at least 82.4 and 55.1, exceeding the weak instrument threshold of 10 (Andrews et al., 2019).¹²

We employ a two-stage least squares (2SLS) approach in which we instrument the firm-level heterogeneity in stakeholder pressure with *Wave*, an indicator variable equal to one if the firm is targeted by at least one wave proposal in a given year in Table III Panel B. Using this approach, we observe statistically and economically similar effects to our OLS estimation in Panel A. Specifically, we observe a 7.7 and 12.9 percentage point decrease in the likelihood that a firm adopts CSR substantively for a one-standard-deviation increase in instrumented issue and stakeholder heterogeneity. Given the above, we verify our first hypothesis (H_{1a} and H_{1b}) and show that heterogeneity in stakeholder pressure leads firms to approach CSR less substantively.

¹²Square the t-statistics of Columns (1) in Panels A and B. A squared t-statistic gives you the F-statistic in the case of a single instrument.

4.2 Collaboration and heterogeneous pressure

We next examine whether collaboration can mitigate heterogeneity in stakeholder pressure in Table V. Here, we introduce an indicator variable equal to one when multiple stakeholders collaborate on a shareholder proposal in a specification otherwise identical to that of Table III Panel A. We hypothesized that cooperation would only be effective in mitigating the influence of heterogeneity across stakeholder not issues. This aligns precisely with our empirical estimates. We find no significant effects when introducing cooperation into regressions with issue heterogeneity, with coefficients nearly identical to those in the main specification. In contrast, we do observe positive and significant effects for stakeholder heterogeneity. Across specifications, stakeholder pressure cooperation increases the likelihood that firms will approach CSR substantively by 9.1 to 10.5 percentage points. Economically, this increase can offset about 1.36 standard deviations in stakeholder heterogeneity in the most stringent specification. The positive influence of collaboration on heterogeneity in stakeholder pressure validates the second hypothesis (H_2).

4.3 Managerial and Shareholder CSR receptivity and heterogeneous stakeholder pressure

We hypothesized that managerial and shareholder CSR receptivity mediates the impact of heterogeneous stakeholder pressure on firms' substantive CSR adoption. We operationalize managerial CSR receptivity by using their prior decisions on how they handle shareholder proposals. Management has an active role in the shareholder proposal process. Alongside remaining passive and having a proposal voted on, management can decide to omit (attempt to remove a shareholder proposal from the ballot) or withdraw (settle with the filing stakeholder before a vote) a proposal. We argue that management that withdraws proposals is more CSR receptive as it adopts them even without pressure from its investors. In contrast, management that seeks to omit proposals is less receptive to CSR, as it aims to ignore stakeholders' CSR demands, even without awaiting investor support.

We proxy managerial CSR receptivity as the share of proposals it withdrew relative to the

share of withdrawn and omitted proposals in past ballots. When managers withdraw proposals and do not omit them, the ratio is 1, and management is very receptive to stakeholder pressure. When managers omit proposals but do not withdraw any, management is unreceptive, and the ratio is 0.

We adopt a mediation analysis using this proxy of managerial CSR receptivity in Table VI, Panel A. We find that managerial CSR receptivity only mediates heterogeneity in stakeholder pressure across issues, not stakeholders. In the most stringent specification, we find that a one standard deviation increase in managerial CSR receptivity (27.6%) attenuates 41.3% of the negative impact of heterogeneity in issue stakeholder on substantive CSR adoption.¹³ In contrast, we do not observe a significant effect for heterogeneity of stakeholder pressure across stakeholders. One interpretation of these findings is that managers who are more receptive to CSR are more inclined to accept a broader range of CSR demands when faced with them, but still experience difficulty determining which CSR demands to follow when stakeholders differ on the same CSR issue.

Alongside managerial CSR receptivity, we find that managers are also less influenced by heterogeneity in stakeholder pressure when shareholders are receptive to CSR. We proxy shareholder CSR receptivity as the average past share of votes in favor of shareholder proposals.¹⁴ We find that shareholder CSR receptivity positively moderates the impact of both issue and stakeholder heterogeneity on firms' substantive CSR adoption. For heterogeneity in stakeholder pressure across issues (stakeholders), we find that a one-standard-deviation increase in shareholder CSR receptivity attenuates 35.9% (34.3%) of the negative impact of heterogeneity in issue stakeholder pressure on substantive CSR adoption.¹⁵

An interpretation of these findings is that managers feel more freedom to adopt heterogeneous stakeholder demands when their stakeholders are more receptive to CSR. On the issue

¹³In Column (4), multiply the interaction effect coefficient of 0.473 by the standard deviation of managerial CSR receptivity (27.6%) and divide it by the -0.316 effect of lagged heterogeneous stakeholder pressure across issues on substantive CSR adoption, or $\frac{0.473 \times 0.276}{-0.316} = 41.3\%$.

¹⁴Since not all shareholder proposals come to a vote, and thus have a past voting record, we lose 12.0% of observations in our analysis.

¹⁵In Column (4), multiply the interaction effect coefficient of 0.819 by the standard deviation of managerial CSR receptivity (20.3%) and divide it by the -0.463 effect of lagged heterogeneous stakeholder pressure across issues on substantive CSR adoption, or $\frac{0.819 \times 0.203}{-0.463} = 35.9\%$. For heterogeneity across stakeholders in Column (8), we get $\frac{0.783 \times 0.203}{-0.464} = 34.3\%$

heterogeneity side, management might feel enabled to pursue multiple CSR aspects. On the stakeholder heterogeneity side, management could feel empowered to pursue more CSR even though the reputational or other benefits associated with it would likely be less.

4.4 CSR Consequences of heterogeneous stakeholder pressure

Although we provide evidence that heterogeneity in stakeholder pressure leads firms to adopt CSR less substantively, we have not showcased its magnitude on firms' symbolic and substantive environmental and social performance. Table VII analyzes this magnitude on an array of critical CSR indicators. We chose these indicators in CSR dimensions where we could directly compare firms' policies with realized outcomes or controversies.

Firms begin to extensively report on a wide range of CSR issues once they face heterogeneous stakeholder pressure. In Panels A and B, we analyze the effects of lagged heterogeneous stakeholder pressure on firms' policies on resource reduction, energy efficiency, environmental supply chain management, CO₂ emissions, health & safety, human rights, employee training, and customer health & safety. We find that either types of heterogeneous CSR pressure increase the likelihood that firms adopt these policies. Increases in the likelihood of policy adoption range from 3.42% for health & safety policies to 12.1% for CO₂ emission policies.

Firms begin to extensively report on a wide range of CSR issues once they face heterogeneous stakeholder pressure. In Panels A and B, we analyze the effects of lagged heterogeneous stakeholder pressure on firms' policies on resource reduction, energy efficiency, environmental supply chain management, CO₂ emissions, health & safety, human rights, employee training, and customer health & safety. We find that either types of heterogeneous CSR pressure increase the likelihood that firms adopt these policies. Increases in the likelihood of policy adoption range from 3.42% for health & safety policies to 12.1% for CO₂ emission policies.

Conversely, firms perform worse on CSR when they faced heterogeneity in stakeholder pressure. In Panel C, we find that issue heterogeneity is generally associated with more volatile organic compound or particulate matter emissions, more worker accidents, lower employee satisfaction, and more wage & working condition and consumer complaint controversies. Similarly, Panel D shows that stakeholder heterogeneity increases environmental controversies,

volatile organic compound or particulate matter emissions, worker accidents, wage & working condition controversies, and consumer complaint controversies. The combination of more CSR policies and worse CSR performance strongly indicates that firms engage in CSR less substantively and, if anything, take a more symbolic stance.

4.5 Financial Consequences of heterogeneous stakeholder pressure

Alongside consequences on environmental and social dimensions, heterogeneity in stakeholder pressure is likely to reduce financial performance. Some managers respond to stakeholder pressure in an instrumental or profit-optimizing manner (Vishwanathan et al., 2020). When stakeholder pressure is heterogeneous across CSR issues, managerial attention might be split, leading to lower returns (Ocasio and Joseph, 2005). When stakeholder pressure becomes heterogeneous across stakeholders, reputational and legitimacy benefits could also be lower as fewer stakeholders are satisfied when firms adopt CSR (Durand, Hawn and Ioannou, 2019; Philippe and Durand, 2011; Zavyalova et al., 2012, 2016). Given the above, we expect financial performance to be lower for firms facing heterogeneous CSR pressure.

Table VIII displays mixed results on the relationship between heterogeneous stakeholder pressure and financial performance. We measure financial performance in three ways: excess stock returns, Fama and French (1993) 3-factor alphas, and Fama and French (2015) 5-factor alphas.¹⁶ We find that lagged issue heterogeneity is negatively associated with financial performance in some but not all specifications. Columns (1) and (2) show significantly lower financial performance in the year following greater exposure to issue-level heterogeneity. A one-standard-deviation increase in issue heterogeneity reduces annualized excess returns and 3-Factor alphas by 1.45% and 0.80%. However, we do not observe significant financial consequences when measuring financial performance using a 5-Factor model. Moreover, we do not observe significant heterogeneity across stakeholder groups in Columns (4) to (6) across all specifications.

¹⁶Factor-adjusted alphas offer a more robust assessment of financial performance than simpler metrics such as excess returns, Tobin's Q, or accounting-based returns, as they account for exposures to market, size, value/growth, profitability, and reinvestment risk factors, analogous to estimating Tobin's Q while controlling for these underlying sources of risk. We calculate firm-level financial outperformance by regressing equally weighted USD stock returns on Kenneth French's factor returns, using a 3-year rolling window (Fama and French, 2015). All financial performance measures are winsorized at the 5th and 95th percentiles to limit the influence of outliers.

Given the mixed nature of our results, we argue that heterogeneity in stakeholder pressure is associated with financial performance in a neutral, and possibly somewhat negative, manner. This, combined with negative environmental and social implications, suggests that heterogeneity in stakeholder pressure is not beneficial for either stakeholder or firm.

5 Discussion & Conclusion

Understanding the conditions under which stakeholders effectively influence firm behavior remains a central question in stakeholder theory (Freeman and Reed, 1983; Freeman, 1999; Mitchell et al., 1997). While prior work suggests that increased stakeholder pressure generally leads firms to respond substantively, we highlight an underexplored barrier: heterogeneity in stakeholder pressure. Such heterogeneity, whether across CSR issues or among stakeholder groups, can constrain firms from adopting a broader substantive CSR agenda, ultimately leading to weaker sustainability and financial outcomes. Building on recent literature that examines stakeholder heterogeneity (Asmussen and Fosfuri, 2019; Crilly et al., 2016; Hou and Poliquin, 2023; Luo et al., 2017; Mohliver et al., 2023; Wang et al., 2018), we formalize the mechanisms through which this heterogeneity shapes corporate decision-making. Specifically, we develop a theoretical framework in which heterogeneity across issues or stakeholders reduces firms' ability to respond substantively to CSR pressures. In doing so, our work contributes to the broader literature on how CSR antecedents shape CSR approaches (Li and Lu, 2020; Luo et al., 2017), and how these approaches in turn influence sustainable and financial outcomes (Barnett et al., 2020; Friede et al., 2015; Nardi, 2022; Wickert et al., 2016; Wickert, 2021). By focusing on how stakeholder pressure is applied, our theory provides a mediating mechanism that links antecedents to outcomes. It also helps explain the persistent gap between rising stakeholder demands and limited corporate sustainability: the challenge is not only firm unwillingness, but also the uncoordinated and diffuse nature of stakeholder demands (Barnett, 2019; Barnett et al., 2020).

We empirically examine the role of stakeholder pressure heterogeneity by linking CSR antecedents, approaches, and outcomes for U.S. firms over a 17-year period. Using a novel

method to quantify firms' substantive and symbolic CSR efforts, we find that greater heterogeneity in stakeholder pressure leads firms to adopt CSR more symbolically and less substantively. This relationship holds for heterogeneity across both issues and stakeholder groups. The effect is most attenuated when stakeholders form coalitions and jointly advocate for specific issues, suggesting that coordination enhances the effectiveness of stakeholder pressure. These results remain robust to an instrumental variables approach using exogenous "waves" of shareholder proposals (Flammer et al., 2019, 2021). Furthermore, we document that heterogeneous pressure exacerbates firms' emissions, labor standards violations, and CSR-related controversies. From a financial perspective, issue-level heterogeneity is associated with weaker performance. These findings suggest that more focused stakeholder pressure may render CSR efforts more profitable, thereby increasing firms' incentives to respond substantively. Overall, our results underscore that the effects of stakeholder pressure depend not only on whether firms face pressure, but also on how that pressure is applied.

Our analysis implies that ineffective sustainable performance often results not just from firm behavior, but from the interplay between firms and stakeholders. While much of the management literature places the onus of weak CSR implementation on firms themselves (Barnett, 2019; Barnett et al., 2020; Vishwanathan et al., 2020), our findings highlight that fragmented and heterogeneous stakeholder demands also play a central role. When stakeholders advocate for a wide array of conflicting issues, they may unintentionally reduce the total amount of substantive CSR a firm can pursue. Thus, both the instrumental view of firm strategy and the stakeholder-driven environment in which firms operate shape CSR outcomes.

In practice, stakeholders devote considerable resources to pressuring firms to improve sustainability outcomes, yet these efforts are often ineffective (Barnett, 2019). Our study suggests that coordinated stakeholder coalitions are more likely to succeed. By aligning around shared goals, coalitions reduce heterogeneity, more effectively allocate pressure, and avoid the inefficiencies that arise when individual stakeholders must infer the priorities of others. Moreover, such coalitions can pool resources to target a broader set of firms.

Given the breadth of our study, some dimensions of heterogeneity remain unaddressed. In particular, we focus on macro-level heterogeneity across firms, leaving aside micro-level vari-

ation within organizations. Future research could investigate how heterogeneous stakeholder demands manifest inside the firm and shape managerial perceptions, internal alignment, and decision-making processes. Such work could illuminate additional pathways through which stakeholder heterogeneity influences CSR outcomes.

Further research might also extend stakeholder theory by moving beyond single-stakeholder models toward dynamic, multi-stakeholder frameworks. Traditional approaches emphasize how individual stakeholders vary in salience and influence on specific issues (Freeman and Reed, 1983; Mitchell et al., 1997). Yet stakeholder power is inherently relational; its impact depends on the presence and actions of other stakeholders, particularly when demands conflict (Pache and Santos, 2010). Our study represents an initial step toward modeling this complexity; however, further theoretical and empirical developments are necessary to understand its boundaries and implications fully.

Finally, we call for closer attention to the temporal dynamics of heterogeneous stakeholder pressure. Stakeholder agendas shift with sociopolitical developments and cultural movements. For example, long-standing concerns over racial equity gained renewed urgency following George Floyd; environmental issues surged after the Paris Agreement; gender equality drew focus during the #MeToo movement; and DEI efforts faced backlash following the 2020 U.S. presidential election. These episodic surges in stakeholder attention underscore the need for future research to investigate whether heterogeneous demands cluster around core strategic domains or more peripheral concerns—and how firms adjust their CSR responses in response to such temporal variation.

Bibliography

- Agle, B. R., Mitchell, R. K. and Sonnenfeld, J. A. (1999). Who matters to CEOs? An investigation of stakeholder attributes and salience, *Academy of Management Journal* **42**(5): 507–525.
- Ahn, B. H., Patatoukas, P. N. and Skiadopoulos, G. S. (2024). Material ESG alpha: A fundamentals-based perspective, *Accounting Review* pp. 1–27.
- Andrews, I., Stock, J. H. and Sun, L. (2019). Weak instruments in instrumental variables regression: Theory and practice, *Annual Review of Economics* **11**(1): 727–753.
- Asmussen, C. G. and Fosfuri, A. (2019). Orchestrating corporate social responsibility in the multinational enterprise, *Strategic Management Journal* **40**(6): 894–916.

- Bansal, P., Kim, A. and Wood, M. O. (2018). Hidden in plain sight: The importance of scale in organizations' attention to issues, *Academy of Management Review* **43**(2): 217–241.
- Barnett, M. L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility, *Academy of Management Review* **32**(3): 794–816.
- Barnett, M. L. (2019). The business case for corporate social responsibility: A critique and an indirect path forward, *Business & Society* **58**(1): 167–190.
- Barnett, M. L., Henriques, I. and Husted, B. W. (2020). Beyond good intentions: Designing CSR initiatives for greater social impact, *Journal of Management* **46**(6): 937–964.
- Baron, D. P. (2009). A positive theory of moral management, social pressure, and corporate social performance, *Journal of Economics & Management Strategy* **18**(1): 7–43.
- Bauer, R., Ruof, T. and Smeets, P. (2021). Get real! individuals prefer more sustainable investments, *Review of Financial Studies* **34**(8): 3976–4043.
- Bosse, D. A., Phillips, R. A. and Harrison, J. S. (2009). Stakeholders, reciprocity, and firm performance, *Strategic Management Journal* **30**(4): 447–456.
- Bothello, J., Ioannou, I., Porumb, V.-A. and Zengin-Karaibrahimoglu, Y. (2023). CSR decoupling within business groups and the risk of perceived greenwashing, *Strategic Management Journal* **44**(13): 3217–3251.
- Bromley, P. and Powell, W. W. (2012). From smoke and mirrors to walking the talk: Decoupling in the contemporary world, *Academy of Management Annals* **6**(1): 483–530.
- Buchanan, S., Zietsma, C. and Matten, D. (2023). Settlement constellations and the dynamics of fields formed around social and environmental issues, *Organization Science* **34**(2): 700–721.
- Bundy, J. and Pfarrer, M. D. (2015). A burden of responsibility: The role of social approval at the onset of a crisis, *Academy of Management Review* **40**(3): 345–369.
- Bundy, J., Shropshire, C. and Buchholtz, A. K. (2013). Strategic cognition and issue salience: Toward an explanation of firm responsiveness to stakeholder concerns, *Academy of Management Review* **38**(3): 352–376.
- Chuah, K., DesJardine, M. R., Goranova, M. and Henisz, W. J. (2024). Shareholder activism research: A system-level view, *Academy of Management Annals* **18**(1): 82–120.
- Connelly, B. L., DesJardine, M. R., Shi, W. and Sun, Z. (2024). Corporate social responsibility in the age of activist directorships, *Strategic Management Journal* .
- Crilly, D., Hansen, M. and Zollo, M. (2016). The grammar of decoupling: A cognitive-linguistic perspective on firms' sustainability claims and stakeholders' interpretation, *Academy of Management Journal* **59**(2): 705–729.
- Crilly, D. and Sloan, P. (2012). Enterprise logic: Explaining corporate attention to stakeholders from the 'inside-out', *Strategic Management Journal* **33**(10): 1174–1193.

- Dasgupta, S., Huynh, T. D. and Xia, Y. (2023). Joining forces: The spillover effects of EPA enforcement actions and the role of socially responsible investors, *Review of Financial Studies* **36**(9): 3781–3824.
- DesJardine, M. R., Shi, W. and Marti, E. (2024). The corporate opportunity structure for shareholder activism: How activist hedge funds exploit board demographic diversity, *Organization Science* **35**(2): 644–666.
- DesJardine, M. R., Shi, W. and Sun, Z. (2022). Different horizons: The effects of hedge fund activism versus corporate shareholder activism on strategic actions, *Journal of Management* **48**(7): 1858–1887.
- Dewan, Y., Simons, T. and Wernicke, G. (2024). The ideological imperative: Corporate social responsibility and news media coverage of firms, *Organization Science* **35**(5): 1930–1955.
- Dimson, E., Karakaş, O. and Li, X. (2015). Active ownership, *Review of Financial Studies* **28**(12): 3225–3268.
- Donaldson, T. and Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications, *Academy of Management Review* **20**(1): 65–91.
- Dorobantu, S., Kaul, A. and Zelner, B. (2017). Nonmarket strategy research through the lens of new institutional economics: An integrative review and future directions, *Strategic Management Journal* **38**(1): 114–140.
- Durand, R., Hawn, O. and Ioannou, I. (2019). Willing and able: A general model of organizational responses to normative pressures, *Academy of Management Review* **44**(2): 299–320.
- Durand, R., Paugam, L. and Stolowy, H. (2019). Do investors actually value sustainability indices? Replication, development, and new evidence on csr visibility, *Strategic Management Journal* **40**(9): 1471–1490.
- Fama, E. F. and French, K. R. (1993). Common risk factors in the returns on stocks and bonds, *Journal of Financial Economics* **33**(1): 3–56.
- Fama, E. F. and French, K. R. (2015). A five-factor asset pricing model, *Journal of Financial Economics* **116**(1): 1–22.
- Ferraro, F., Etzion, D. and Gehman, J. (2015). Tackling grand challenges pragmatically, *Academy of Management Journal* **58**(2): 363–390.
- Flammer, C. (2013). Corporate social responsibility and shareholder reaction: The environmental awareness of investors, *Academy of Management Journal* **56**(3): 758–781.
- Flammer, C. (2015). Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach, *Management Science* **61**(11): 2549–2568.
- Flammer, C., Hong, B. and Minor, D. (2019). Corporate governance and the rise of integrating corporate social responsibility criteria in executive compensation: Effectiveness and implications for firm outcomes, *Strategic Management Journal* **40**(7): 1097–1122.
- Flammer, C., Toffel, M. W. and Viswanathan, K. (2021). Shareholder activism and firms' voluntary disclosure of climate change risks, *Strategic Management Journal* **42**(10): 1850–1879.

- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*, Cambridge university press.
- Freeman, R. E. (1999). Divergent stakeholder theory, *Academy of Management Review* **24**(2): 233–236.
- Freeman, R. E. and Reed, D. L. (1983). Stockholders and stakeholders: A new perspective on corporate governance, *California Management Review* **25**(3): 88–106.
- Friede, G., Busch, T. and Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies, *Journal of Sustainable Finance & Investment* **5**(4): 210–233.
- Frooman, J. (1999). Stakeholder influence strategies, *Academy of Management Review* **24**(2): 191–205.
- Gantchev, N. and Giannetti, M. (2021). The costs and benefits of shareholder democracy: Gadflies and low-cost activism, *Review of Financial Studies* **34**(12): 5629–5675.
- Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: A risk management perspective, *Academy of Management Review* **30**(4): 777–798.
- Godfrey, P. C., Merrill, C. B. and Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis, *Strategic Management Journal* **30**(4): 425–445.
- Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R. and Lounsbury, M. (2011). Institutional complexity and organizational responses, *Academy of Management Annals* **5**(1): 317–371.
- Grimm, J. and Reinecke, J. (2024). Collaborating on the edge of failure: Frame alignment across multiple interaction arenas in multi-stakeholder partnerships, *Academy of Management Journal* **67**(4): 956–990.
- Gupta, A., Briscoe, F. and Hambrick, D. C. (2017). Red, blue, and purple firms: Organizational political ideology and corporate social responsibility, *Strategic Management Journal* **38**(5): 1018–1040.
- Haack, P., Schoeneborn, D. and Wickert, C. (2012). Talking the talk, moral entrapment, creeping commitment, *Organization Studies* **33**(5–6): 815–845.
- Hair, J. F. (2013). *Multivariate data analysis*, Pearson.
- Hambrick, D. C. and Mason, P. A. (1984). Upper Echelons: The organization as a reflection of its top managers, *Academy of Management Review* **9**(2): 193–206.
- Hambrick, D. C. and Schecter, S. M. (1983). Turnaround strategies for mature industrial-product business units, *Academy of Management Journal* **26**(2): 231–248.
- Harrison, J. S. and Wicks, A. C. (2013). Stakeholder theory, value, and firm performance, *Business Ethics Quarterly* **23**(1): 97–124.
- Hart, S. L. (1995). A natural-resource-based view of the firm, *Academy of Management Review* **20**(4): 986–1014.

- Henisz, W. J., Dorobantu, S. and Nartey, L. J. (2014). Spinning gold: The financial returns to stakeholder engagement, *Strategic Management Journal* **35**(12): 1727–1748.
- Hirschman, A. O. (1964). The paternity of an index., *American Economic Review* **54**(5).
- Hou, Y. and Poliquin, C. W. (2023). The effects of CEO activism: Partisan consumer behavior and its duration, *Strategic Management Journal* **44**(3): 672–703.
- Hsu, P.-H., Li, K. and Tsou, C.-Y. (2023). The pollution premium, *Journal of Finance* **78**(3): 1343–1392.
- Husted, B. W. and de Jesus Salazar, J. (2006). Taking Friedman seriously: Maximizing profits and social performance, *Journal of Management Studies* **43**(1): 75–91.
- Jain, A. K. (2010). Data clustering: 50 years beyond k-means, *Pattern Recognition Letters* **31**(8): 651–666.
- Ketchen, D. J. and Shook, C. L. (1996). The application of cluster analysis in strategic management research: An analysis and critique, *Strategic Management Journal* **17**(6): 441–458.
- King, B. G. and Soule, S. A. (2007). Social movements as extra-institutional entrepreneurs: The effect of protests on stock price returns, *Administrative Science Quarterly* **52**(3): 413–442.
- Lange, T., Roth, V., Braun, M. L. and Buhmann, J. M. (2004). Stability-based validation of clustering solutions, *Neural Computation* **16**(6): 1299–1323.
- Li, S. and Lu, J. W. (2020). A dual-agency model of firm CSR in response to institutional pressure: Evidence from Chinese publicly listed firms, *Academy of Management Journal* **63**(6): 2004–2032.
- Luo, X. R., Wang, D. and Zhang, J. (2017). Whose call to answer: Institutional complexity and firms' CSR reporting, *Academy of Management Journal* **60**(1): 321–344.
- MacQueen, J. (1967). Some methods for classification and analysis of multivariate observations, *Proceedings of the fifth Berkeley symposium on mathematical statistics and probability*, number 14, Oakland, CA, USA, pp. 281–297.
- Margolis, J. D. and Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business, *Administrative science quarterly* **48**(2): 268–305.
- Marquis, C. and Qian, C. (2014). Corporate social responsibility reporting in China: Symbol or substance?, *Organization science* **25**(1): 127–148.
- McDonnell, M.-H., King, B. G. and Soule, S. A. (2015). A dynamic process model of private politics: Activist targeting and corporate receptivity to social challenges, *American Sociological Review* **80**(3): 654–678.
- McKean, A. E. and King, B. G. (2024). When ideologies align: Progressive corporate activism and within-firm ideological alignment, *Strategic Management Journal* **45**(12): 2459–2518.
- McWilliams, A. and Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective, *Academy of Management Review* **26**(1): 117–127.

- Mitchell, R. K., Agle, B. R. and Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts, *Academy of Management Review* **22**(4): 853–886.
- Mohliiver, A., Crilly, D. and Kaul, A. (2023). Corporate social counterpositioning: How attributes of social issues influence competitive response, *Strategic Management Journal* **44**(5): 1199–1217.
- Nardi, L. (2022). The corporate social responsibility price premium as an enabler of substantive CSR, *Academy of Management Review* **47**(2): 282–308.
- Ocasio, W. (1997). Towards an attention-based view of the firm, *Strategic Management Journal* **18**(S1): 187–206.
- Ocasio, W. and Joseph, J. (2005). An attention-based theory of strategy formulation: Linking micro-and macroperspectives in strategy processes, *Strategy Process*, Emerald Group Publishing Limited, pp. 39–61.
- Odziemkowska, K. and McDonnell, M.-H. (2024). Ripple effects: How collaboration reduces social movement contention, *Strategic Management Journal* **45**(4): 775–806.
- Odziemkowska, K. and Zhu, Y. (2025). How social movements catalyze firm innovation, *Organization Science* **36**(4): 1221–1241.
- Oliver, C. (1991). Strategic responses to institutional processes, *Academy of Management Review* **16**(1): 145–179.
- Ou, A. Y., Lu, Q., Li, X., Chi-Nien, C. and Chen, G. (2024). CEO humility and corporate social irresponsibility: Evidence based on a new unobtrusive measure, *Organization Science* **35**(6): 2016–2039.
- Pache, A.-C. and Santos, F. (2010). When worlds collide: The internal dynamics of organizational responses to conflicting institutional demands, *Academy of Management Review* **35**(3): 455–476.
- Parmar, B. L., Freeman, R. E., Harrison, J. S., Wicks, A. C., Purnell, L. and De Colle, S. (2010). Stakeholder theory: The state of the art, *Academy of Management Annals* **4**(1): 403–445.
- Penrose, E. T. (1959). *The Theory of the Growth of the Firm*, Oxford university press.
- Philippe, D. and Durand, R. (2011). The impact of norm-conforming behaviors on firm reputation, *Strategic Management Journal* **32**(9): 969–993.
- Poliquin, C. and Hou, Y. (2025). Policymaker responses to CEO activism, *Organization Science* **36**(6): 2416–2434.
- Punj, G. and Stewart, D. W. (1983). Cluster analysis in marketing research: Review and suggestions for application, *Journal of Marketing Research* **20**(2): 134–148.
- Qian, C., Crilly, D., Lin, Y., Zhang, K. and Zhang, R. (2023). Short-selling pressure and workplace safety: Curbing short-termism through stakeholder interdependencies, *Organization Science* **34**(1): 358–379.

- Ren, C., Hu, Y. and Yang, H. (2023). Attention allocation and issue competition in corporate social responsibility, *Organization Science* .
- Ringov, D., Asija, A., Joseph, J. and Szulanski, G. (2026). Dual Demands, Attention, and Organizational learning: Spatial and temporal replication of routines in scaling organizations, *Organization Science* .
- Rowley, T. J. (1997). Moving beyond dyadic ties: A network theory of stakeholder influences, *Academy of management Review* **22**(4): 887–910.
- Seo, H. (2025). Counter-Activism against ideological opponents: Evidence based on the competitive dynamics of corporate engagement in advocacy giving, *Organization Science* **36**(4): 1333–1356.
- Shin, S., Lee, J. and Bansal, P. (2022). From a shareholder to stakeholder orientation: Evidence from the analyses of CEO dismissal in large US firms, *Strategic Management Journal* **43**(7): 1233–1257.
- Slager, R., Chuah, K., Gond, J.-P., Furnari, S. and Homanen, M. (2023). Tailor-to-target: Configuring collaborative shareholder engagements on climate change, *Management Science* **69**(12): 7693–7718.
- Tibshirani, R., Walther, G. and Hastie, T. (2001). Estimating the number of clusters in a data set via the gap statistic, *Journal of the Royal Statistical Society: Series B (Statistical Methodology)* **63**(2): 411–423.
- Van der Kroft, B., Palacios, J., Rigobon, R. and Zheng, S. (2024). Timing sustainable engagement in real asset investments, *Technical report*, National Bureau of Economic Research.
- Vishwanathan, P., Van Oosterhout, H., Heugens, P. P., Duran, P. and Van Essen, M. (2020). Strategic CSR: A concept building meta-analysis, *Journal of Management Studies* **57**(2): 314–350.
- Wang, R., Wijen, F. and Heugens, P. P. (2018). Government’s green grip: Multifaceted state influence on corporate environmental actions in china, *Strategic Management Journal* **39**(2): 403–428.
- Wickert, C. (2021). Corporate social responsibility research in the Journal of Management Studies: A shift from a business-centric to a society-centric focus, *Journal of Management Studies* **58**(8): E1–E17.
- Wickert, C., Scherer, A. G. and Spence, L. J. (2016). Walking and talking corporate social responsibility: Implications of firm size and organizational cost, *Journal of Management Studies* **53**(7): 1169–1196.
- Wittkowski, K. M., Lee, E., Nussbaum, R., Chamian, F. N. and Krueger, J. G. (2004). Combining several ordinal measures in clinical studies, *Statistics in Medicine* **23**(10): 1579–1592.
- Xu, Q. and Kim, T. (2021). Financial Constraints and Corporate Environmental Policies, *Review of Financial Studies* **35**(2): 576–635.
URL: <https://doi.org/10.1093/rfs/hhab056>

- Xu, R. and Wunsch, D. (2005). Survey of clustering algorithms, *IEEE Transactions on neural networks* **16**(3): 645–678.
- Zavyalova, A., Pfarrer, M. D., Reger, R. K. and Hubbard, T. D. (2016). Reputation as a benefit and a burden? How stakeholders' organizational identification affects the role of reputation following a negative event, *Academy of Management Journal* **59**(1): 253–276.
- Zavyalova, A., Pfarrer, M. D., Reger, R. K. and Shapiro, D. L. (2012). Managing the message: The effects of firm actions and industry spillovers on media coverage following wrongdoing, *Academy of Management Journal* **55**(5): 1079–1101.

Table I: Validation of symbolic and substantive CSR scores using EPA TRI data

This table validates the symbolic and substantive CSR scores of firms using established measures of symbolic and substantive environmental performance for US heavy manufacturing firms in the EPA Pollution Prevention (P2), Toxic Releases, and Environmental Fines (ECHO) data, see Xu and Kim (2021), Dasgupta et al. (2023), and Hsu et al. (2023). Columns (1) to (2), regresses symbolic and substantive CSR scores on the natural logarithm of pollution prevention activities. These activities reflect firms' symbolic environmental performance as they are tangible but do not necessarily involve material actions that firms undertake to reduce pollution. Columns (3) to (4) follow similar regressions for log toxic releases, reflecting firms' actual air, land, and water emissions. Columns (5) to (6) consider the number of EPA penalties as the dependent variable. The number of observations differs, as all plants are required to report their toxic releases, while few engage in pollution prevention activities, and even fewer are fined for violating environmental laws. We have a higher number of observations here than in the main sample, as we conduct the analysis at the plant or plant-chemical level rather than the firm level. Plant-chemical clustered standard errors are given in parentheses. *, ** and *** denote significance at the 10%, 5% and 1% level, respectively.

VARIABLES	Pollution Prevention		ln(Toxic Release)		Penalties	
	(1)	(2)	(3)	(4)	(5)	(6)
Symbolic CSR	0.078*** (0.007)		0.129*** (0.011)		0.005*** (0.001)	
Substantive CSR		-0.039*** (0.006)		-0.063*** (0.011)		-0.010*** (0.003)
Observations	7,225	7,225	61,178	61,178	1,221	1,221
Adjusted R-squared	0.045	0.007	0.008	0.001	0.006	0.012

Table II: Summary Statistics

Table II Panels A and B provide information on the heterogeneity in shareholder proposals across issues and stakeholders. We use ISS classifications of proponents and CSR issues, and display the frequency (Panel A) and support at the vote (Panel B) for the 9 shareholder groups and the most common CSR issues. Dashes indicate no observations in a combination of stakeholders and CSR issues. Panel C presents summary statistics for the main variables in this paper, which are directly used in the regression analyses. Return on assets is winsorized at the 5th and 95th percentiles. Leverage is set to the smallest non-negative number when it is negative (a few smaller firms have negative equity).

Panel A: Frequency of proposals											
		CSR Issues									
		Human Rights	Water & Agriculture	Climate Change	GGH Emissions	Sustainability Reporting	Lobbying	Discrimination	Public Health	DEI	Total
Stakeholder groups	Religious	2.29%	1.15%	1.69%	1.42%	0.95%	3.81%	0.31%	0.54%	0.29%	12.45%
	Union	0.35%	-	0.23%	0.04%	0.23%	2.60%	-	-	0.10%	3.55%
	NGO	0.33%	0.80%	1.30%	1.07%	0.16%	0.47%	-	0.52%	1.01%	5.67%
	Individual	0.58%	0.29%	1.11%	0.56%	0.19%	2.76%	0.12%	0.49%	0.19%	6.29%
	Other Company	0.06%	0.06%	0.45%	0.29%	0.21%	0.37%	-	0.06%	0.60%	2.10%
	SRI fund	1.07%	1.98%	1.48%	1.90%	2.99%	6.12%	1.46%	0.60%	1.09%	18.70%
	Mutual Fund	1.28%	2.47%	2.23%	2.74%	3.90%	8.70%	1.69%	0.76%	1.44%	25.21%
	Pension Fund	0.87%	0.45%	0.62%	1.59%	2.00%	7.22%	2.70%	0.12%	0.99%	16.55%
	Other	0.49%	0.60%	1.20%	1.22%	0.60%	4.08%	0.37%	0.29%	0.64%	9.48%
Total		7.76%	7.09%	9.99%	10.68%	10.50%	37.85%	6.71%	3.41%	6.01%	100.00%
Panel B: Proposal voting support											
		CSR Issues									
		Human Rights	Water & Agriculture	Climate Change	GGH Emissions	Sustainability Reporting	Lobbying	Discrimination	Public Health	DEI	Total
Stakeholder groups	Religious	17.66%	19.10%	27.89%	21.97%	24.81%	26.64%	18.15%	22.80%	27.28%	23.72%
	Union	13.90%	-	7.82%	52.89%	33.16%	27.43%	-	-	21.73%	26.34%
	NGO	12.68%	23.80%	24.53%	35.03%	7.42%	23.86%	-	21.53%	43.87%	26.21%
	Individual	10.79%	21.74%	22.29%	21.79%	14.82%	28.21%	3.15%	12.74%	30.43%	23.23%
	Other Company	9.14%	6.80%	32.95%	33.88%	28.22%	27.29%	-	17.68%	47.03%	32.02%
	SRI fund	7.10%	22.68%	23.21%	25.29%	28.37%	24.09%	36.78%	15.16%	28.75%	23.69%
	Mutual Fund	10.26%	24.35%	24.81%	28.09%	27.88%	25.42%	37.45%	16.00%	32.06%	25.26%
	Pension Fund	18.36%	22.34%	30.66%	28.24%	24.33%	27.34%	32.65%	5.55%	32.91%	27.48%
	Other	16.51%	18.61%	29.10%	28.64%	34.41%	29.68%	22.58%	11.74%	32.79%	28.00%
Total		13.92%	21.97%	26.58%	26.93%	26.45%	26.69%	29.86%	15.35%	33.64%	25.50%
Panel C: Summary Statistics											
Variable Name							Mean	s.d.	Min	Max	N
Key measures											
Number of Proposals per Ballot							2.57	2.43	1.00	27.00	785
Strategic CSR							42.80%	49.51%	0.00%	100%	785
Heterogeneity Issues _{<i>t-1</i>}							29.95%	33.13%	0.00%	94.00%	785
Heterogeneity Stakeholders _{<i>t-1</i>}							29.54%	31.14%	0.00%	86.00%	785
Cooperation & Issue Salience											
Cooperation _{<i>t-1</i>}							28.66%	63.14%	0.00%	100.00%	785
Managerial salience external _{<i>t-1</i>}							36.90%	20.29%	1.00%	98.36%	785
Managerial salience internal _{<i>t-1</i>}							27.56%	27.61%	0.00%	100.00%	691
Managerial Controls											
CEO age _{<i>t-1</i>}							57.47	6.54	30.00	80.00	785
CEO tenure _{<i>t-1</i>}							9.72	4.48	1.00	20.00	785
CEO gender _{<i>t-1</i>}							97.20%	16.52%	0.00%	100.00%	785
CEO share of salary compensation _{<i>t-1</i>}							14.43%	15.12%	0.00%	100.00%	785
Firm Controls											
Firm size _{<i>t-1</i>}							23.12	1.66	14.52	26.32	785
Firm leverage _{<i>t-1</i>}							2.20	3.53	0.03	27.02	785
Firm ROA _{<i>t-1</i>}							6.44%	5.95%	-8.17%	17.86%	785

Table III: Heterogeneity in stakeholder and topic pressure

Table III shows the effect of heterogeneity in stakeholder pressure across issues and stakeholders on the probability of a firm adopting substantive CSR. It does so using an OLS setting (Panel A) and a 2SLS setting using proposal waves as an instrument (Panel B). US firms are often engaged on a multitude of issues (diverse social and environmental issues) by diverse stakeholders (i.e., institutional investors, NGOs, labor unions, and religious organizations) through shareholder proposals. In Columns (1) to (4) and (5) to (8), we respectively analyze the effect of variation in issues and stakeholders filling these proposals as a measure of imprecision. Specifically, we compute one minus the Herfindahl-Hirschman Index (HHI) on issues and stakeholders, respectively. We employ increasingly stringent controls, with Columns (2) introducing manager controls that include lagged CEO age, gender, tenure, and salary over total compensation; Columns (3) also correcting for firm controls spanning lagged size (log total assets), return on assets, leverage, and firm age; and Columns (4) adding year and industry fixed effects. All specifications include firms' lagged substantive CSR scores. CSR approach clustered standard errors are given in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Panel A: OLS								
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Heterogeneity Issues _{<i>t</i>-1}	-0.307** (0.121)	-0.306*** (0.113)	-0.231*** (0.089)	-0.233*** (0.074)				
Heterogeneity Stakeholders _{<i>t</i>-1}					-0.311*** (0.105)	-0.310*** (0.093)	-0.232*** (0.064)	-0.240*** (0.043)
Substantive CSR score _{<i>t</i>-1}	0.045*** (0.013)	0.042*** (0.013)	0.038*** (0.009)	0.026 (0.018)	0.047*** (0.015)	0.044*** (0.015)	0.039*** (0.011)	0.028 (0.020)
Observations	785	785	785	785	785	785	785	785
Adjusted R-squared	0.087	0.098	0.127	0.202	0.083	0.095	0.126	0.202
Manager controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Firm controls	No	No	Yes	Yes	No	No	Yes	Yes
Year + Industry FE	No	No	No	Yes	No	No	No	Yes
Panel B: Proposal Wave 2SLS								
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Heterogeneity Issues _{<i>t</i>-1}	-0.444*** (0.146)	-0.422*** (0.124)	-0.309*** (0.114)	-0.235*** (0.091)				
Heterogeneity Stakeholders _{<i>t</i>-1}					-0.713*** (0.169)	-0.678*** (0.139)	-0.529*** (0.137)	-0.416*** (0.134)
Substantive CSR score _{<i>t</i>-1}	0.041*** (0.010)	0.039*** (0.010)	0.036*** (0.007)	0.026* (0.014)	0.037*** (0.012)	0.035*** (0.012)	0.034*** (0.009)	0.024 (0.015)
Observations	785	785	785	785	785	785	785	785
Manager controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Firm controls	No	No	Yes	Yes	No	No	Yes	Yes
Year + Industry FE	No	No	No	Yes	No	No	No	Yes

Table IV: Instrument Strength Test: First-Stage

Table IV tests the strength of our proposal wave instrument in a first-stage regression. We do so for both heterogeneity across issues as well as heterogeneity across stakeholders in Panels A and B, respectively. We employ increasingly stringent controls, with Columns (2) introducing manager controls that include lagged CEO age, gender, tenure, and salary over total compensation; Columns (3) also correcting for firm controls spanning lagged size (log total assets), return on assets, leverage, and firm age; and Columns (4) adding year and industry fixed effects. All specifications include firms' lagged substantive CSR scores. CSR approach clustered standard errors are given in parentheses. *, ** and *** denote significance at the 10%, 5% and 1% level, respectively.

Panel A: Heterogeneity Issues_{<i>t-1</i>}				
VARIABLES	(1)	(2)	(3)	(4)
Proposal Wave _{<i>t-1</i>}	0.227*** (0.025)	0.227*** (0.022)	0.196*** (0.017)	0.193*** (0.014)
Substantive CSR score _{<i>t-1</i>}	-0.028 (0.015)	-0.029 (0.016)	-0.021 (0.020)	-0.024 (0.021)
Observations	785	785	785	785
Adjusted R-squared	0.134	0.130	0.230	0.280
Manager controls	No	Yes	Yes	Yes
Firm controls	No	No	Yes	Yes
Year + Industry FE	No	No	No	Yes
Panel B: Heterogeneity Stakeholders_{<i>t-1</i>}				
VARIABLES	(1)	(2)	(3)	(4)
Proposal Wave _{<i>t-1</i>}	0.141*** (0.019)	0.141*** (0.019)	0.114*** (0.015)	0.109*** (0.009)
Substantive CSR score _{<i>t-1</i>}	-0.024 (0.012)	-0.023 (0.013)	-0.017 (0.016)	-0.017 (0.021)
Observations	785	785	785	785
Adjusted R-squared	0.068	0.065	0.137	0.179
Manager controls	No	Yes	Yes	Yes
Firm controls	No	No	Yes	Yes
Year + Industry FE	No	No	No	Yes

Table V: Cooperation and heterogeneity in stakeholder pressure

Table V shows the role of cooperation as a counterbalancing force to the effects of heterogeneity in stakeholder pressure across issues and stakeholders on the probability of a firm adopting substantive CSR. We define cooperation as an indicator variable equal to 1 when a firm receives a shareholder proposal with sponsors from multiple stakeholder groups (e.g., a labor union and a church, or an environmental activist group and a pension fund). Such proposals are coordinated efforts across stakeholder groups and have already internally aligned demands, reducing heterogeneity. In Columns (1) to (4) and (5) to (8), we analyze the effect of variation in issues and stakeholders filling these proposals as a measure of imprecision using one minus the Herfindahl-Hirschman Index (HHI) on issues and stakeholders, respectively. We employ increasingly stringent controls, with Columns (2) introducing manager controls that include lagged CEO age, gender, tenure, and salary over total compensation; Columns (3) also correcting for firm controls spanning lagged size (log total assets), return on assets, leverage, and firm age; and Columns (4) adding year and industry fixed effects. All specifications include firms' lagged substantive CSR scores. CSR approach clustered standard errors are given in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Heterogeneity Issues _{<i>t</i>-1}	-0.310** (0.123)	-0.307*** (0.117)	-0.235** (0.096)	-0.239*** (0.078)				
Heterogeneity Stakeholders _{<i>t</i>-1}					-0.395*** (0.145)	-0.388*** (0.133)	-0.307*** (0.104)	-0.326*** (0.068)
Cooperation _{<i>t</i>-1}	0.007 (0.010)	0.002 (0.012)	0.012 (0.019)	0.016 (0.011)	0.105** (0.046)	0.099** (0.046)	0.091** (0.041)	0.102*** (0.024)
Substantive CSR score _{<i>t</i>-1}	0.045*** (0.013)	0.042*** (0.013)	0.038*** (0.009)	0.026 (0.018)	0.047*** (0.015)	0.044*** (0.014)	0.039*** (0.010)	0.028 (0.020)
Observations	785	785	785	785	785	785	785	785
Adjusted R-squared	0.085	0.097	0.126	0.201	0.087	0.098	0.129	0.206
Manager controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Firm controls	No	No	Yes	Yes	No	No	Yes	Yes
Year + Industry FE	No	No	No	Yes	No	No	No	Yes

Table VI: Managerial and Shareholder CSR Receptivity mediating heterogeneity in stakeholder pressure

Table VI shows the role of external and internal managerial salience as a mediating factor to the effects of heterogeneity in stakeholder pressure across issues and stakeholders on the probability of a firm adopting substantive CSR. We define external managerial CSR salience as the percentage of shareholders who have supported past CSR-related shareholder proposals. When support was higher, managers are externally nudged to make CSR issues more salient, providing them justification to adopt a broader range of CSR initiatives, and be less affected by heterogeneity in stakeholder pressure. We define internal CSR salience as managers' innate willingness to adopt CSR issues. We measure this as the ratio of shareholder proposals that management accepts before a vote (withdrawal) to withdrawn proposals and those that management actively tries to remove from the ballot by filing a legal procedure called an omission request with the SEC. The higher the number, the more management is inclined to listen to stakeholder needs. We include interaction terms with our heterogeneous stakeholder pressure measures. In Columns (1) to (4) and (5) to (8), we analyze the effect of variation in issues and stakeholders filling these proposals as a measure of imprecision using one minus the Herfindahl-Hirschman Index (HHI) on issues and stakeholders, respectively. We employ increasingly stringent controls, with Columns (2) introducing manager controls that include lagged CEO age, gender, tenure, and salary over total compensation; Columns (3) also correcting for firm controls spanning lagged size (log total assets), return on assets, leverage, and firm age; and Columns (4) adding year and industry fixed effects. All specifications include firms' lagged substantive CSR scores. CSR approach clustered standard errors are given in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Panel A: Managerial CSR receptivity								
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Heterogeneity Issues _{<i>t</i>-1}	-0.413** (0.168)	-0.431*** (0.153)	-0.355*** (0.127)	-0.316*** (0.111)				
Heterogeneity Stakeholders _{<i>t</i>-1}					-0.362** (0.160)	-0.375** (0.147)	-0.277** (0.116)	-0.285** (0.118)
Heterogeneity Issues _{<i>t</i>-1} X Managerial salience internal _{<i>t</i>-1}	0.622** (0.251)	0.726*** (0.221)	0.661*** (0.181)	0.473*** (0.143)				
Heterogeneity Stakeholders _{<i>t</i>-1} X Managerial salience internal _{<i>t</i>-1}					0.282 (0.205)	0.345* (0.205)	0.209 (0.183)	0.210 (0.263)
Managerial salience internal _{<i>t</i>-1}	0.074* (0.041)	0.077** (0.035)	0.055* (0.030)	0.071* (0.042)	0.129*** (0.048)	0.131*** (0.040)	0.117*** (0.039)	0.108 (0.077)
Substantive CSR score _{<i>t</i>-1}	0.044*** (0.013)	0.040*** (0.013)	0.037*** (0.009)	0.025 (0.019)	0.045*** (0.015)	0.042*** (0.014)	0.038*** (0.011)	0.026 (0.020)
Observations	785	785	785	785	785	785	785	785
Adjusted R-squared	0.097	0.112	0.137	0.208	0.093	0.106	0.132	0.207
Manager controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Firm controls	No	No	Yes	Yes	No	No	Yes	Yes
Year + Industry FE	No	No	No	Yes	No	No	No	Yes

Table VI – continued

Panel B: Stakeholder CSR receptivity								
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Heterogeneity Issues _{<i>t</i>-1}	-0.577** (0.268)	-0.609** (0.258)	-0.494** (0.227)	-0.463** (0.209)				
Heterogeneity Stakeholders _{<i>t</i>-1}					-0.554** (0.264)	-0.584** (0.254)	-0.458** (0.216)	-0.464** (0.196)
Heterogeneity Issues _{<i>t</i>-1} X Managerial salience external _{<i>t</i>-1}	1.056** (0.420)	1.145*** (0.428)	0.937** (0.402)	0.819** (0.334)				
Heterogeneity Stakeholders _{<i>t</i>-1} X Managerial salience external _{<i>t</i>-1}					0.945** (0.434)	1.029** (0.445)	0.817** (0.417)	0.783** (0.361)
Managerial salience external _{<i>t</i>-1}	-0.056*** (0.020)	-0.098*** (0.022)	-0.088*** (0.017)	-0.025 (0.042)	-0.036 (0.052)	-0.075* (0.045)	-0.067* (0.038)	-0.032 (0.064)
Substantive CSR score _{<i>t</i>-1}	0.040*** (0.012)	0.037*** (0.012)	0.035*** (0.008)	0.022 (0.015)	0.041*** (0.013)	0.038*** (0.013)	0.036*** (0.009)	0.023 (0.016)
Observations	691	691	691	691	691	691	691	691
Adjusted R-squared	0.092	0.105	0.129	0.192	0.087	0.100	0.125	0.191
Manager controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Firm controls	No	No	Yes	Yes	No	No	Yes	Yes
Year + Industry FE	No	No	No	Yes	No	No	No	Yes

Table VII: Heterogeneous Stakeholder Pressure on Sustainable Performance

Table VII shows the effect of heterogeneous pressure on a firm's environmental and social performance, as measured by symbolic and substantive CSR indicators, in Panels A and B, and C and D respectively. It does so for heterogeneity in issues (Panels A and C) and stakeholders (Panels B and D). Panels A and B capture policies on resource reduction initiatives, energy efficiency, emission reductions, employee health and safety, human rights, training, and customer health and safety. Panels C and D Columns (1) to (3) capture environmental aspects of CSR, such as environmental controversies, CO_2 emissions, and volatile organic compound and particulate matter emissions. Columns (4) to (7) capture social issues such as accidents on the work floor, employee satisfaction (measured in CSR reports), wage or working condition controversies, and controversies related to consumer complaints. We adopt identical manager and firm controls as in previous analyses, along with year and industry fixed effects. CSR approach clustered standard errors are given in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Panel A: Symbolic indicators - Heterogeneity by issues

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Heterogeneity Issues _{<i>t-1</i>}	21.83*** (6.54)	29.22*** (1.63)	29.48*** (1.38)	36.71*** (3.41)	11.58*** (2.77)	15.71** (6.44)	13.66*** (0.24)	18.61*** (6.95)
Mean dependent	69.55%	58.73%	42.93%	55.03%	77.71%	45.86%	67.90%	32.36%
Heterogeneity s.d.	0.331	0.331	0.331	0.331	0.331	0.331	0.331	0.331
Observations	785	785	785	785	785	785	785	785
Adjusted R-squared	0.11	0.17	0.21	0.16	0.07	0.27	0.13	0.16
Manager controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year + Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Panel B: Symbolic indicators - Heterogeneity by issues

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Heterogeneity Stakeholders _{<i>t-1</i>}	22.57*** (7.32)	31.01*** (4.24)	32.60*** (5.53)	38.85*** (3.72)	11.01*** (2.42)	21.70** (9.09)	18.43*** (2.82)	21.40*** (5.47)
Mean dependent	69.55%	58.73%	42.93%	55.03%	77.71%	45.86%	67.90%	32.36%
Heterogeneity s.d.	0.311	0.311	0.311	0.311	0.311	0.311	0.311	0.311
Observations	816	816	816	816	816	816	816	816
Adjusted R-squared	0.10	0.15	0.16	0.12	0.05	0.22	0.10	0.14
Manager controls	YES	YES	YES	YES	YES	YES	YES	YES
Firm controls	YES	YES	YES	YES	YES	YES	YES	YES
Year + Industry FE	YES	YES	YES	YES	YES	YES	YES	YES

Table VII – continued

Panel C: Substantive indicators - Heterogeneity by stakeholders						
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Environmental con.	CO ₂	VOC & PM	Accidents	Employee satisfaction	Wage/working controversies
Heterogeneity Issues _{t-1}	1.161* (0.667)	0.217* (0.115)	0.156*** (0.059)	0.161** (0.082)	-0.030*** (0.007)	10.871*** (3.255)
Mean dependent	0.89%	-	18.34%	-	-	4.84%
Heterogeneity s.d.	0.331	0.331	0.331	0.331	0.331	0.331
Observations	785	785	785	785	785	785
Adjusted R-squared	0.019	0.438	0.140	0.110	0.258	0.115
Manager controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes
Year + Industry FE	Yes	Yes	Yes	Yes	Yes	Yes

Panel D: Substantive indicators - Heterogeneity by stakeholders						
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Environmental con.	CO ₂	VOC & PM	Accidents	Employee satisfaction	Wage/working controversies
Heterogeneity Stakeholders _{t-1}	1.853*** (0.712)	0.283 (0.184)	0.127** (0.063)	0.172** (0.071)	0.013 (0.020)	9.092*** (1.543)
Mean dependent	0.89%	-	18.34%	-	-	4.84%
Heterogeneity s.d.	0.311	0.311	0.311	0.311	0.311	0.311
Observations	785	785	785	785	785	785
Adjusted R-squared	0.021	0.448	0.135	0.111	0.257	0.107
Manager controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes
Year + Industry FE	Yes	Yes	Yes	Yes	Yes	Yes

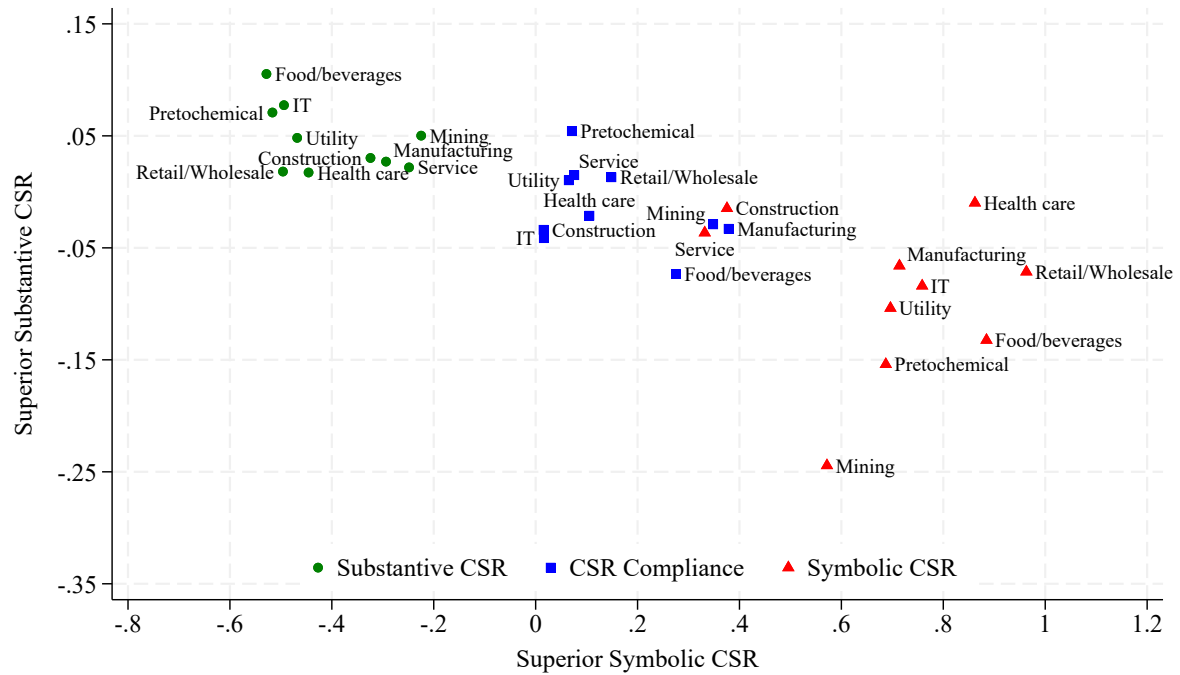
Table VIII: Heterogeneous Stakeholder Pressure and Financial Performance

Table VIII shows the effect of heterogeneous pressure on a firm's financial performance. It does so for heterogeneity in issues and stakeholders in Columns (1) to (3) and (4) to (6), respectively. We compute Fama and French (2015) 5-factor alphas in Columns (1) and (4), Fama and French (1993) 3-factor alphas in Columns (2) and (5), and excess returns in Columns (3) and (6). Factors and stock returns are in USD, equally weighted, and measured at the firm level. Alphas are computed using a rolling window of 3 years, using stock price information before the start of the LSEG sample, enabling us to also capture the initial years of the sample. We adopt identical manager and firm controls as in previous analyses, along with year and industry fixed effects. CSR approach clustered standard errors are given in parentheses. *, ** and *** denote significance at the 10%, 5% and 1% level, respectively.

VARIABLES	(1) Excess Return	(2) 3F Alpha	(3) 5F Alpha	(4) Excess Return	(5) 3F Alpha	(6) 5F Alpha
Heterogeneity Issues _{<i>t-1</i>}	-4.385*** (1.054)	-2.406*** (0.672)	-2.512* (1.386)			
Heterogeneity Stakeholders _{<i>t-1</i>}				0.568 (2.110)	-0.875 (0.710)	-1.377 (1.348)
Heterogeneity s.d.	0.331	0.331	0.331	0.311	0.311	0.311
Observations	782	782	782	782	782	782
Adjusted R-squared	0.390	0.145	0.130	0.389	0.142	0.127
Manager controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes
Year + Industry FE	Yes	Yes	Yes	Yes	Yes	Yes

Figure 1: CSR Approach Clustering

Figure 1 shows the CSR approaches of firms after clustering at the industry level. Superior substantive CSR captures how much better a firm performs regarding its substantive CSR score compared to the average firm in that industry. Superior symbolic CSR captures how much firms outperform their industry in terms of symbolic CSR scores. Dots represent industry means of these indicators, separately for substantive CSR firms, CSR compliance firms, and symbolic CSR firms.



Online Appendices

Appendix A Data cleaning and summary statistics

Since LSEG ESG captures CSR information from multiple sources, we must clean and format the data before applying it to our analysis. Specifically, we remove select variables with insufficient coverage or a too-specific use case and concatenate multiple data points capturing the same aspect of CSR. Correspondingly, we reduce the number of granular CSR variables from 466 to 169, approaching the strict selection procedure of LSEG, which retains 177 relevant variables.

We do not include granular CSR variables with less than 200 relevant observations (out of the 5,035), as including these variables would overrepresent the impact of outliers on our analysis. Many controversy variables, especially recent controversies, are incredibly narrow in scope, containing fewer than 50 observations. This includes recent controversies regarding the health and safety of customers and customers in general, responsible marketing, product access, business ethics, management team compensation, intellectual property, responsible R&D, anti-competition, wage working conditions, diversity, privacy, employee health and safety, critical countries, shareholder rights, insider trading, accounting, and tax fraud. Moreover, we also observe insufficient coverage for non-recent controversies related to human rights, child labor, environmental controversies in critical countries and critical countries in general, product access, freedom of association, and insider trading.

In addition to controversies, selected natural resource- and emission-related variables contain insufficient observations. This includes policies regarding the divestment of fossil fuel, indirect energy use, cement energy use, the supplied renewable energy, cement CO_2 emissions, internal carbon pricing per tonne, and in general, total hazardous $\frac{\text{waste}}{\text{revenue}}$, $\frac{\text{waterpollutantemissions}}{\text{revenue}}$ and fleet CO_2 emissions and fuel consumption.

Furthermore, we observe insufficient information regarding revenue from environmental products, equator principals or equator environmental projects, company cross shareholding, supply chain health and safety impairments, abortifacients, drug delays, FDA warning letters,

not approved drug, recent FDA warning letters, product delays, alcohol revenue, gambling revenue, tobacco revenue, armament revenue, employee resource groups, expanded constituency provisions, community lending and investment, the percentage of certified quality management systems and the production of cluster bombs, landmines and firearms, litigation expenses, fair price provision, energy produced directly, unlimited authorised capital, carbon offsetting credits, advance notice period, written consent requirements, non-audit / audit fees ratio, auditor tenure, golden parachute, water discharged total donations, earning restatement, profit warnings, ESM certificated (%), GMO products, iso 9k, training costs total, and HIV/aids programs.

We do not consider shareholder rights when identifying companies with similar CSR approaches. The CSR approach of a company should capture its sustainable performance that is not driven by the firm's interests nor required by law (McWilliams and Siegel, 2001). As shareholder rights are directly related to the company's interest, they do not align with this definition. Consequently, we do not consider shareholder rights policy, policy equal voting rights, policy shareholder engagement, different voting rights per share, equal shareholder rights, voting cap, voting cap (%), minimum number of shares to vote director election majority requirement, shareholder vote on executive positions, public availability corporate statement, veto power or golden shares, state-owned enterprise identifier, anti-takeover devices larger than two, percentage supermajority vote requirement, limited shareholder rights, elimination of cumulative voting, pre-emptive rights, confidential voting policy, limitation of director liability, shareholder approval significant, limitations on removal of director, or advance notice for shareholder propositions.

The Refinitiv ESG database contains granular CSR information that measures the same underlying CSR component due to sourcing from multiple data entries. We compile such variables to improve data coverage and prevent overweighing specific aspects of CSR through various entries. However, not all CSR variables are of similar scope. For example, water recycled as a percentage of total water usage and water recycled in cubic meters measure the same underlying CSR components differ strongly in magnitude. To correct for this, we divide the total energy use, direct energy purchases, indirect energy use, electricity purchased, renewable energy purchased, total renewable energy use, renewable energy use, water withdrawal, fresh-

water withdrawal, water recycled, CO_2 equivalent emissions, direct CO_2 equivalent emissions, indirect CO_2 equivalent emissions, estimated CO_2 equivalent emissions, carbon offset credits, flaring gasses, total waste, non-hazardous waste, recycled waste, the water discharged, water pollutant emissions, environmental expenditures, environmental provisions, self-reported environmental fines, environmental R&D expenditures, salaries and wages, training costs, donations, community lending and investment, political contributions, and lobbying contributions by the total assets of the firm. Furthermore, to increase the comparability of granular CSR variables, we normalize all non-binary variables on an industry level and constrain them to five standard deviations from the mean.

After this reconstruction, we combine CSR variables regarding ISO 14000 or EMS classifications, estimated CO_2 emissions, waste recycling ratios, hazardous waste ratios, controversies concerning the responsible market, health and safety policies, employee health safety teams, lost time injury rates, salary gaps, environmental expenditures (due to investments), supply chain management activities, partnerships and investments in environmental initiatives, supply chain health safety policies, renewable energy, labeled wood, agrochemical revenue, anti-competition controversies, total waste to revenue, policy business ethics, animal testing, and human rights policies.

In addition, we include the identifiers for VOC and particulate matter emissions in their joint identifier to improve coverage. We append information about water withdrawal and fresh-water usage to the total water. We combine information concerning total employee turnover, voluntary employee turnover, and involuntary turnover. We enhance training and development policies with information regarding skills training, management training, and career development, as they measure a similar aspect of CSR and are all endogenous to the firm. When information for the total number of training hours is missing, we use the average training hours per employee and the training costs as a replacement. We proxy missing net employment creation observations by the number of employees. We supplement women's information regarding new women employees or managers' data. We enhance the coverage of our policy on board diversity variable by including the percentage of the board or executive gender or cultural diversity. We reduce the number of missing observations for the contractor injury rate by

introducing contractor accidents, fatalities, and lost time injury rates. We collect information on direct energy purchases, electricity purchases, renewable energy purchases, the amount of energy used as a share of total revenue, and the amount of renewable energy used to create an augmented ratio of energy consumption divided by total revenue and renewable energy over total energy consumption ratio. We remove information concerning poison pill adoption and expiration dates as we observe whether a company has a poison pill. Finally, we capture information related to classified or staggered board structures by considering board composition and takeover prevention mechanisms through our singular, mixed, or two-tier board structure and poison pill identifiers. For more details on the controversy allocation as well as the industry composition of our sample, see Tables A.2.

Table A.1: Summary statistics on granular CSR information

Notes: This table provides summary statistics on our granular CSR information from LSEG ESG. In columns 1 and 2, we display the SASB materiality group for all variables. With the exception of critical incident management and systemic risk, we can accurately map all LSEG ESG information to a SASB category. The third column denotes for each CSR variable its type, i.e. reporting, policy, activity, target, controversy, or performance. Columns four to seven contain the mean, standard deviation, minimum, and maximum values of all CSR variables. Due to the full rank requirements of our clustering analysis, we always have 5,035 observations.

SASB materiality group	Variable name	CSR type	mean	sd	min	max
Greenhouse gas emissions	Emission policy	Policy	0.50	0.50	0.00	1.00
	Emission trading	Activity	0.11	0.31	0.00	1.00
	Emission targets	Target	0.31	0.46	0.00	1.00
	Emission reduction target (%)	Target	-0.00	0.17	-1.71	3.83
	CO ₂ Emissions	Performance	-0.02	0.36	-0.61	5.00
	Staff transportation impact reduction	Activity	0.16	0.36	0.00	1.00
Air quality	Ozon-depleting substances	Performance	0.00	0.05	0.00	1.00
	NO _x and SO _x Emissions	Performance	-0.02	0.79	-1.27	5.00
	NO _x and SO _x Emission reduction	Performance	0.13	0.33	0.00	1.00
	VOC and PM Emissions	Performance	0.17	0.38	0.00	1.00
	VOC and PM Emission reduction	Performance	0.13	0.34	0.00	1.00
Energy management	Energy efficiency policy	Policy	0.52	0.50	0.00	1.00
	Energy efficiency targets	Target	0.22	0.41	0.00	1.00
	Renewable energy ratio	Performance	0.01	0.89	-5.00	5.00
Water and wastewater	Water efficiency policy	Policy	0.36	0.48	0.00	1.00
	Water technologies	Activity	0.06	0.24	0.00	1.00
	Water efficiency targets	Target	0.13	0.34	0.00	1.00
	Water usage / revenue	Performance	-0.01	0.32	-0.35	5.00
	Water recycled	Performance	-0.00	0.20	-0.99	5.00
	Water pollutant emissions	Performance	-0.00	0.18	-0.51	5.00
	Waste reduction initiatives	Activity	0.49	0.50	0.00	1.00
Waste & hazardous management	Waste / revenue	Performance	-0.04	0.32	-0.35	5.00
	Waste recycled (%)	Performance	-0.00	0.20	-0.99	5.00
	Hazardous waste	Performance	-0.02	0.32	-2.18	5.00
	Toxic chemicals reduction	Performance	0.13	0.34	0.00	1.00
	Electronic waste reduction	Performance	0.12	0.33	0.00	1.00
	Environmental restoration initiatives	Activity	0.20	0.40	0.00	1.00
Ecological impact	Land environmental impact reduction	Policy	0.08	0.28	0.00	1.00
	Biodiversity impact reduction	Policy	0.20	0.40	0.00	1.00
	Policy human rights	Policy	0.41	0.49	0.00	1.00
Human rights & Community relations	Policy Community involvement	Policy	0.67	0.47	0.00	1.00
	Human rights compliance ILO/UN	Policy	0.20	0.40	0.00	1.00
	Donations / revenue	Performance	-0.01	0.29	-0.79	5.00
	Controversies privacy	Controversy	0.00	0.08	-2.07	5.00

Continued

Table A.1 – continued

SASB materiality group	Variable name	CSR type	mean	sd	min	max
Data security	Policy data privacy	Policy	0.49	0.50	0.00	1.00
	Whistleblower protection	Policy	0.52	0.50	0.00	1.00
	HSMS certified percent	Policy	0.00	0.12	-4.12	1.72
Access and affordability	Product discount emerging markets	Activity	0.50	0.46	0.00	1.00
	Product access low prices	Activity	0.05	0.21	0.00	1.00
Product quality and safety	Policy customer health safety	Policy	0.27	0.44	0.00	1.00
	Product recall	Performance	0.04	0.19	0.00	1.00
Customer welfare	Product responsibility monitoring	Activity	0.15	0.36	0.00	1.00
	Healthy food/products	Activity	0.08	0.27	0.00	1.00
Selling practices and product labelling	Controversies consumer complaints	Controversy	0.02	0.12	0.00	1.00
	Policy responsible marketing	Policy	0.03	0.18	0.00	1.00
	Policy fair trade	Policy	0.02	0.13	0.00	1.00
Labor practices	Retailing responsibilities	Activity	0.01	0.12	0.00	1.00
	Ethical trading initiatives	Policy	0.01	0.07	0.00	1.00
	Customer satisfaction	Performance	0.00	0.25	-5.00	1.62
	Controversies wages working conditions	Controversy	0.02	0.15	0.00	1.00
	Policy child labor	Policy	0.18	0.38	0.00	1.00
	Policy forced labor	Policy	0.16	0.37	0.00	1.00
	Policy training and development	Policy	0.64	0.48	0.00	1.00
	Day care service	Activity	0.12	0.32	0.00	1.00
	Employee engagement voluntary work	Policy	0.50	0.50	0.00	1.00
	Training hours / assets	Performance	-0.00	0.41	-1.37	5.00
	Employee fatalities / assets	Performance	-0.00	0.45	-0.77	5.00
	Flexible working hours	Activity	0.23	0.42	0.00	1.00
	Employee satisfaction	Performance	-0.01	0.39	-5.00	2.37
	Salaries/wages	Performance	-0.02	0.23	-1.29	5.00
	Net employment creation / assets	Performance	-0.03	0.44	-5.00	5.00
Employee health and safety	Employee turnover	Performance	-0.01	0.50	-1.84	5.00
	Strikes	Controversy	0.02	0.15	0.00	1.00
	Health safety policy	Policy	0.71	0.46	0.00	1.00
	Employee health safety team	Activity	0.49	0.50	0.00	1.00
	Health safety training	Activity	0.56	0.50	0.00	1.00
	Accidents total/ assets	Performance	0.02	0.48	-1.05	5.00
	Lost time injury rate	Performance	-0.00	0.52	-0.99	5.00
	Occupational diseases	Performance	-0.02	0.44	-1.05	5.00
	Policy board diversity	Policy	0.36	0.48	0.00	1.00
	Policy diversity and opportunity	Policy	0.61	0.49	0.00	1.00
Employee engagement	Internal promotion	Activity	0.28	0.45	0.00	1.00
	HRC corporate equality index	Performance	-0.00	0.43	-3.64	2.69
	Targets diversity and opportunity	Target	0.21	0.38	0.00	1.00
	Salary gap	Performance	-0.03	0.26	-3.66	5.00
	Women employees	Performance	-0.01	0.66	-2.67	5.00
	Employees with disabilities	Performance	-0.00	0.39	-1.96	5.00
	Sustainable packaging policy	Policy	0.15	0.36	0.00	1.00
	Takeback and recycling initiatives	Activity	0.10	0.30	0.00	1.00
	Environmental material sourcing	Activity	0.29	0.45	0.00	1.00
	Environmental products	Activity	0.29	0.46	0.00	1.00
Product design and lifecycle management	Eco-design products	Activity	0.13	0.34	0.00	1.00
	Renewable energy products	Activity	0.11	0.31	0.00	1.00
	Sustainable building products	Activity	0.04	0.20	0.00	1.00
	Product impact minimization	Activity	0.18	0.39	0.00	1.00
	Product environmental responsibilities	Activity	0.35	0.48	0.00	1.00
	Environment management team	Policy	0.40	0.49	0.00	1.00
	CSR sustainability committee	Policy	0.44	0.50	0.00	1.00
	Global compact signatory	Reporting	0.17	0.37	0.00	1.00
	Sustainability compensation executives	Activity	0.16	0.37	0.00	1.00
	Integrated strategy in MDA	Policy	0.13	0.34	0.00	1.00
Business model resilience	environmental project financing	Activity	0.00	0.06	0.00	1.00
	Environment management training	Policy	0.44	0.50	0.00	1.00
	Green buildings	Performance	0.17	0.37	0.00	1.00
	Environmental investment initiatives	Activity	0.14	0.35	-0.93	3.81
	Six sigma and quality management system	Policy	0.16	0.36	0.00	1.00
	Environmental provisions	Activity	-0.02	0.23	-0.37	5.00
	Environmental expenditures	Performance	-0.03	0.27	-1.32	5.00
	Environmental investment expenditures	Performance	0.26	0.44	-0.78	4.03
	Environmental partnership	Activity	0.38	0.49	0.00	1.00
	Contractor human rights breaches	Performance	0.13	0.33	0.00	1.00
Supply chain management	Human rights contractors	Activity	0.30	0.46	0.00	1.00
	Supplier ESG training	Activity	0.12	0.33	0.00	1.00

Continued

Table A.1 – continued

SASB materiality group	Variable name	CSR type	mean	sd	min	max
Material Sourcing and efficiency	Environmental supply chain policy	Policy	0.35	0.48	0.00	1.00
	Environmental supply chain management	Policy	0.39	0.49	0.00	1.00
	Policy supply chain health safety	Policy	0.19	0.39	0.00	1.00
	Injury rate contractors	Performance	0.00	0.33	-1.71	5.00
	Resource reduction policy	Policy	0.64	0.48	0.00	1.00
	Organic product initiatives	Activity	0.03	0.18	0.00	1.00
	Resource reduction targets	Target	0.25	0.43	0.00	1.00
	Energy usage	Performance	-0.01	0.23	-0.26	5.00
Physical impact of climate change	Renewable energy usage	Performance	-0.02	0.33	-0.54	5.00
	Climate change commercial risk	Controversy	0.31	0.46	0.00	1.00
Business Ethics	Controversies tax fraud	Controversy	0.00	0.07	-2.76	5.00
	Controversies business ethics	Controversy	-0.00	0.17	-2.18	5.00
	Controversy bribery corruption and fraud	Controversy	0.08	0.27	0.00	1.00
	Controversies intellectual property	Controversy	-0.00	0.14	-2.74	5.00
	Policy bribery and corruption	Policy	0.60	0.49	0.00	1.00
	Policy business ethics	Policy	0.66	0.47	0.00	1.00
	Animal testing	Activity	0.06	0.23	0.00	1.00
	Policy fair competition	Policy	0.50	0.50	0.00	1.00
Competitive behavior	Trade union representation	Activity	-0.00	0.53	-1.81	3.11
	Poison pill	Controversy	0.06	0.23	0.00	1.00
Legal & regulatory environment	Quality management systems	Policy	0.41	0.49	0.00	1.00
	OECD guidelines for multinationals	Policy	0.06	0.24	0.00	1.00
	Stakeholder engagement	Activity	0.31	0.47	0.00	1.00
	Real estate sustainability certificate	Policy	0.01	0.11	0.00	1.00
	Corporate responsibility awards	Performance	0.34	0.47	0.00	1.00
	Self-reported environmental fines	Performance	-0.89	0.35	-1.00	5.00
Critical incident risk management	Accounting controversies	Controversy	0.00	0.06	0.00	1.00
	Crisis management systems	Policy	0.33	0.47	0.00	1.00
	Controversies public health	Controversy	0.00	0.10	-2.27	3.61
	Accidental spills	Controversy	-0.00	0.12	-0.58	5.00
Systemic risk management	Environmental controversies	Controversy	0.01	0.09	0.00	1.00
	Controversies anti-competition	Controversy	0.05	0.21	0.00	1.00
	Controversies responsible marketing	Controversy	0.07	0.58	-2.00	5.00
	Obesity risk	Controversy	0.02	0.12	0.00	1.00
	Controversies product quality	Controversy	0.04	0.19	0.00	1.00
	Controversies customer health	Controversy	-0.00	0.13	-1.32	5.00
Reporting	ESG reporting scope	Reporting	0.00	0.61	-5.00	0.62
	GRI reporting guidelines	Reporting	0.30	0.46	0.00	1.00
	Global CSR sustainability report	Reporting	0.42	0.49	0.00	1.00
	CSR sustainability external audit	Reporting	0.22	0.42	0.00	1.00

Table A.2: Industry decomposition

Notes: Table A.2 discloses information about the industries for each of the firm-year observations in our sample. The industries are chosen to match the available information from SIC and NAICS classifications from LSEG, Compustat US, Compustat Global, and FactSet. The industries are aggregated to an industry level to accommodate the industry classification presented by the SASB Materiality map.

Industry	N
Mining	500
Construction	159
Manufacturing non-food, non-petrochemicals	918
Utility	356
Retail & Wholesale	252
Service	261
Health care	392
ICT & ICT equipment	1,344
Food & Beverages	27
Manufacturing petrochemicals	826
Total	5,035

Table A.3: Controversies by industry

Notes: Table A.3 presents an overview which controversies we deem material for which industries. We need to manually assign some controversies to the SASB materiality map as they do not always match perfectly.

Controversies	Mining	Construction	Generic Manufacturing	Utilities	Retail & Wholesale	Service	Health care	ICT	Food & beverages	Manufacturing petrochemicals
Accidental spills	x			x						x
Accounting				x						
Anticompetitive	x	x	x	x		x		x	x	x
Bribery, corruption and fraud	x	x				x	x	x		x
Business ethics	x		x		x	x	x	x		x
Consumer complaint			x		x				x	x
Consumer health		x	x	x		x	x	x		x
Environmental		x		x					x	x
Intellectual property	x		x	x		x	x	x		x
Privacy						x	x	x		
Product quality		x	x		x	x	x	x	x	
Public health	x				x		x			x
Responsible marketing		x	x	x	x	x	x	x	x	x
Tax fraud	x		x	x		x		x		x
Wage working condition	x				x	x			x	

Appendix B Additional clustering specifications and CSR antecedent identification

A k-means clustering algorithm is a classification tool that considers similarities in a multivariate setting to identify groups of distinct clusters (MacQueen, 1967; Hair, 2013; Jain, 2010). The algorithm uncovers comparable observations by first assigning k random companies as initial cluster means, for which k represents the number of clusters (MacQueen, 1967). The second step determines the joint distance of all variables to the k initial cluster means for each observation to identify the smallest distance. Subsequently, it assigns each observation to the cluster with the smallest distance to later compute the cluster means using the updated cluster allocation. This process is repeated until each observation is more closely associated with its current cluster mean than to all the other cluster means, and thus no observation changes cluster (Xu and Wunsch, 2005). The k-means clustering algorithm requires a predefined number of clusters, k, to perform its clustering analysis (MacQueen, 1967).

We anticipate finding three distinct clusters as we hypothesize that firms approach substantive, compliance, and symbolic CSR. To illustrate the importance of an accurate number of clusters, we show what happens when k is suboptimal. When we choose an insufficient number of clusters, not every CSR approach can be identified as a share of the firms is assigned a wrong cluster by definition. On the other hand, when we assign a surplus of clusters, we create multiple clusters for a single CSR approach or near-empty clusters. For this reason, we validate our clustering analysis when we show that our hypothesized three clusters, one for every CSR approach, are optimal (Punj and Stewart, 1983; Ketchen and Shook, 1996).

We empirically verify that three clusters provide an optimal solution by considering a goodness of fit measure. Equation 3 displays our goodness of fit measure, η_k^2 , which considers the share of variation in granular CSR data that is explained by our clustering mechanism for different numbers of clusters, k. The WSS_j represents the weighted sum of squared variation of all granular CSR data in cluster j. Likewise, the TSS represents the sum of all squared variation in granular CSR data. This goodness of fit measure strongly resembles the R^2 of a linear regression model and is frequently used in literature (Punj and Stewart, 1983). We determine

the optimal number of clusters k by identifying the point in which the marginal increases of η_k^2 converge in the $k + 1$ cluster Ketchen and Shook (1996); Tibshirani et al. (2001). In addition, we require each cluster to contain at least 5% of the firms to ensure cluster validity and statistical relevance.

$$\eta_k^2 = 1 - \frac{\sum_{j=1}^{j=k} WSS_j}{TSS} \quad (3)$$

Figure B.1 shows the η_k^2 for each industry separately for one to twenty clusters. We see the largest marginal increase in η_k^2 for low values of k , indicating that each industry has a few distinct CSR approaches. Specifically, we find three diverging CSR clusters for mining, construction, general manufacturing, utilities, retail & wholesale, and health care industries and four clusters for services, ICT, food manufacturing, and petrochemical manufacturing industries. However, we are forced to constrain the industries from four to three clusters as firms either attain near empty clusters or provide nearly identical CSR approaches in two clusters. The resulting η_k^2 are 20.53%, 28.34%, 25.56%, 20.90%, 22.27%, 19.74%, 21.93%, 22.97%, 24.99%, and 23.90% for respectively the mining, construction, general manufacturing, utilities, retail & wholesale, service, health care, ICT, manufacturing food & beverages, and manufacturing petrochemicals industries. The average η_k^2 is 23.08%, indicating that the k-means clustering algorithm explains on average 48.04% of the variation in granular CSR information across industries.

Moreover, the validity of the clustering procedure is supported by the pronounced rate of the marginal η_k^2 increases and the single natural kink in the η_k^2 plot (Xu and Wunsch, 2005). In addition, both the η_k^2 and the number of clusters are similar across industries, indicating that our clustering procedure persists in multiple subsamples of our dataset (Hambrick and Schecter, 1983; Lange et al., 2004). When we perform a principal component analysis on our granular CSR data, we observe that the first three components respectively explain 23%, 6%, and 5% of the joint variation. Therefore, our clustering analysis is not driven by selected variables but captures the multifaceted nature of CSR.

In addition to identifying three clusters across every industry, we next identify them as substantive, compliance, and symbolic CSR, given their symbolic and substantive CSR scores.

Table B.1 displays the CSR reporting, policy, activity, target, controversy, and performance ranks of all firms with similar CSR approaches separately. In Panels A to K, we individually represent the entire sample and the mining, construction, generic manufacturing, utilities, retail & wholesale, service, health care, ICT, food & beverages, and petrochemical manufacturing industries.

We persistently observe substantive, compliant, and symbolic CSR firms. In every industry, we find that firms approach substantive CSR, given their excellent substantive CSR performance and little symbolic CSR performance. These firms strictly outperform all other firms regarding CSR controversy and performance ranks at the industry level. Precisely, they attain average controversy and performance ranks of 8.40 and 5.47, which statistically significantly outperform CSR compliance (7.85 and 4.78), and symbolic CSR firms (6.75 and 5.01) at the one percent level (Table B.1, Panel A). In contrast, substantive CSR firms underperform in all CSR reporting, policy, target, and activity ranks at the industry level. On average, their CSR reporting, policy, target, and activity ranks are 1.25, 3.66, 2.58, and 3.15, while CSR compliance and symbolic CSR firms attain ranks of 4.50, 5.62, 3.15, and 5.30, and 7.01, 7.47, 6.76, and 7.22, respectively.

We also identify CSR compliance firms in every industry. These firms display moderate symbolic and substantive CSR performance. In particular, they have average CSR reporting, policy, target, and activity ranks. As anticipated, CSR compliance firms are better equipped to mitigate CSR controversies than improve CSR performance. This especially holds in the construction and food & beverages industries, for which CSR compliance firms experience poor CSR performance ranks yet few controversies.

The last CSR approach that we identify is symbolic CSR. These firms have exuberant symbolic CSR performance that strongly overshoots their substantive CSR performance. Symbolic CSR firms outperform in symbolic CSR performance in every industry as they realize superior average CSR reporting, policy, target, and activity ranks. Further, they underperform in substantive CSR performance in almost all industries. This validates our main findings across every industry and the components of symbolic and substantive CSR performance.

Figure B.1: The goodness of fit for multiple clusters by industry

Note: Figure B.1 represents the goodness of fit, η_k^2 , using Equation (1) on an industry level, similar to an R^2 in a linear regression.

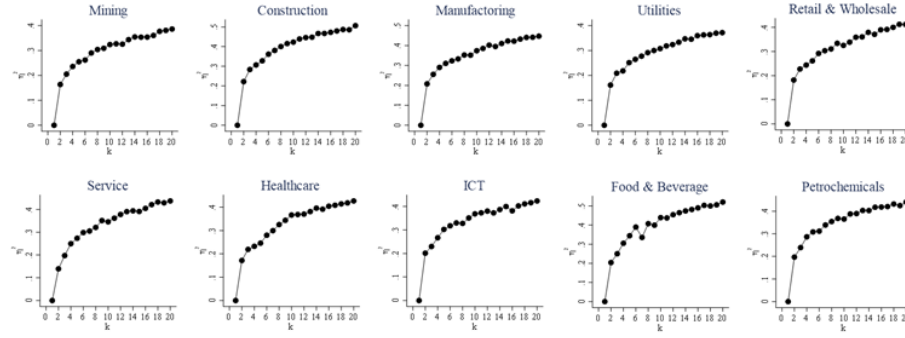


Table B.1: Identifying heterogeneous CSR approaches

Notes: Table B.1 displays the Wittkowski et al. (2004) ranks for CSR reporting, policies, activities, targets, controversies, and performance on a scale of 0 to 10 at the industry level. Standard deviations are given in parentheses.

Panel A: Full sample

CSR approach	N	Reporting	Policy	Target	Activity	Controversy	Performance
Symbolic CSR	775	7.01 (2.33)	7.47 (1.94)	6.76 (3.59)	7.22 (1.69)	6.75 (3.54)	5.01 (1.75)
CSR Compliance	907	4.50 (3.23)	5.62 (1.97)	3.15 (3.71)	5.30 (2.01)	7.85 (2.74)	4.78 (2.04)
Substantive CSR	3,353	1.25 (2.52)	3.66 (2.61)	2.58 (3.19)	3.15 (2.54)	8.40 (2.38)	5.47 (2.31)

Panel B: Mining

CSR approach	N	Reporting	Policy	Target	Activity	Controversy	Performance
Symbolic CSR	26	8.60 (1.84)	8.25 (1.37)	7.83 (2.67)	7.67 (1.17)	5.57 (4.03)	3.97 (1.16)
CSR Compliance	78	6.63 (2.22)	6.77 (1.55)	7.37 (2.47)	6.99 (1.17)	8.91 (2.59)	4.24 (1.64)
Substantive CSR	396	1.15 (2.42)	3.61 (2.33)	6.89 (2.29)	3.98 (2.38)	8.55 (1.77)	4.72 (2.49)

Panel C: Construction

CSR approach	N	Reporting	Policy	Target	Activity	Controversy	Performance
Symbolic CSR	22	6.63 (1.97)	6.73 (2.14)	7.13 (2.99)	7.19 (1.81)	7.34 (3.00)	4.50 (2.14)
CSR Compliance	3	4.29 (3.09)	5.66 (2.29)	6.47 (2.50)	3.65 (2.07)	9.11 (2.90)	3.89 (2.05)
Substantive CSR	134	1.22 (2.65)	2.86 (2.64)	5.87 (2.42)	3.54 (2.63)	8.37 (2.60)	5.17 (2.97)

Panel D: Manufacturing (non-food, non-petrochemical)

CSR approach	N	Reporting	Policy	Target	Activity	Controversy	Performance
Symbolic CSR	158	7.00 (2.17)	7.85 (2.23)	8.05 (3.33)	7.38 (1.85)	8.39 (3.41)	5.16 (1.49)
CSR Compliance	6	6.06 (3.23)	6.19 (2.41)	5.68 (4.35)	6.32 (2.47)	8.29 (3.49)	5.19 (1.63)
Substantive CSR	754	2.27 (3.06)	4.45 (3.05)	1.90 (2.81)	3.59 (2.46)	9.60 (1.67)	5.26 (2.17)

Panel E: Utilities

CSR approach	N	Reporting	Policy	Target	Activity	Controversy	Performance
Symbolic CSR	39	7.10 (2.02)	7.16 (1.68)	7.29 (3.78)	7.07 (1.31)	5.61 (3.44)	4.68 (1.25)
CSR Compliance	124	4.65 (2.95)	5.22 (1.82)	2.54 (3.27)	5.14 (1.58)	7.51 (2.62)	4.41 (1.76)
Substantive CSR	193	1.13 (2.35)	2.96 (2.25)	1.99 (2.54)	3.21 (2.60)	7.97 (2.33)	5.02 (2.24)

Panel F: Retail & Wholesale

CSR approach	N	Reporting	Policy	Target	Activity	Controversy	Performance
Symbolic CSR	47	6.82 (2.47)	7.83 (2.01)	5.14 (4.12)	7.03 (1.69)	9.04 (2.82)	5.78 (2.11)
CSR Compliance	89	3.67 (3.53)	5.63 (2.11)	1.88 (3.38)	4.99 (2.39)	9.62 (1.59)	6.13 (1.75)
Substantive CSR	116	0.67 (2.02)	2.91 (2.37)	0.72 (1.85)	2.87 (2.56)	9.58 (1.50)	6.23 (1.59)

Panel G: Service

CSR approach	N	Reporting	Policy	Target	Activity	Controversy	Performance
Symbolic CSR	74	5.72 (3.07)	8.18 (1.86)	6.18 (2.91)	6.36 (2.05)	7.53 (2.49)	6.99 (1.56)
CSR Compliance	8	3.59 (4.24)	5.22 (3.37)	6.11 (2.48)	4.10 (3.33)	8.21 (2.30)	7.09 (1.39)
Substantive CSR	179	1.16 (2.49)	4.37 (2.99)	6.05 (2.24)	2.94 (2.71)	7.96 (2.43)	7.08 (1.20)

Panel H: Health care

CSR approach	N	Reporting	Policy	Target	Activity	Controversy	Performance
Symbolic CSR	23	7.41 (1.75)	7.06 (1.43)	5.99 (3.99)	8.25 (1.09)	7.32 (3.11)	4.64 (1.67)
CSR Compliance	115	3.73 (3.42)	5.77 (1.54)	2.03 (3.29)	5.68 (1.69)	7.89 (2.64)	4.49 (2.47)
Substantive CSR	254	0.72 (2.18)	3.77 (2.40)	0.92 (1.99)	3.28 (2.73)	8.49 (2.13)	5.46 (2.38)

Panel I: ICT

CSR approach	N	Reporting	Policy	Target	Activity	Controversy	Performance
Symbolic CSR	243	7.05 (2.39)	7.31 (1.96)	5.98 (3.65)	7.07 (1.23)	4.92 (2.10)	4.53 (1.65)
CSR Compliance	329	3.63 (3.35)	5.59 (1.97)	1.62 (2.72)	5.27 (1.48)	5.29 (1.53)	4.72 (2.32)
Substantive CSR	772	0.71 (2.00)	3.36 (2.14)	1.07 (1.87)	2.80 (2.39)	5.50 (1.77)	5.73 (2.56)

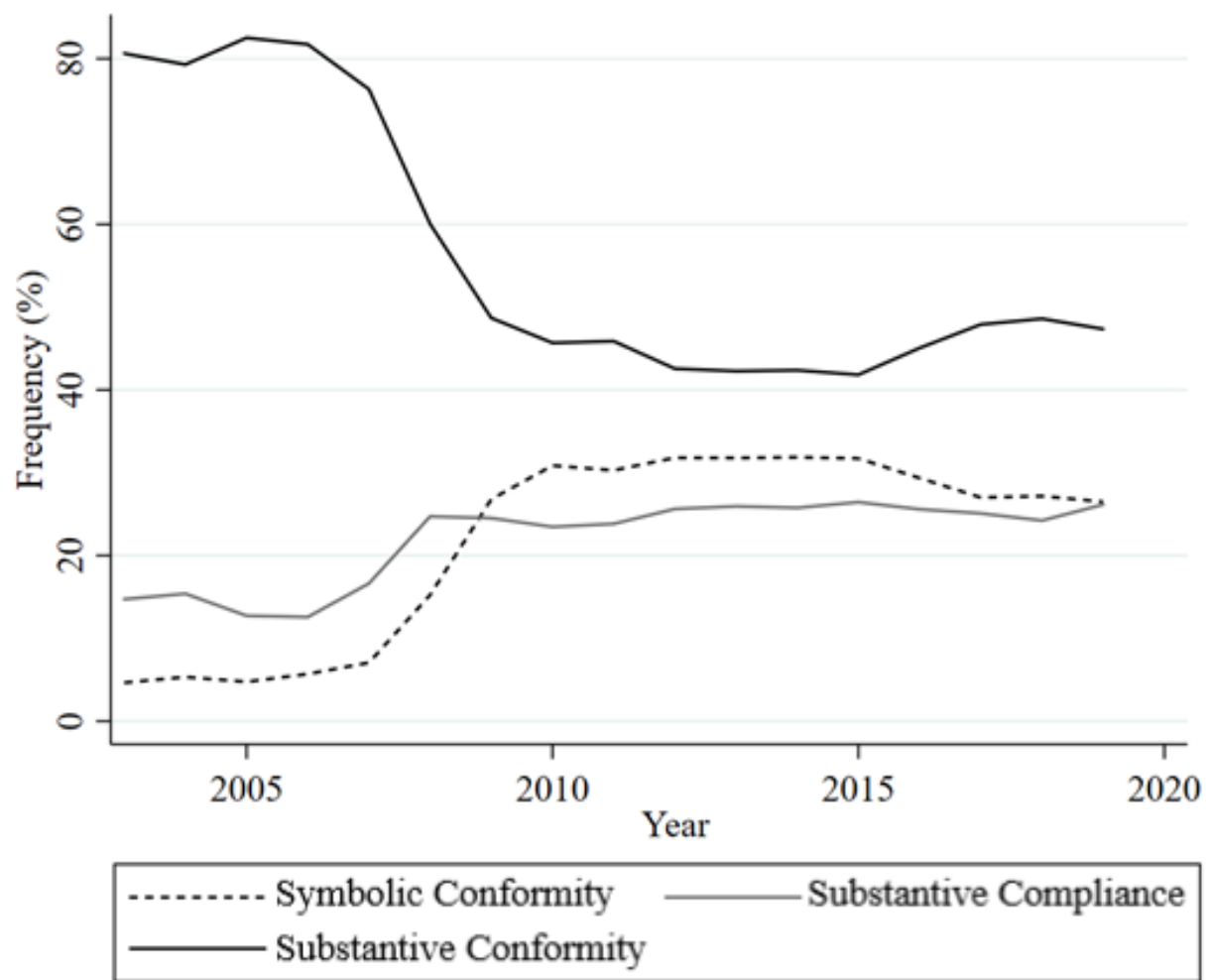
Panel J: Food & Beverages

CSR approach	N	Reporting	Policy	Target	Activity	Controversy	Performance
Symbolic CSR	0	-	-	-	-	-	-
CSR Compliance	16	4.75 (2.97)	5.77 (2.10)	3.33 (4.06)	5.00 (1.96)	8.91 (2.81)	3.73 (2.31)
Substantive CSR	11	1.09 (2.16)	2.77 (2.71)	1.92 (2.80)	2.68 (2.69)	9.18 (2.08)	5.44 (2.51)

Panel K: Manufacturing petrochemicals

CSR approach	N	Reporting	Policy	Target	Activity	Controversy	Performance
Symbolic CSR	143	7.40 (2.02)	6.74 (1.41)	6.61 (3.09)	7.77 (1.98)	6.74 (4.13)	4.75 (1.27)
CSR Compliance	139	4.67 (2.66)	5.29 (1.52)	2.90 (3.49)	5.05 (2.16)	9.11 (2.46)	4.84 (1.50)
Substantive CSR	544	0.90 (2.12)	3.80 (2.18)	1.42 (2.41)	2.05 (2.19)	9.35 (1.95)	5.54 (2.26)

Figure B.2: Heterogeneous CSR approaches over time



Appendix C Non-clustering robustness test

A careful reader might wonder whether our results can be explained by our clustering analysis. Due to its unsupervised nature, we do not impose any requirements on how firms' CSR approaches should be structured. This provides strong empirical benefits, as we do not impose our CSR approaches on the data but rather let the data reveal what is happening in practice. The downside of this approach is that we have no control over how CSR approaches are classified and identified, making our results highly dependent on the algorithm. In other words, by not imposing our definitions on the real world, we deal with a black box of how we assume the real world works.

We circumvent this issue by validating our main result using a manual classification of CSR approaches using our symbolic and substantive CSR scores. Specifically, we define firms as having substantive CSR when they have above-median substantive CSR scores within the industry, symbolic CSR firms as having above-median symbolic CSR scores in the industry and below-median substantive CSR, and CSR compliance when they have neither. As described before, these choices are arbitrary since the literature does not define thresholds for when an approach is symbolic or substantive. We are open to any alternative classification thresholds.

We replicate this finding that firms facing more heterogeneity in stakeholder pressure on CSR adopt less substantive CSR approaches, using the alternative classification in Table C.1. As hypothesized, we find again that heterogeneity in stakeholder pressure reduces the share of substantive CSR firms in Panel A, and increases the number of symbolic CSR firms in Panel B. The economic magnitude of the reduction in substantive CSR firms is roughly half compared to the prior analysis, resulting in arguably more reasonable numbers, i.e., one standard deviation in heterogeneity reduces firms' the likelihood that firms approach CSR substantively with 5.56, 4.21, and 4.85 percentage points for issue heterogeneity, stakeholder group heterogeneity, and stakeholder group heterogeneity correcting for coalitions. Results are virtually identical for symbolic CSR.

Table C.1: Heterogeneity in stakeholder and topic pressure using manual classification

This table shows the effect of three measures of heterogeneity in stakeholder pressure on the probability of a firm adopting substantive and symbolic CSR. We use thresholds rather than a clustering analysis for substantive CSR (above-median substantive CSR scores), symbolic CSR (above-median symbolic CSR scores and no above-median substantive CSR scores), and CSR compliance (the remainder). US firms are often engaged by diverse stakeholders (i.e., institutional investors, NGOs, labor unions, and religious organizations) on many issues (diverse social, environmental, and governance issues) through shareholder proposals. In Columns (1) to (3) and (4) to (6), we respectively analyze the effect of heterogeneity in issues and across stakeholder filling these proposals. Specifically, we compute one minus the Herfindahl-Hirschman Index (HHI) on issues and stakeholders, respectively. In Columns (7) to (9), we measure the heterogeneity in stakeholder pressure through shareholder disagreement by correcting the prior stakeholder measure for coalitions of shareholders jointly targeting firms. We similarly compute one minus the HHI on stakeholders, but consider coalitions as one stakeholder, as their demands are identical. Industry clustered standard errors are given in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Panel A: Substantive CSR

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>HeterogeneityIssue_{t-1}</i>	-0.150*** (0.037)	-0.182*** (0.040)	-0.167*** (0.034)						
<i>HeterogeneityStakeholders_{t-1}</i>				-0.136*** (0.052)	-0.157*** (0.058)	-0.134** (0.062)			
<i>DisagreementStakeholders_{t-1}</i>							-0.158*** (0.053)	-0.184*** (0.057)	-0.164*** (0.052)
Heterogeneity standard deviation	0.334	0.334	0.334	0.314	0.314	0.314	0.296	0.296	0.296
Observations	822	816	816	822	816	816	822	816	816
Adjusted R-squared	0.010	0.061	0.078	0.007	0.056	0.073	0.009	0.058	0.075
Size	NO	YES	YES	NO	YES	YES	NO	YES	YES
Year FE	NO	YES	YES	NO	YES	YES	NO	YES	YES
Industry FE	NO	NO	YES	NO	NO	YES	NO	NO	YES

Panel B: Symbolic CSR

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>HeterogeneityIssue_{t-1}</i>	0.395*** (0.043)	0.355*** (0.061)	0.328*** (0.055)						
<i>HeterogeneityStakeholders_{t-1}</i>				0.383*** (0.057)	0.343*** (0.085)	0.314*** (0.084)			
<i>DisagreementStakeholders_{t-1}</i>							0.420*** (0.049)	0.368*** (0.083)	0.338*** (0.079)
Heterogeneity standard deviation	0.334	0.334	0.334	0.314	0.314	0.314	0.296	0.296	0.296
Observations	822	816	816	822	816	816	822	816	816
Adjusted R-squared	0.068	0.094	0.117	0.057	0.088	0.112	0.061	0.088	0.112
Size	NO	YES	YES	NO	YES	YES	NO	YES	YES
Year FE	NO	YES	YES	NO	YES	YES	NO	YES	YES
Industry FE	NO	NO	YES	NO	NO	YES	NO	NO	YES

Appendix D Probit Estimation

Even though the average probability of a firm approaching CSR substantively or symbolically is far from zero, and an OLS estimation should converge to a probit estimation, we explicitly run the model to ensure our coefficients remain significant and standard errors are consistent. Table D.1 displays such estimations and generally validates the statistical significance of our prior results. Specifically, all coefficients are significant at the 5% level.

Table D.1: Heterogeneity in stakeholder and topic pressure

This table shows the effect of three measures of heterogeneity in stakeholder pressure on the probability of a firm adopting substantive CSR (Panel A) and symbolic CSR (Panel B) using a probit estimation. US firms are often engaged on a multitude of issues (diverse social and environmental issues) by diverse stakeholders (i.e., institutional investors, NGOs, labor unions, and religious organizations) through shareholder proposals. In Columns (1) to (3) and (4) to (6), we respectively analyze the effect of variation in issues and stakeholders filling these proposals as a measure of imprecision. Specifically, we compute one minus the Herfindahl-Hirschman Index (HHI) on issues and stakeholders, respectively. In Columns (7) to (9), we measure the heterogeneity in stakeholder pressure through shareholder disagreement by correcting the prior stakeholder heterogeneity measure for coalitions of shareholders jointly targeting firms. We similarly compute one minus the HHI for stakeholders while considering coalitions as a single stakeholder since their demands are identical. CSR approach clustered standard errors are given in parentheses. *, ** and *** denote significance at the 10%, 5% and 1% level, respectively.

Panel A: Substantive CSR									
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Heterogeneity Issues _{<i>t-1</i>}	-0.818*** (0.243)	-0.756*** (0.287)	-0.709*** (0.230)						
Heterogeneity Stakeholders _{<i>t-1</i>}				-0.799*** (0.163)	-0.776*** (0.160)	-0.736*** (0.154)			
Disagreement Stakeholders _{<i>t-1</i>}							-0.882*** (0.249)	-0.835*** (0.277)	-0.779*** (0.217)
Substantive CSR score _{<i>t-1</i>}	0.061*** (0.015)	0.057*** (0.014)	0.042 (0.030)	0.063*** (0.018)	0.058*** (0.018)	0.045 (0.033)	0.062*** (0.017)	0.058*** (0.016)	0.043 (0.031)
Observations	822	816	8164	822	816	814	822	816	814
Pseudo R-squared	0.065	0.104	0.158	0.061	0.104	0.158	0.063	0.104	0.158
Average share of substantive CSR approaches									
Heterogeneity s.d.	0.501 0.334	0.501 0.334	0.501 0.334	0.501 0.314	0.501 0.314	0.501 0.314	0.501 0.296	0.501 0.296	0.501 0.296
Size	NO	YES	YES	NO	YES	YES	NO	YES	YES
Year FE	NO	YES	YES	NO	YES	YES	NO	YES	YES
Industry FE	NO	NO	YES	NO	NO	YES	NO	NO	YES
Panel B: Symbolic CSR									
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Heterogeneity Issues _{<i>t-1</i>}	0.933*** (0.142)	0.897*** (0.136)	0.823*** (0.144)						
Heterogeneity Stakeholders _{<i>t-1</i>}				0.796*** (0.185)	0.739*** (0.175)	0.703*** (0.185)			
Disagreement Stakeholders _{<i>t-1</i>}							0.973*** (0.170)	0.928*** (0.156)	0.839*** (0.165)
Substantive CSR score _{<i>t-1</i>}	-0.069*** (0.007)	-0.064*** (0.006)	-0.098*** (0.021)	-0.073*** (0.008)	-0.068*** (0.008)	-0.102*** (0.020)	-0.071*** (0.008)	-0.066*** (0.007)	-0.100*** (0.020)
Average share of symbolic CSR approaches									
Heterogeneity s.d.	0.246 0.334	0.246 0.334	0.246 0.334	0.246 0.314	0.246 0.314	0.246 0.314	0.246 0.296	0.246 0.296	0.246 0.296
Observations	822	816	816	822	816	816	822	816	816
Pseudo R-squared	0.087	0.128	0.259	0.073	0.116	0.252	0.083	0.124	0.256
Size	NO	YES	YES	NO	YES	YES	NO	YES	YES
Year FE	NO	YES	YES	NO	YES	YES	NO	YES	YES
Industry FE	NO	NO	YES	NO	NO	YES	NO	NO	YES