The Moral Boundary of the Firm

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ABSTRACT: Scholars have wrestled with the legal boundary of the firm for generations. The legal boundary limits the extent to which a firm can be held liable for the torts, contractual, and regulatory obligations of other corporations. The existence of a legal boundary suggests that the law limits incentives for firms to control the climate and other environmental harms caused by their corporate suppliers. Yet recent research demonstrates that many of the largest corporations impose environmental requirements on their suppliers that exceed the legal requirements imposed on these suppliers. This suggests that some factors other than the threat of liability may be encouraging corporations to try to reduce the environmental harm caused by their suppliers. In this Essay, we refer to the attributions of responsibility to firms by customers, employees, and other stakeholders as imposing a "moral boundary" on corporate action that may be more constraining than the legal boundary. Drawing on three surveys with 2,400 respondents, this Essay evaluates the extent to which the public may influence this moral boundary of the firm—whether potential employees, retail customers, community members, and other stakeholders hold firms morally accountable for the environmental harms of their suppliers even if they are not legally accountable. The survey results suggest that they do. These stakeholders assign moral blame to corporate buyers for the emissions of their first- and second-tier suppliers, although the moral boundary is nuanced: The assignment of blame has limited effects on consumer

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behavioral intentions, increases with the control the buyer exercises over the supplier, and decreases from tier one to tier two suppliers. The Essay concludes that corporate managers may be protecting the reputation-driven economic interests of their firms when they adopt environmental supply chain requirements, and it suggests the need for research on whether the moral boundary interacts with the legal boundary in ways that lead to an efficient balance between the legal boundary's incentives to take financial risks, externalize harms, and exercise limited control over third parties, and the moral boundary's incentives to be cautious about financial risks, internalize harms, and exercise a greater degree of control over third parties.

INTRODUCTION

Why do eighty percent of the largest firms in seven global sectors impose environmental requirements on their suppliers even though they face little or

no risk of legal liability and have no regulatory obligation to do so?[1] Why have over one thousand companies committed to reduce their carbon emissions consistent with limiting global warming to 1.5°C, absent any government regulatory requirement?[2] Why do all six of the leading national banks in the United States impose climate-related requirements on their borrowers even though they are not required to do so?[3] Why have many of the largest investment firms in the world adopted environmental, social, and governance ("ESG") or related requirements?

The answers are undoubtedly complex. Some firms could simply be responding to the economic incentives arising from the long term physical and transition risks from climate change or anticipating future government regulation.[4] Some critics argue that these actions are often just a form of costless signaling, allowing cynical managers to engage in greenwashing by making commitments without intending to bear the costs of fulfilling them.[5] Other critics argue that these actions just reflect the policy preferences of liberal corporate managers who are not sufficiently constrained by legal or economic considerations.[6]

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1. Michael P. Vandenbergh & Patricia A. Moore, *Environmental Governance by Contract: The Growing Role of Supply Chain Contracting*, 12 MICH. J. ENV'T & ADMIN. L. 1, 3 (2022); *see also* Michael P. Vandenbergh, *The New Wal-Mart Effect: The Role of Private Contracting in Global Governance*, 54 UCLA L. REV. 913, 948 (2007) (reporting a fifty percent environmental supply chain contracting rate based on 2004 data).

2. *See Companies Taking Action*, SCI. BASED TARGETS INITIATIVE, https://sciencebasedtargets.org/companies-taking-action#table [https://perma.cc/TV64-MVD7].

3. Sarah E. Light & Christina P. Skinner, *Banks and Climate Governance*, 121 COLUM. L. REV. 1895, 1896 (2021). For a discussion of the role of lenders, see *id.* at 1917–21. Some banks have recently reduced their commitments. *See* Nina Lakhani & Dominic Rushe, *US Banks Abandon "Bare Minimum" Environmental Standards Project, Alarming Climate Groups*, GUARDIAN (Mar. 5, 2024, 6:59 PM), https://www.theguardian.com/business/2024/mar/05/us-banks-leave-esg-finance-climate-crisis [https://perma.cc/E4FZ-NMRN].

4. *See* Ryan Thomas Trahan & Brad Jantz, *What Is ESG? Rethinking the "E" Pillar*, 32 BUS. STRATEGY & ENV'T 4382, 4382–88 (2023); *see also ESG Risk*, MOODY'S, https://www.moodys.com/web/en/us/capabilities/esg-risk.html [https://perma.cc/MU6G-3EGT]; *c.f.* GREGG LEMOS-STEIN, S&P GLOBAL RATINGS UPDATE ON ESG CREDIT INDICATORS 1 (2023), https://www.spglobal.com/_assets/documents/ratings/esg_credit_indicators_mr.pdf [https://perma.cc/6NSD-BJXU] (pausing S&P numerical ratings in favor of qualitative assessments); Cynthia A. Williams, *Fiduciary Duties and Corporate Climate Responsibility*, 74 VAND. L. REV. 1875, 1885 (2021) (concluding that "[e]xposure to climate risks extends to companies across almost every sector of the U.S. economy").

5. *See, e.g.*, Shelley Welton, *Neutralizing the Atmosphere*, 132 YALE L.J. 171, 195–98 (2022) (discussing greenwashing risks); Daniel C. Esty & Nathan de Arriba-Sellier, *Zeroing in on Net-Zero: From Soft Law to Hard Law in Corporate Climate Change Pledges*, 94 U. COLO. L. REV. 635, 637–41 (2023) (examining concerns with net-zero commitments); *see also* Amanda Shanor & Sarah E. Light, *Greenwashing and the First Amendment*, 122 COLUM. L. REV. 2033, 2071–72 (2022) (discussing laws requiring honest disclosures in securities exchanges).

6. *See, e.g.*, Elodie O. Currier, Note, *Virtuous Cycles: The Interaction of Public and Private Environmental Governance*, 40 PACE ENV'T. L. REV. 526, 534 (2023) (citing Cindy Chan, Jonah Berger & Leaf Van Boven, *Identifiable but Not Identical: Combining Social Identity and Uniqueness Motives in Choice*, 39 J. CONSUMER RSCH. 561, 561 (2012) (discussing group influences); and

Although these are plausible answers for some corporate actions, another motivation may explain much of this activity: Retail customers, employees, managers, and community stakeholders may hold firms morally responsible for the actions of their suppliers, the companies they invest in, and the companies they lend to even when the law does not hold them legally accountable. The legal boundary limits the extent to which a firm can be held liable for the actions of others and delineates firm managers' span of control. Absent extraordinary circumstances, a firm cannot be held liable for the actions of a third-party supplier or even a wholly owned subsidiary, an investor cannot be held liable for the actions of the companies in which it invests, and a lender cannot be held liable for the actions of its borrower.[7] But a firm that loses retail customers, that cannot attract and retain the best employees, that cannot open or expand a facility without resistance from the local community, and so on will often suffer economic consequences regardless of the absence of legal liability and the economic advantages of externalizing environmental harms.[8] Importantly, because employees, corporate customers, investors, and lenders may have a broader view of the moral responsibility of a large firm, and those firms are often the customers of other firms, the economic effects may be felt not only by firms with substantial consumer exposure (business-to-consumer or B-to-C firms), but also by those that are insulated from retail consumers (business-to-business or B-to-B firms).

The importance of reputation or brand has been widely recognized in the business and legal literatures,[9] and reputation has been identified as an important driver of private environmental governance.[10] But the literature is surprisingly unclear about the extent to which the public's attribution of moral responsibility—what we are calling the "moral boundary of the firm"—is broader than the legal boundary and may explain the reputational drivers of firms' interactions with suppliers, the firms they invest in, and borrowers.

Jonah Berger & Chip Heath, *Who Drives Divergence? Identity Signaling, Outgroup Dissimilarity, and the Abandonment of Cultural Tastes*, 95 J. PERSONALITY & SOC. PSYCH. 593, 593 (2008) (same)).

7. *See* Frank H. Easterbrook & Daniel R. Fischel, *Limited Liability and the Corporation*, 52 U. CHI. L. REV. 89, 90, 94, 105, 110–11 (1985).

8. *See* Joshua Ulan Galperin, *Governing Private Governance*, 56 ARIZ. ST. L.J. 765, 780–81 (2024). Recent resistance to corporate environmental actions may be affecting supply chain contracting. For instance, in 2019, CDP reported that supply-chain contracting was reducing 563 million tons of CO_2 per year, but in 2024 that figure was only forty-three million tons and only fifteen percent of corporate buyers had set supplier carbon emissions reduction targets. Research is needed on this issue. CDP, CHANGING THE CHAIN: MAKING ENVIRONMENTAL ACTION IN PROCUREMENT THE NEW NORMAL 4 (2019); *see also* MANVEER GILL, SOPHIA BONIFACIO, JAMES CHAMBERLAYNE & NATHAN COLE, CDP WORLDWIDE, STRENGTHENING THE CHAIN: TRANSFORM THE NORM 6 (2024).

9. *See generally* DANIEL DIERMEIER, REPUTATION ANALYTICS: PUBLIC OPINION FOR COMPANIES (2023) (analyzing business trends over the recent years and predicting how businesses can adopt strategies to remain in positive public perception).

10. Michael P. Vandenbergh, *Private Environmental Governance*, 99 CORNELL L. REV. 129, 150–99 (2013).

Understanding the contours of the moral boundary is essential for predicting firm behavior, assessing when firm managers are acting within their permissible decisional space under the fiduciary duty and business judgment rules, designing new interventions to drive socially desirable behavior by firms, and assessing the optimal legal boundary of the firm.

This Essay focuses on supply chain contracting and reports on the results of a new survey that examines the public's view of the importance and extent of the moral boundary. The results are preliminary and subject to further analysis, but they suggest that the public's view of the moral boundary is substantially broader than the legal boundary. The survey results also identify the contours of the moral boundary, clarify the differences between the moral and legal boundaries, and help explain the situations in which firms seek to control third parties even when there is no meaningful risk of legal liability. The results suggest that potential retail customers, employees, and others assign moral blame to corporate buyers for the greenhouse gas ("GHG") and other air pollution emissions of their first- and second-tier suppliers. But the moral boundary is nuanced. The assignment of blame appears to have limited effects on consumers' intentions to purchase retail products. The assignment of blame also increases with the level of control the buyer exercises over the supplier, potentially creating risks to firms that seek to control suppliers but fail to do so successfully. Not surprisingly, the assignment of blame also decreases from tier one to tier two suppliers, reducing incentives to control tier two suppliers and potentially creating incentives to interpose a low-risk supplier between the corporate buyer and its high-risk suppliers.

On the whole, however, given the risks of reputation or brand damage arising from the assignment of moral responsibility by potential retail customers, employees, and others, it is not surprising that firm managers take steps to reduce risks arising from third parties that are outside the legal boundary. The survey results provide insights into why firms often police their suppliers' behavior more strictly than tort liability and government regulatory requirements would suggest. For instance, why have firms made commitments to reduce not only their own carbon emissions and other climate impacts (e.g., scope 1 and 2 GHG emissions), but also those of their suppliers (scope 3 emissions),[11] over the last few decades even though there has been no legal or regulatory requirement to do so? Are these economically defensible responses to the broader moral boundary of the firm—to customers, employees, and local communities' ascription of responsibility for activities by third-party contractors? The survey results suggest that economically cognizable, reputation-driven risks may arise from failing to control the environmental harms of suppliers, and these results in turn may suggest that the corporate managers are often within

11. *See, e.g.*, Michael P. Vandenbergh & Sharon Shewmake, *The Pandemic Legacy: Accounting for Working-from-Home Emissions*, 48 ECOLOGY L.Q. 767, 772–73 (2021) (discussing the concept of GHG emissions scopes).

the decisional space the law provides for managers to respond to economic risks that arise from suppliers' actions.[12]

Understanding the moral boundary of the firm is also important for pedagogical reasons. Generations of lawyers are taught to understand the legal boundary and the rationales behind it, and their training shapes their advice to corporate managers. Yet from Nike to Kathie Lee Gifford, a long list of firms and individuals have suffered severe economic consequences from the failure to regulate the actions of suppliers who were well outside the legal boundaries that are taught in law school classes.[13] Understanding the differences between the moral and legal boundaries and the effects of the interactions between the two may enable more effective training of corporate and regulatory lawyers and improve the advice given by practicing lawyers.

The survey results also raise interesting questions about the optimal legal boundary of the firm. The data demonstrate that the moral boundary is complex, but it is clearly broader than the legal boundary. Both boundaries affect firm behavior, and they interact with one another. The legal boundary creates incentives to take risks, externalize harms, and outsource production or buy rather than make. In contrast, the moral boundary softens the effects of the legal boundary by creating incentives to be more risk averse, to reduce negative externalities, and to make rather than buy. The two boundaries not only interact, but they also likely shift over time, with courts narrowing or expanding the legal boundary, and the public doing the same with the moral boundary, such as through retail customers and employees broadening the ascription of moral responsibility as it becomes clear that government is not satisfying their preferences for environmental protection. An accurate understanding of the moral boundary of the firm and its interactions with the legal boundary thus can inform assessments of the optimal extent of the legal boundary.

The remainder of the Essay proceeds in four parts. Part I explores the legal boundary of the firm and the leading explanations for the boundary. Part II then explores the social psychological and legal literature on the moral boundary of the firm, discusses the methodology for the survey of perceptions of the moral boundary, and presents the results of the survey. Part III examines the implications of the survey results for explaining firm behavior and for assessing the combined effects of the moral and legal boundaries of the firm. The Essay concludes by identifying new areas for research.

12. *See* Einer Elhauge, *Sacrificing Corporate Profits in the Public Interest*, 80 N.Y.U. L. REV. 733, 763–64 (2005).

13. *See, e.g.*, Nike, Inc. v. Kasky, 539 U.S. 654, 659–60 (2003) (Stevens, J., concurring) (addressing First Amendment issues).

I. THE LEGAL BOUNDARY OF THE FIRM

The legal boundary of the firm serves two important functions: (1) it limits a firm's liabilities for the actions of individuals and organizations outside the legal boundary; and (2) it creates a zone of management control that affects a wide range of corporate relationships, including supply chain buyer–seller relationships, parent–subsidiary relationships, landlord–tenant relationships, and others. Although we focus on supply chain contracting, we recognize the importance of the legal boundary for understanding the role of investors, lenders, insurers, and others in influencing firm climate-related behavior.

A. SUPPLY CHAIN CONTRACTORS

To explore how the legal boundary of the firm may influence corporate buyers' decisions to add environmental requirements to its supply chain contracts, we ask a simple question: When is a corporate buyer legally liable for the actions of a corporate seller in a way that might explain these actions? More specifically, to understand corporate behavior, we focus on what corporate managers are likely to *believe* the risks to be. To assess likely perceptions of risks by corporate managers, we focus here not only on cases and statutes, but also other sources of information that might inform the beliefs of corporate managers and the lawyers who advise them, such as restatements, model jury instructions, treatises, and the client alerts distributed by corporate law firms. Product liability cases include numerous instances of corporate buyers facing liability for selling defective products purchased from corporate suppliers, but product liability cases are not instructive because the risks addressed by climate mitigation and many other environmental supply chain contracting requirements often do not arise from the harms caused by the product that the corporate buyer sells to others but from the provenance of the good—the harms caused by the corporate seller in the production of the good (e.g., the GHG emissions released during production at the seller's factory).

The legal risks to a buying corporation arising from the actions of a supplier can arise from contracts, torts, federal, state, local, and foreign environmental laws, and other federal, state, and local laws, such as consumer protection laws. We focus principally on common law contract and tort risks because until very recently federal, state, local or foreign environmental or consumer protection laws did not create a risk of liability for corporate buyers regarding the climate actions of their suppliers. As a result, compliance with these more recent laws cannot be the basis for the growth in climate-related supply chain contracting that has occurred over the last decade, although it is possible that some firms are acting in anticipation of future legal changes. We briefly discuss these more recent laws, though, because they provide signals about what firms may be anticipating and how anticipated government actions may affect the incentives for climate-related corporate supply chain contracting in the future.

1. Common Law Contract and Tort Risks

Express Assumption of Liability. Under basic principles of contract law, a contract can create liability for a corporate buyer for the acts of its supplier if the buyer explicitly assumes liability for the acts of the seller.[14] We are not aware of any such provisions in standard supply chain contracts despite years of research on the topic, however, so express assumption of liability cannot explain the widespread use of climate and other environmental supply chain contract requirements.[15] To ensure that our survey respondents are fully informed on this issue, the questions in our survey indicate that the buying corporation has not expressly agreed to bear the liabilities of the selling corporation.

Independent Contractor and Principal–Agent Claims. As a general rule, a corporation is not liable for the actions of its independent contractors,[16] and a corporate purchaser is not liable for the actions of its corporate sellers.[17] These widely accepted concepts may explain the lack of cases alleging that corporate buyers are liable for the climate or other environmental harms of their corporate suppliers.[18] Even if a corporate seller is an independent contractor, a risk of legal liability can arise for a corporate buyer if a principal–agent relationship is found to exist, with the supplier acting as the buyer's agent.[19] This can occur if the buyer dominates or controls the operations of the seller, but the extent of the control necessary to create a principal–agent relationship varies. The more control a corporate buyer exercises over a corporate seller, the greater the risk that it will be held to be

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14. *See generally* McNeilus Truck & Mfg. v. Linfor, Inc., No. 27-CV-19-14542, 2021 Minn. Dist. LEXIS 1124 (July 8, 2021) (discussing contract principles).

15. S*ee generally id.* (discussing express assumption of liability).

16. *See, e.g.*, ILL. PATTERN CIV. JURY INSTRUCTION 50.10 (2024) ("[O]ne who engages an independent contractor is not liable to others for the negligence of the contractor.").

17. *See* RESTATEMENT (THIRD) OF AGENCY § 1.01 case citation C.A.9 (AM. L. INST. 2006) (noting that "under Restatement Third of Agency § 1.01, a purchaser generally was not acting on behalf of a supplier in a distribution relationship in which goods were purchased from the supplier for resale").

18. For instance, the form jury instructions in Delaware provide:

> Generally, an independent contractor is not considered the agent of an owner or contractee who ordered the work performed. But if the owner or contractee's control or direction dominates the way that the work is performed, the independent contractor becomes an agent of the owner/contractee, making the owner/contractee vicariously liable for the acts of the independent contractor.

DEL. PATTERN JURY INSTRUCTIONS NO. 18.6A (2000).

19. *See, e.g.*, WILLIAM T. ALLEN, REINIER KRAAKMAN & VIKRAMADITYA S. KHANNA, COMMENTARIES AND CASES ON THE LAW OF BUSINESS ORGANIZATION 7–8 (6th ed. 2021) (citing RESTATEMENT (THIRD) OF AGENCY § 1.01 (AM L. INST. 2006)) (noting the elements of agency); *see also* RESTATEMENT (THIRD) OF AGENCY § 1.01 cmt. g (AM L. INST. 2006) ("A purchaser is not 'acting on behalf of' a supplier in a distribution relationship in which goods are purchased from the supplier for resale.").

legally liable for the actions of its supplier; however, we were unable to find any case in which a corporate buyer exercised sufficient control over a corporate seller to create common law contract- or tort-based environmental liabilities for the buyer.[20]

Third-Party Beneficiary, Negligence, and Unjust Enrichment Claims. Several reported decisions have addressed allegations that a corporate buyer has contract or tort liability for labor or human rights practices under legal theories relevant to climate change mitigation such as third-party beneficiary, negligence, and unjust enrichment claims. For instance, in *Doe I v. Wal-Mart*, the Ninth Circuit addressed supply chain liability issues in a class action brought by employees of Wal-Mart's foreign suppliers.[21] The claims were based on the working conditions in the supplier's facilities and Wal-Mart's failure to implement a 1992 private code of conduct that was included in Wal-Mart's standard supply chain contract.[22] Although the case did not involve environmental harms, the decision demonstrates the narrow legal boundary for corporate buyers under common law contract and tort principles.[23]

The Wal-Mart code of conduct included in the 1992 supply chain contract provided Wal-Mart with a right to inspect the suppliers' facilities, required suppliers to comply with local laws, and required suppliers to follow industry standards on forced labor, child labor, discrimination, and working conditions. The employees alleged that Wal-Mart failed to adequately monitor its suppliers and alleged that Wal-Mart's demand for low prices pressured suppliers to violate the labor standards in the code of conduct.[24]

The complaint sought relief based on three theories that are relevant to climate change mitigation: (1) that the employees were third-party beneficiaries of the supply contracts; (2) that Wal-Mart negligently breached a duty to monitor the suppliers; and (3) that Wal-Mart was unjustly enriched by the mistreatment of the employees.[25] The Ninth Circuit concluded that Wal-Mart had no legal duty under the labor standards included in the supply chain contract and that a negligence claim based on a third-party beneficiary theory could not be maintained because Wal-Mart's supply contracts did not create a legal obligation to third parties and Wal-Mart did not have a duty to monitor the suppliers or to protect the suppliers' employees from the suppliers' intentional acts.[26] Similarly, a claim for "negligent retention of control and

20. *See* ALLEN ET AL., *supra* note 19; A. Gay Jenson Farms Co. v. Cargill, Inc., 309 N.W.2d 285, 293 (Minn. 1981).

21. Doe I v. Wal-Mart Stores, Inc., 572 F.3d 677, 680–85 (9th Cir. 2009).

22. *Id.* at 679–80.

23. *Id.* at 680–85.

24. *See id.* at 680; *see also* Doe I v. Apple Inc., No. 1:19-cv-03737, 2021 WL 5774224 (D.D.C. Nov. 2, 2021) (a class-action case on behalf of child laborers at mines producing cobalt for major technology firms that argues Apple should be liable for its suppliers' violations of the Trafficking Victims Protection Reauthorization Act).

25. *Wal-Mart*, 572 F.3d at 681.

26. *Id.* at 685.

supervision" failed because it required the plaintiffs to demonstrate that Wal-Mart "exercised significant control over Plaintiffs and that 'exercise of retained control *affirmatively contributed* to the employee's injuries.'"[27]

An irony arising from the Wal-Mart case is that Wal-Mart's adoption of standards designed to improve the working conditions of its suppliers' employees increased the legal risk to Wal-Mart, even if the plaintiffs' claims ultimately failed. The employees' claims arose from the alleged shortcomings of Wal-Mart's attempt to add a labor code of conduct to its supply chain requirements and to improve working conditions by monitoring the suppliers' operations. Increasing the control over suppliers to reduce their GHG emissions, a common feature of many supply chain contracting initiatives, may also increase legal risks for companies that adopt climate change requirements in supply chain contracts.[28] We included questions in our survey to assess whether a corporate buyer's effort to improve the climate performance of its supplier may inadvertently increase its moral or normative risks as well, and we report on the results in Part III.

2. Federal, State, Local, and Foreign Climate-Related Laws

Federal Tort and Statutory Liability. A corporate buyer is also unlikely to be liable for federal common law torts regarding GHG emissions that are released by its corporate suppliers. In *American Electric Power Co. v. Connecticut*, the U.S. Supreme Court concluded that the Clean Air Act displaces federal common law tort actions arising from GHG emissions, and the Clean Air Act does not have current provisions creating liability for suppliers' emissions.[29] Similarly, no other federal statutes or regulations restrict or create liability for the release of GHG emissions from a corporation's suppliers. Although the Securities and Exchange Commission ("SEC") has promulgated a rule requiring reporting of some climate risks, the rule is in jeopardy pending review by the federal courts and changes in the SEC after the 2024 presidential election.[30] State tort actions alleging corporate liability for GHG emissions on multiple grounds are working their way through the courts, but they typically address the emissions from corporations arising from their operations or products rather than from suppliers' emissions, and the emergence

27. *Id.* at 684 (quoting Hooker v. Dep't of Transp., 38 P.3d 1081, 1083 (Cal. 2002)).

28. *See, e.g.*, JOANA SETZER & CATHERINE HIGHAM, GLOBAL TRENDS IN CLIMATE CHANGE LITIGATION: 2024 SNAPSHOT 41 (2024) (discussing claims that corporations breached fiduciary duties by pursuing ESG actions).

29. *See* Am. Elec. Power Co. v. Connecticut, 564 U.S. 410, 424, 426–29 (2011).

30. *See* The Enhancement and Standardization of Climate-Related Disclosures for Investors, 89 Fed. Reg. 21668, 21674–76 (Mar. 28, 2024) (to be codified at 17 C.F.R. pts. 210, 229–30, 232, 239, 249); Lesley Clark, *Trump SEC Pick Wants to Ditch Landmark Climate Disclosure Rule*, POLITICO (Dec. 9, 2024, 9:50 AM), https://www.politico.com/live-updates/2024/12/09/congress/paul-atkins-sec-climate-00193254 [https://perma.cc/JN2K-74BB].

of widespread climate and other environmental supply chain contracting requirements predated the filing of these state tort actions.

State and Foreign Legal Risks. State and foreign legal risks are also limited for supply chain GHG emissions. In recent years, some states have begun to regulate, tax, and create liability for GHG emissions, and in 2023 California adopted state securities disclosure requirements for businesses operating in California that include a requirement to disclose some scope 3 supply chain GHG emissions.[31] California has not adopted restrictions on the quantity of emissions from suppliers, but a business may be subject to administrative penalties for failure to properly disclose its scope 3 emissions. Vermont enacted legislation creating the Climate Superfund Cost Recovery Program in 2024, which developed a state liability scheme modeled on the federal Superfund statute, and New York adopted a similar statute several months later.[32] The law creates successor liability, but it does not address the responsibility of corporate buyers for their suppliers' emissions. Although the EU recently adopted a GHG disclosure measure that includes supply chain reporting obligations,[33] it does not create liability for or regulate supply chain emissions.[34] In sum, state and foreign regulation and liability are unlikely to explain the widespread existence of environmental supply chain contracting, although the activity by California, Vermont, and the EU may signal legal risks on the horizon for corporate suppliers' emissions.

3. Other Legal Risks

Federal Regulatory Violations or Liability. Under a limited number of federal statutory provisions, risks arise for corporate buyers from the environmental actions of corporate sellers. The Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") liability poses the greatest risk of liability to corporate buyers through the "owner," "operator," and "arranger" provisions in CERCLA section 107. In *United States v. Bestfoods*, the U.S.

31. *See, e.g.*, Climate Corporate Data Accountability Act, S.B. 253, 2023–2024 Gen. Assemb., Reg. Sess. (Cal. 2024).

32. *See* Climate Superfund Act, S. 259, 2023–2024 Gen. Assemb., Reg. Sess. (Vt. 2024); Leah Sarnoff, *Vermont Officially Becomes 1st State to Charge Big Oil for Climate Change Damage*, ABC NEWS (May 30, 2024, 6:59 PM), https://abcnews.go.com/US/vermont-bill-charge-big-oil-climate-change-damage/story?id=110148158 [https://perma.cc/64E3-9HAA]; Climate Change Superfund Act, S.B. S2129B, 2023–2024 Gen. Assemb., Reg. Sess. (N.Y. 2024); Drew Hutchinson, *Companies Could Pay Billions Under NY Climate Superfund Law (2)*, BLOOMBERG L. (Dec. 26, 2024, 1:56 PM) (on file with the *Iowa Law Review*).

33. *See* Directive (EU) 2022/2464, of the European Parliament and of the Council of 14 December 2022, amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as Regards Corporate Sustainability Reporting, 2022 O.J. (L 322) 15, 43.

34. *Id.* (regarding corporate sustainability reporting).

Supreme Court addressed this issue regarding owners and operators,[35] and in *Burlington Northern and Santa Fe Railway Co. v. United States*, the Court addressed this issue regarding arranger liability.[36] The Court has interpreted CERCLA narrowly in these cases, however, with the result that the risks posed to corporate buyers are not substantially different from general supplier liability arising under tort law.[37] In addition, CERCLA liability only applies to releases of hazardous substances, so CERCLA statutory provisions create limited risks regarding corporate supply chain GHG or air pollution emissions.[38]

Risks can arise under the Clean Water Act ("CWA"), however, for corporate buyers in limited circumstances that roughly parallel the principal–agent analysis under tort law. In short, a corporate buyer is typically not liable for the CWA violations of its corporate suppliers, but if the buyer exercises excessive control the Act "imposes liability both on the party who actually performed the work and on the party with responsibility for or control over performance of the work."[39] For example, in *Assateague Coastkeeper v. Hudson Farm*, Perdue, a poultry "integrator," purchased chickens from Hudson Farm, a poultry producer, but also was heavily involved in the day-to-day actions of the producer.[40] Hudson Farm violated its CWA discharge permit,[41] and an advocacy group filed a CWA section 505 citizen suit against Hudson Farm and Perdue.[42] The District Court denied a motion to dismiss on the ground that Perdue controlled almost every aspect of Hudson Farm's operations.[43] The case suggests that a corporate buyer that exercises extensive control over the operations of a corporate seller may be considered a person who violates the Act, but this level of control is unlikely to occur in many supply chain contracting arrangements.[44]

35. *See generally* United States v. Bestfoods, 524 U.S. 51 (1998) (discussing the application of the "owner" and "operator" provisions in CERCLA section 107(a)(2) in holding a parent company liable for a subsidiary's actions in operating a polluting facility).

36. Burlington N. & Santa Fe Ry. Co. v. United States, 556 U. S. 599, 612 (2009) (discussing the application of the "arranger" provision and holding that to be an "arranger" a company organizing transportation of a hazardous substance must "inten[d] that at least a portion of the product be disposed of during the transfer process").

37. *See, e.g.*, *id.* at 612–19.

38. *See id.*

39. United States v. Lambert, 915 F. Supp. 797, 802 (S.D. W. Va. 1996).

40. Assateague Coastkeeper v. Alan & Kristin Hudson Farm, 727 F. Supp. 2d 433, 434 (D. Md. 2010).

41. *Id.* at 435.

42. *See id.*; Clean Water Act § 505, 33 U.S.C. § 1365 (2018).

43. *See Assateague*, 727 F. Supp. 2d at 440.

44. *See id.* at 442 (citing United States v. Avatar Holdings, Inc., No. 93-281-CIV-FTM-21, 1995 WL 871260, at *14 (M.D. Fla. Nov. 22, 1995)).

4. Summary

The discussion above suggests that a corporate buyer's common law and statutory risks for climate-related matters are limited so long as the corporate buyer does not become heavily involved in controlling the operations of the seller. The principal exception to the limited liability of the buyer arises when an agency relationship is formed,[45] such as when the buyer exerts substantial control over the seller's internal affairs.[46] The precise amount of control necessary to trigger liability by a corporate buyer based on the climate actions of a climate seller is unclear, but anything short of domination or controlling nearly every aspect of the supplier's operations appears to be insufficient to create a substantial risk of liability.[47] The current legal risks thus appear to be insufficient to explain the extent and breadth of the observed environmental and climate supply chain contracting requirements.

II. THE MORAL BOUNDARY OF THE FIRM

The widespread adoption of climate and other environmental supply chain contracting provisions absent legal risks may result from managers' concerns about reputational risks, their policy preferences, risk averse advice from corporate lawyers about the extent of the legal liability arising from suppliers, anticipation of future regulation, or other sources.[48] Our survey explores the extent to which reputational risks arise from an accurate perception that potential retail customers, employees, and other stakeholders hold corporate buyers morally responsible for the actions of corporate suppliers. Part II explores the social science and legal research regarding public perceptions of the social responsibility and moral boundary of the firm.[49] It then discusses the methodology and results of a survey regarding the moral boundary.

A. THE MORAL BOUNDARY

The bulk of the research by social scientists on what we are calling the moral boundary of the firm falls under the concept of "corporate social

45. *See* Byrd v. Republic of Honduras, 613 F. App'x 31, 33–34 (2d Cir. 2015).

46. *See* Jenson Farms Co. v. Cargill, Inc., 309 N.W.2d 285, 290–91 (Minn. 1981).

47. *See* Vandenbergh & Moore, *supra* note 1, at 3.

48. *See, e.g.*, *Five Steps to Protect Your Business from Being Liable for Your Supplier's or Distributor's Environmental Contamination*, TAFT STETTINIUS & HOLLISTER LLP (Aug. 10, 2010), https://www.taftlaw.com/news-events/law-bulletins/five-steps-to-protect-your-business-from-being-liable-for-your-supplier-s-or-distributor-s-environmental-contamination [https://perma.cc/M8GE-Q48V] (identifying no risk from the GHG emissions of suppliers).

49. *See generally* Michael P. Vandenbergh, *Beyond Elegance: A Testable Typology of Social Norms in Corporate Environmental Compliance*, 22 STAN. ENV'T L.J. 55 (2003) (discussing the role of social norms on corporate behavior).

responsibility ("CSR"),"[50] which describes the extent to which companies are or should be socially accountable to stakeholders and the broader society.[51] Several conceptions of CSR have been proposed, but they generally divide the responsibilities of the firm into economic, legal, ethical, and altruistic responsibilities.[52] Notably, the definition of ethical responsibilities specifically includes societal-based responsibilities beyond legal ones, including responsibilities that reflect "implicit social norms and values."[53] Researchers have discussed the directional role of business's responsibilities to society and how these responsibilities shape consumer responses, but researchers have paid considerably less attention to how the expectations of society shape these responsibilities. Namely, when does the public care about the moral, not legal, boundaries of the firm?

No direct empirical evidence exists on the degree to which the public's perceptions of the moral boundaries of the firm differ from its legal boundaries. The moral boundary has been inferred, however, from a wide range of sources. For instance, the purchasing behavior of consumers provides a common demonstration of the extent to which people care about the moral boundaries of the firm. Consumers have been holding social responsibility in increasingly higher regard when making purchasing decisions,[54] deciding which brands to be loyal to,[55] and in determining their satisfaction with their purchase[56] and willingness to purchase from the company again.[57] Although these social responsibility initiatives are often costly to undertake, the consumer loyalty gained from them means that it can be in a corporation's

50. Andreas Georg Scherer & Guido Palazzo, *The New Political Role of Business in a Globalized World: A Review of a New Perspective on CSR and Its Implications for the Firm, Governance, and Democracy*, 48 J. MGMT. STUD. 899, 900 (2011).

51. *See* Julia Patrizia Rotter, Peppi-Emilia Airike & Cecilia Mark-Herbert, *Exploring Political Corporate Social Responsibility in Global Supply Chains*, 125 J. BUS. ETHICS 581, 582 (2014). Social scientists have assessed norm activation regarding individuals as well. *See, e.g.*, Paul C. Stern, Thomas Dietz & J. Stanley Black, *Support for Environmental Protection: The Role of Moral Norms*, 8 POPULATION & ENV'T 204, 218–20 (1985) (concluding that individuals often assign responsibility to government or corporations).

52. Geoffrey P. Lantos, *The Boundaries of Strategic Corporate Social Responsibility*, 18 J. CONSUMER MKTG. 595, 595–97 (2001).

53. Jee-Won Kang & Young Namkung, *The Effect of Corporate Social Responsibility on Brand Equity and the Moderating Role of Ethical Consumerism: The Case of Starbucks*, 42 J. HOSP. & TOURISM RSCH. 1130, 1132 (2018).

54. *See* Ali Azizzadeh, Hossein Mehdizadeh & Nematollah Shiri, *Effect of Corporate Social Responsibility on Customer Behavioral Intention*, 14 J. BUS. ADMIN. RSCH. 203, 203–04 (2022).

55. Pedro Cuesta-Valiño, Pablo Gutiérrez-Rodríguez, Blanca García-Henche & Estela Núñez-Barriopedro, *The Impact of Corporate Social Responsibility on Consumer Brand Engagement and Purchase Intention at Fashion Retailers*, 41 PSYCH. & MKTG. 649, 649–50 (2024).

56. Khawaja Fawad Latif, Andrea Pérez & Umar Farooq Sahibzada, *Corporate Social Responsibility (CSR) and Customer Loyalty in the Hotel Industry: A Cross-Country Study*, INT'L J. HOSP. MGMT., Aug. 2020, at 1, 1.

57. Xueming Luo & C.B. Bhattacharya, *Corporate Social Responsibility, Customer Satisfaction, and Market Value*, 70 J. MKTG. 1, 3–4 (2006).

best financial interest to act within the moral boundary, even if that results in actions that are not required by government regulations and do not create a substantial risk of legal liability.[58]

Consumers have been found to express feelings of moral outrage,[59] including contempt and disgust, in response to a firm's perceived moral transgressions.[60] These powerful negative emotions, often triggered by human rights violations, are hard to overcome and often lead to consumer complaints,[61] boycotting,[62] and brand avoidance.[63] Consumers also respond similarly to environmental misdeeds by corporations, including expressing feelings of anger and outrage when a company engages in non-green actions, but rewarding them for green initiatives.[64] The moral behaviors associated with firms can go as far as to influence the product consumption experience of the consumer even when immoral behaviors are irrelevant to the products themselves.[65]

Research suggests that the consumer response to moral or ethical transgressions by the firm can reach beyond just the individual business committing the transgression, and the entire supply-chain may be susceptible to consumer pressure, as consumers may not differentiate across levels of the supply-chain in their responses. For example, one recent study found that the perception of firms suffers when there is a mismatch between their legal–ethical actions and their supply chain partners' legal–ethical actions.[66] Other research suggests that consumers may hold a firm responsible for the transgressions

58. Markus Kitzmueller & Jay Shimshack, *Economic Perspectives on Corporate Social Responsibility*, 50 J. ECON. LITERATURE 51, 60 (2012).

59. *See generally* Paolo Antonetti & Stan Maklan, *An Extended Model of Moral Outrage at Corporate Social Irresponsibility*, 135 J. BUS. ETHICS 429 (2014) (discussing the growing role of moral outrage in CSR considerations).

60. *See generally* Silvia Grappi, Simona Romani & Richard P. Bagozzi, *Consumer Response to Corporate Irresponsible Behavior: Moral Emotions and Virtues*, 66 J. BUS. RSCH. 1814 (2013).

61. *Id.* at 1818.

62. Jörg Lindenmeier, Christopher Schleer & Denise Pricl, *Consumer Outrage: Emotional Reactions to Unethical Corporate Behavior*, 65 J. BUS. RSCH. 1364, 1364 (2011), https://www.sciencedirect.com/science/article/pii/S0148296311003316 [https://perma.cc/H67M-RR2J].

63. Anni Rahimah, Huu Phuc Dang, Tessa Tien Nuyen, Julian Ming-Sung Cheng, Andriani Kusumawati, *The Subsequent Effects of Negative Emotions: From Brand Hate to Anti-Brand Consumption Behavior Under Moderating Mechanisms*, 32 J. PROD. & BRAND MGMT. 618, 621–23 (2023), https://www.proquest.com/docview/2792391078/fulltextPDF/86D3FF9C3D884F4DPQ/1?accountid=14663&sourcetype=Scholarly%20Journals [https://perma.cc/CHA7-8J4E].

64. Chunyan Xie, Richard P. Bagozzi & Kjell Grønhaug, *The Role of Moral Emotions and Individual Differences in Consumer Responses to Corporate Green and Non-Green Actions*, 43 J. ACAD. MKTG. SCI. 333, 349 (2015).

65. Aner Tal, Yaniv Gvili & Moty Amar, *The Influence of Companies' Moral Associations on the Product Consumption Experience: The Role of Moral Disgust*, 39 PSYCH. & MKTG. 1871, 1878 (2022).

66. *See generally* Yi Liu, Xingping Jia, Xingzhi Jia & Xenophon Koufteros, *CSR Orientation Incongruence and Supply Chain Relationship Performance—A Network Perspective*, 67 J. OPERATIONS MGMT. 237 (2021) (discussing the detrimental effects of supply chain CSR orientation incongruence).

committed by upstream suppliers,[67] although the extent to which consumers hold firms responsible above and beyond the legal requirements of the supply-chain relationship is unclear, as is the extent to which consumers hold all levels of the supply chain to the same moral standards.

The causes of these mismatches may be due to several different types of pressure arising from a perceived moral boundary that is broader than the legal boundary. These include pressures arising from corporate partnerships and media coverage, as well as consumer pressure.[68] The power of the moral boundary of the firm also can lead to public support for legislation that shifts the legal boundary. For example, research suggests that the Fair Labor Standards Act was created as a response to the moral outrage about the use of sweatshop labor.[69]

One recent review paper concluded that several different factors predict when consumers choose to punish corporations for failing to uphold their corporate social responsibilities.[70] Several of these factors are unrelated to the corporation, including specific features of the wrongdoing or moral transgression—such as the severity of the harm done to the victims—as well as specific features of the consumer, including the strength of their moral values.[71] Consumers also consider characteristics of the specific firm itself, however, including the size and previous commitment to social responsibility, when determining how much to punish the corporation for a moral misdeed.[72] The willingness of consumers to attenuate their moral response to a corporation—and even potentially forgive them—implies that unlike a legal boundary, a moral boundary is flexible and can shift along with changes in societal norms and other factors.

Corporations may also be subject to internal pressure from their employees about extending their moral obligations beyond their legal requirements.[73] Employees with pro-social and pro-environmental attitudes often want to work for companies that match their values, and thus may self-

67. Julia Hartmann & Sabine Moeller, *Chain Liability in Multitier Supply Chains? Responsibility Attributions for Unsustainable Supplier Behavior*, 32 J. OPERATIONS MGMT. 281, 288–90 (2014).

68. Haesun Park-Poaps & Kathleen Rees, *Stakeholder Forces of Socially Responsible Supply Chain Management Orientation*, 92 J. BUS. ETHICS 305, 316–19 (2010).

69. *See generally* John S. Forsythe, *Legislative History of the Fair Labor Standards Act*, 6 LAW & CONTEMP. PROBS. 464, 465–67 (1939) (discussing public concern about New Deal-era working conditions as an influence on the adoption of the Fair Labor Standards Act); Denis G. Arnold & Laura P. Hartman, *Moral Imagination and the Future of Sweatshops*, 108 BUS. & SOC'Y REV. 425, 425–61 (2003) (discussing the impact of moral outrage on companies who use unsavory labor practices).

70. Carmen Valor, Paolo Anotonetti & Grzegorz Zasuwa, *Corporate Social Irresponsibility and Consumer Punishment: A Systematic Review and Research Agenda*, 144 J. BUS. RSCH. 1218, 1228 (2022).

71. *Id.* at 1220–25.

72. *Id.* at 1225–28.

73. Joseph Lanfranchi & Sanja Pekovic, *How Green Is My Firm? Workers' Attitudes and Behaviors Towards Job in Environmentally-Related Firms*, 100 ECOLOGICAL ECON. 16, 23–27 (2014).

select into them.[74] This in turn may encourage corporations to increase their social responsibility initiatives to attract high-value workers.[75] These internal pressures may benefit companies in the long run to the extent pro-social employees working for green firms report more positive attitudes and increased motivation towards their jobs.[76]

In addition, investor behavior suggests that many investors believe they bear moral responsibilities when deciding which corporations to invest in.[77] For example, investors may believe that they financially enable a corporation's immoral or unethical behavior, thus they may believe that they are morally responsible for the bad behavior of corporations they invest in, even if they are not legally responsible.[78] Research demonstrates that laypeople often make harsh moral judgments about certain types of investing behavior, even when that behavior is legally permissible.[79] Given these beliefs regarding moral accountability, it is not surprising that some investors engage in socially responsible investing ("SRI"), in which they take into account the ethical implications of their investments.[80] For example, when consumers in a particular market care more about the environment and sustainable initiatives, investors in that market tend to invest more in "green" and environmentally-friendly markets.[81] Additionally, moral expectation influences the SRI behavior of both parties in the investment relationship—consumers react negatively to companies with a sustainable reputation accepting investments from less-than-sustainable investors.[82] The gap between the moral boundary and the legal boundary of the firm can also be seen in the lending sector, where the general public is placing an increasing emphasis on the social and ethical implications of a bank's actions.[83]

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74. *Id.* at 16–23. *See generally* Kjell Arne Brekke & Karine Nyborg, *Attracting Responsible Employees: Green Production as Labor Market Screening*, 30 RES. & ENERGY ECON. 509 (2008) (discussing the economic effects of companies promoting social values).

75. Brekke & Nyborg, *supra* note 74, at 522.

76. *Id.*

77. *See generally* Martin E. Sandbu, *Stakeholder Duties: On the Moral Responsibility of Corporate Investors*, 109 J. BUS. ETHICS 97 (2012).

78. *Id.* at 100.

79. Sebastian Lotz & Andrea R. Fix, *Not All Financial Speculation Is Treated Equally: Laypeople's Moral Judgments About Speculative Short Selling*, 37 J. ECON. PSYCH. 34, 35–36 (2013).

80. Steve Schueth, *Socially Responsible Investing in the United States*, 43 J. BUS. ETHICS 189, 189–90 (2003).

81. Boey Huey Ming, Gerald Goh Guan Gan & Suganthi Ramasamy, *The Role of Concern for the Environment and Perceived Consumer Effectiveness on Investors' Willingness to Invest in Environmentally-Friendly Firms*, 33 KAJIAN MALAY. 173, 186 (2015).

82. Merika Mattila, Sustainable Investing and the Ethical Dilemma: Consumer Reactions to Sustainable Companies Choosing Controversial Investors 37–42 (Apr. 9, 2021) (B.S. thesis, Aalto University) (on file with the *Iowa Law Review*).

83. Csaba Lentner, Krisztina Szegedi & Tibor Tatay, *Corporate Social Responsibility in the Banking Sector*, PUB. FIN. Q. 95, 97–99 (2015); Roger Bennett & Rita Kottasz, *Public Attitudes Towards the UK Banking Industry Following the Global Financial Crisis*, 30 INT'L J. BANK MKTG. 128,

One way to conceptualize the difference between the legal and the moral boundary of the firm is to investigate how the public attributes responsibilities to corporations beyond legally stated ones. A recent paper by Amengual and colleagues examined public perceptions of human rights "soft-laws"—where corporations have human rights obligations that are not legally or otherwise defined.[84] Participants were presented with several vignettes about multinational enterprises being potentially involved in human rights violations and were asked about the extent to which they held the corporation morally responsible.[85] The study found that the public's standards for corporate responsibility for human rights violations exceed the legal standards for the same actions, with the supply chain relationship and firms' attempt at due diligence were the most predictive of public judgments of the firm.[86] Importantly, Amengual et al. conclude that public opinion matters more than legal boundaries when it comes to the reputation of multinational enterprises.[87]

B. EMPIRICAL STUDIES 1 TO 3

We conducted three surveys to examine the public's views regarding the moral boundary of the firm as to the GHG and other air pollution emissions from first- and second-tier suppliers.

1. Overview of Empirical Study Methodology

Our research employed a structure similar to that used by Amengual et al., with the primary stimuli consisting of a hypothetical scenario describing a corporation's potential wrongdoing and the survey assessing participants' reactions toward the corporation.[88]

Description of Scenario and Key Scenario Manipulations. We generated a scenario that described an outdoor furniture company named The Acme Corporation and its supply chain relationship with either a first-tier (Beta

139–40 (2012); Rafael Bravo, Jorge Matute & José M. Pina, *Corporate Social Responsibility as a Vehicle to Reveal the Corporate Identity: A Study Focused on the Websites of Spanish Financial Entities*, 107 J. BUS. ETHICS 129, 132 (2012); Meng-Wen Wu & Chung-Hua Shen, *Corporate Social Responsibility in the Banking Industry: Motives and Financial Performance*, 37 J. BANKING & FIN. 3529, 3532 (2013); Paul Thompson & Christopher J. Cowton, *Bringing the Environment into Bank Lending: Implications for Environmental Reporting*, 36 BRIT. ACCT. REV. 197, 199–200 (2004); Jasmine Elliott & Åsa Löfgren, *If Money Talks, What Is the Banking Industry Saying About Climate Change?*, 22 CLIMATE POL'Y 743, 744 (2022).

84. *See generally* Matthew Amengual, Rita Mota & Alexander Rustler, *The 'Court of Public Opinion:' Public Perceptions of Business Involvement in Human Rights Violations*, 185 J. BUS. ETHICS 49 (2023).

85. *Id.* at 50.

86. *Id.* at 49, 60, 65.

87. *Id.* at 64–66.

88. See the Appendix for full details of the empirical methodology, including an overview of participant recruitment, study design, and procedure, as well as the full survey instrument. *See generally* Michael P. Vandenbergh, Jane E. Miller, Margaret Blair & Jonathan M. Gilligan, *The Moral Boundary of the Firm Appendix* (Dec. 12, 2024) [hereinafter Appendix], https://osf.io/qwjzk (on file with the *Iowa Law Review*).

Corporation, Study 1) or second-tier (Century Corporation, Study 2) supplier, whose manufacturing process is known to cause environmental harms. In each study, we orthogonally manipulated the description of the relationship between the buying company (i.e., Acme) and the first-tier supply chain partner (i.e., Beta)[89] in two main ways. The first involved Acme's contractual ability to influence Beta's manufacturing process as stipulated by the terms of the Acme–Beta contract, and the second involved the actual control Acme exhibited over Beta.

The first key factor, referred to as contractual ability, manipulated Acme's potential involvement in Beta's manufacturing process—as per the terms of their contract. The contractual ability variable had three levels—limited, intermediate, and high—that varied in their description of the manufacturing input that Acme was contractually allowed to have. For example, the limited contractual ability condition included wording such as "Acme's contract with The Beta Corporation allows . . . limited input into the manufacturing process"[90] while also describing some of the allowed input as "set[ting] requirements regarding minimum quality standards."[91] In contrast, the high contractual ability condition describes the contract as allowing "Acme . . . complete control and input over all parts of Beta's manufacturing process, from material sourcing to the building and operation of the machines and facilities."[92]

The second key scenario manipulation followed the first and described the level of actual control that Acme exhibited over Beta's manufacturing process. The actual control manipulation also had limited, intermediate, and high levels that varied Acme's actual involvement—separate from its contractual terms. For example, in the limited control version, participants read about how "[o]nce the manufacturing process was ready to begin, Acme communicated a list of lawn chair part quality requirements . . . but otherwise was not involved,"[93] while in the high actual control condition "Acme employed inspectors to oversee and direct the manufacturing process"[94] along with additional involvement.

The combination of these two manipulations created a set of nine scenarios describing situations in which Acme was not legally liable for the environmental harms but where people might still attribute responsibility to them—based on either the terms of their contract, their actual manufacturing involvement, or

89. Although the scenario employed in Study 2 described a second-tier supply chain partner (i.e., Century) as responsible for the air pollution, the scenario manipulations always described the contractual agreement and manufacturing partnership between The Acme Corporation and The Beta Corporation.

90. Appendix, *supra* note 88, at 5.

91. *Id.*

92. *Id.*

93. *Id.* at 4.

94. *Id.* at 5.

both. By orthogonally manipulating Acme's contractual ability and the actual control it exhibited, we were able to examine whether a corporation's potential or actual ability mattered more to potential consumers when attributing responsibility for environmental harms.

Main Measures. Two primary dependent variables were of interest in this research. The first and key dependent variable assessed participants' attribution of moral responsibility and read, "In your view, is The Acme Corporation morally/ethically responsible for the air pollution [greenhouse gases] created by *Beta Corporation's* manufacturing process?"[95] Participants answered on a seven-point Likert-type scale with verbal anchors on all seven points, from "[n]ot at all responsible" to "[e]xtremely responsible," with a midpoint labeled "[s]omewhat responsible."[96]

The second dependent variable was a likelihood-of-purchasing measure and read, "Based upon the information in the scenario, how likely are you to buy a lawn chair from The Acme Corporation?"[97] This was also answered on a seven-point Likert-type scale anchored on all points, from "[e]xtremely unlikely" to "[e]xtremely likely," and the midpoint labeled as "[n]either likely nor unlikely."[98] For analysis purposes, this measure was recoded as -3 to +3, with the midpoint labeled as zero.

2. Study 1

Study 1 asked participants to take on a hypothetical consumer point of view by asking them to imagine that they were looking to purchase new outdoor furniture from "The Acme Corporation," before detailing the relationship between Acme and Beta. Study 1 used the full set of nine scenarios—as previously detailed—to examine if people attribute moral responsibility to corporations above and beyond the legal standard, based on the corporation's contractual or actual involvement in a supply-chain partner's manufacturing process.

Our overall hypothesis was that participants would attribute a degree of moral/ethical responsibility to The Acme Corporation for the environmental harm caused by The Beta Corporation. We also preregistered two directional hypotheses—specifically that participants would find The Acme Corporation more morally responsible when they had increased contractual ability and actual control.

In addition to the contractual-ability and actual-control manipulations, Study 1 also manipulated the phrase used to describe the environmental harm. Half of participants read that The Beta Corporation's manufacturing process "increase[d] local air pollution" while the other half read that it

95. *Id.* at 6.
96. *Id.*
97. *Id.*
98. *Id.*

"[emit[s] greenhouse gases]."[99] We were interested in potential differences this phrase manipulation might have on moral responsibility attributions, but we did not have any *a priori* directional predictions about this effect.

Study 1 Results. A first research question of interest is if, and to what degree, people attribute moral responsibility to a buying corporation for its suppliers' environmental harms. In support of our key hypothesis, the grand mean for moral responsibility attributions across all scenario manipulations ($M = 4.22$, $SD = 1.62$) indicated that participants generally believed The Acme Corporation held some degree of moral responsibility for the environmental harms caused by The Beta Corporation—despite Acme facing no legal risk for the harm. In fact, the average was significantly above the scale midpoint labeled as "somewhat responsible," suggesting that Acme was generally perceived as more-morally-responsible-than-not, $t(1170) = 4.63$, $p < .001$, $d = 0.14$, 95%CI [0.13, 0.31].

Second, participants' attributions of moral responsibility to Acme negatively correlated with their purchase considerations, $r_{MoralxPurchase} = -0.29$, $p < .001$. Participants generally reported being less-than-likely to consider purchasing a lawn chair from Acme, as indicated by the grand mean being significantly less than the scale midpoint of zero ($M = -0.19$, $SD = 1.54$), $t(1170) = -4.28$, $p < .001$, $d = -0.13$, 95%CI [-0.28, -0.10].

To investigate the questions regarding the supply chain relationship, we submitted the moral responsibility measure to a 3(Ability) x 3(Control) x 2(Phrase) between-subjects analysis of variance ("ANOVA"). In support of our hypothesis, results showed that participants differentially attributed moral responsibility to The Acme Corporation based on Acme's contractual ability to be involved in Beta's manufacturing process, $F(2, 1162) = 56.13$, $p < .001$, $\eta^2_p = .088$. Post-hoc analyses showed significant differences between each of the three levels of contractual ability (all ps $< .025$). Participants who read about Acme having a limited amount of contractual ability over Beta ($M = 3.72$, $SD = 1.53$) believed Acme to be significantly less morally responsible than those who either read about intermediate ($M = 4.05$, $SD = 1.56$) or high levels of ability ($M = 4.87$, $SD = 1.62$). It is important to note however, that even participants in the limited contractual ability condition attributed some degree of moral responsibility to Acme.

The ANOVA also produced a significant main effect regarding the actual control that Acme exhibited over Beta's manufacturing process, $F(2, 1162) = 16.35$, $p < .001$, $\eta^2_p = .027$. Post-hoc analyses revealed significant differences between each level of the manipulation in a similar fashion as contractual ability, all ps $< .05$. In support of our hypothesis, participants who read about a high level of exhibited control attributed more moral responsibility to Acme ($M_{high} = 4.53$, $SD = 1.51$) than participants in either of the other conditions, ($M_{limited} = 3.88$, $SD = 1.59$; $M_{intermediate} = 4.26$, $SD = 1.67$).

99. *Id.* at 4.

In addition to these two main effects, the ANOVA also produced a small but significant two-way interaction between contractual ability and actual control on moral responsibility attributions, $F(4, 1162) = 3.09$, $p = .015$, $\eta^2_p = .011$. A series of simple main effect analyses revealed that participants who read about Acme having limited contractual ability only attributed more responsibility to Acme when Acme also exhibited high levels of actual control over Beta, $F(2, 391) = 10.75$, $p < .001$. In contrast, participants who read about Acme either having intermediate or high levels of contractual ability more greatly penalized Acme for its exhibition of actual control, $F(2, 378) = 11.39$, $p = .009$, and $F(2, 399) = 6.60$, $p = .002$, respectively.

We also ran the same 3(Ability) x 3(Control) x 2(Phrase) between-subjects ANOVA on participants' ratings of their likelihood to purchase lawn chairs from Acme. The ANOVA produced no significant two- or three-way interactions (all Fs < 1.00 and ps > .10) but it did produce a significant main effect of contractual ability $F(2, 1153) = 10.96$, $p < .001$, $\eta^2_p = .019$. Post-hoc analyses revealed that participants who read about Acme exhibiting a high level of contractual ability over Beta ($M = -0.48$, $SD = 1.53$) were less likely to purchase from Acme than participants in either the limited ($M = 0.02$, $SD = 1.56$) or intermediate ability ($M = -0.12$, $SD = 1.50$) conditions. In contrast to the moral responsibility findings, however, there was no significant main effect of actual control, $F(2, 1153) = 2.01$, $p = .134$, $\eta^2_p = .003$, meaning that participants did not alter their intentions to purchase from The Acme Corporation based on the control Acme exhibited over Beta.

The ANOVA also produced a small but significant main effect of phrase on participants' likelihood of purchasing, $F(1, 1153) = 6.97$, $p = .008$, $\eta^2_p = .006$, but this did not significantly interact with any other factors (all ps > .10). Participants who read about Beta increasing local air pollution indicated that they were less likely to purchase from Acme than those who read about Beta emitting GHGs. Importantly, participants reading about air pollution were unlikely to purchase from The Acme Corporation, as shown by the group mean being significantly under the scale midpoint of zero, ($M = -0.33$, $SD = 1.55$), $t(576) = -5.04$, $p < .001$, $d = -.21$, 95%CI [-0.29, -0.13]. The grand mean for those who read about GHG emissions was not significantly different from the scale midpoint, meaning they generally rated themselves as neither likely nor unlikely to purchase from Acme, ($M = -0.64$, $SD = 1.53$, $t(593) = -1.02$, $p = .307$, $d = -.042$, 95%CI [-0.19, 0.06].

3. Study 2

Study 2 further investigated the boundaries of this finding by examining whether people attribute responsibility to a buying company for the harms produced by a second-tier supplier.

In Study 2, participants read a scenario that described and manipulated both the contractual and actual relationship between Acme and Beta in the exact same ways as Study 1. The scenario described the supply chain with

three tiers, however, namely that Acme receives lawn chair parts from Beta, who now in turn sources materials from "The Century Corporation." Critically, The Century Corporation is now the corporation responsible for producing the environmental harm, and we are interested in whether participants hold The Acme Corporation morally responsible for Century's environmental wrongdoings.

Based on the null findings from Study 1, we also made one other key change to Study 2's design by no longer including 'phrase' (air pollution v. GHGs) as a scenario manipulation. Instead, all participants read about "local air pollution" as the environmental harm produced by The Century Corporation's manufacturing.

Study 2 Results. In a similar fashion as Study 1, we first examined whether there was a general sample-wide tendency to attribute moral responsibility to the buying corporation for the action of its second-tier supplier. Results showed that participants were indeed holding Acme morally responsible for the actions of Century. Unlike Study 1, however, the grand mean across all manipulations was significantly less than the scale midpoint, (M = 3.73, SD = 1.55), $t(665)$ = -4.50, p < .001, d = -0.17, 95%CI [-0.39, -0.15]. This indicates that although participants hold Acme to some degree of moral responsibility for the air pollution from a second-tier supplier, the responsibility is truncated.

Our primary research question and preregistered analyses again regarded the contractual ability and actual control manipulations present in the scenario. We submitted the measure of moral responsibility attributions to a 3(Ability) x 3(Control) between-subjects ANOVA. In support of our hypothesis, the ANOVA produced a significant main effect of contractual ability, indicating that the contractual terms between Acme and Beta had an influence on the degree of moral responsibility participants attributed to Acme for Century's environmental harms, $F(2, 657) = 13.78$, $p < .001$, $\eta^2_p = .040$. Post-hoc analyses revealed significant differences across the three levels of contractual ability (all ps < .05), such that participants who read about Acme having more limited ability attributed less responsibility for the harms of Century than participants who read about Acme having higher levels of ability.

The ANOVA also produced a significant main effect of the actual control exhibited by Acme on the degree of perceived moral responsibility, $F(2, 657) = 8.12$, $p < .001$, $\eta^2_p = .024$. Post-hoc analyses revealed that participants who read about Acme having either a limited (M = 3.55, SD = 1.48) or intermediate (M = 3.59, SD = 1.56) amount of control perceived Acme as significantly less responsible than participants in the high-control condition (M = 4.09, SD = 1.57, ps < .005). Lastly, in a departure from the findings of Study 1, the ANOVA did not produce a statistically significant interaction between the ability and control factors on attributions of moral responsibility, $F(4, 657) = 0.71$, $p = .587$, $\eta^2_p = .004$.

We also examined participants' likelihood of purchasing lawn chairs from Acme by submitting them to a 3(Ability) x 3(Control) between-subjects

ANOVA. In contrast to the findings from Study 1, this ANOVA did not produce a significant main effect for either ability $F(2, 657) = 1.70$, $p = .184$, $\eta^2_p = .005$, or control, $F(2, 657) = 0.19$, $p = .828$, $\eta^2_p = .001$, nor was there a significant interaction, $F(4, 657) = 0.51$, $p = 0.732$, $\eta^2_p = .003$. This suggests that participants are not altering their purchasing behavior towards the buying corporation based on environmental harms caused by a second-tier supplier.

4. Study 3

Studies 1 and 2 demonstrate that consumers hold a corporation morally responsible for the actions of both its first- and second-tier suppliers, even though those suppliers' actions do not create substantial legal risks. In these first two studies, participants were told to take on the point of view of a potential consumer and asked about purchasing behavior. Study 3 examined another relevant group—employees of for-profit corporations. We were interested in whether potential employees exhibit similar attributions of moral responsibility as potential customers, and if in turn that influences their likelihood to accept a job with Acme.

Although Study 3 described the same Acme–Beta supply chain relationship and included the same ability and control manipulations as Study 1, we made a couple of small but important changes in Study 3 to investigate the moral attributions of employees. Our first and most critical change in Study 3 involved narrowing our potential participant pool to prolific participants who indicated in their screening questions that they are employees of a for-profit manufacturing or retail industry. Second, participants were asked to imagine that they were interviewing for a job with The Acme Corporation, during which they were told about the supply chain relationship with The Beta Corporation. Lastly, instead of a likelihood-of-purchasing measure, participants were asked a likelihood-of-job-acceptance measure, which was anchored and coded on the same seven-point scale as the purchasing measure.

Study 3 Results. In support of our hypothesis and akin to the findings of the first two studies, participants generally thought Acme held a significant degree of moral responsibility, as the grand mean was significantly above the scale midpoint ($M = 4.17$, $SD = 1.56$), $t(562) = 2.52$, $p = .012$, $d = 0.10$, 95% CI [0.04, 0.29]. Additionally, these perceptions of moral responsibility significantly correlated with responses about job likelihood, such that the more responsibility they perceived Acme to have the less likely they were to accept the job a working there, $r(563) = -0.21$, $p < .001$, 95%CI [-0.28, -0.13]. Despite this relationship, however, participants still indicated they were more likely to take the job than not, as indicated by a one-sample t-test showing the grand mean to be significantly above the scale midpoint of zero ($M = 0.73$, $SD = 1.49$), $t(562) = 11.61$, $p < .001$, 95%CI [0.61, 0.85]. This suggests that when reacting to a corporations' supplier's emissions, potential employees may be less willing than consumers to alter the relevant behavior.

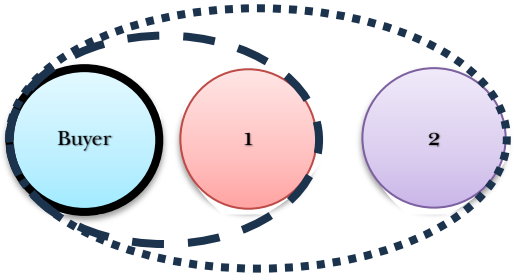
Study 3 used the same analysis plan as the previous studies, namely a 3(Ability) x 3(Control) between-subjects ANOVA(s) on attributions of moral responsibility. In support of our hypotheses and similar to the previous findings, the ANOVA produced significant main effects for both the contractual ability and actual control factors, $F(2, 554) = 24.36$, $p < .001$, $\eta^2_p = .081$ and $F(2, 554) = 19.55$, $p < .001$, $\eta^2_p = .031$, respectively. For contractual ability, post-hoc analyses revealed that participants who read about Acme having a high level of contractual ability over Beta attributed a significantly higher degree of moral responsibility ($M = 4.78$, $SD = 1.49$, both post-hoc ps < .001) than participants who read about Acme having either limited ($M = 3.77$, $SD = 1.56$) or intermediate ($M = 3.99$, $SD = 1.45$) levels of contractual ability. The latter two groups did not differ in their perceptions ($p = .344$).

Post-hoc analyses revealed an opposite pattern, however, for the control manipulation. Participants who read about Acme engaging in limited actual control ($M = 3.82$, $SD = 1.44$) attributed significantly less moral responsibility than participants who read about either intermediate ($M = 4.35$, $SD = 1.64$) or high ($M = 4.34$, $SD = 1.54$) levels of control (post-hoc ps = .001 and .002, respectively). In turn, the latter two groups did not differ in their perceptions ($p = .998$). Lastly, the ANOVA did not produce a significant interaction, $F(4, 554) = 1.79$, $p = .129$, $\eta^2_p = .013$.

5. Overview of Findings in All Three Studies

This three-part study examined situations in which people may perceive a corporate buyer to have a moral boundary that extends beyond the legal boundary regarding environmental harms created by suppliers. Across all three studies (total $N = 2400$), we found that peoples' perceptions of the moral responsibility of a buying company were broader than its legal responsibility for its suppliers' environmental wrongdoings. People attributed significant degrees of moral responsibility to the buying corporation for the environmental harms caused by its suppliers—despite not being told of any legal requirements or responsibility by the buying corporation. We also found consistent evidence that higher levels of both contractual ability to control suppliers and the actual exhibited control influenced moral responsibility attributions. Figure 1 depicts the legal boundary of a corporate buyer with a solid line and the moral boundaries suggested by the survey results for first-tier and second-tier suppliers with dotted lines.

Figure 1



The research also presented evidence that other relevant factors influence people's perceptions of a buying corporation's moral responsibility for the harms of its suppliers. Although people generally believed the buying corporation held some degree of moral responsibility for the environmental harms caused by both first-tier (Study 1) and second-tier (Study 2) suppliers, Study 2 suggested that the moral responsibility is less when the producer of the harm is one step further down the supply chain and further removed from the buyer. Lastly, the research provided evidence for a broader moral boundary of the firm with two key relevant social groups, the potential retail customers (Studies 1 and 2) of the firm and the potential future employees of the firm (Study 3), although the effects on retail customers were somewhat limited. Future studies should manipulate these and additional situational factors to examine potential further influences on peoples' perceptions of the moral boundary of the firm.

III. The Role of the Moral Boundary

The survey results demonstrate that retail customers, employees, and community stakeholders attribute responsibility to corporate buyers in many situations that pose little or no substantial risk of legal liability. These results demonstrate that the moral boundary is broader than the legal boundary for many individuals who can affect the economic success of firms, and the three studies delineate the contours of the moral boundary. It is thus not surprising that many companies feel pressure to engage in climate mitigation actions even when they have outsourced emissions-heavy aspects of their businesses and that they take this pressure seriously even though the legal risk is low. The survey results are valuable for at least three reasons: (1) they help explain firm behavior regarding environmental and climate requirements in supply chain contracting; (2) they suggest the value of accounting for the moral boundary when teaching law and business students; and (3) they suggest the value of additional research on accounting for the moral boundary when assessing the efficiency of the legal boundary of the firm.

A. *EXPLAINING FIRM BEHAVIOR*

1. Supply Chain Motivations

To what extent does the broad moral boundary of the firm explain climate change mitigation activities by corporate buyers? The drivers for these supply chain requirements could include responses to government regulation that have been identified for years, such as a desire to raise rivals' costs and anticipation of future regulation. The drivers also could include several non-reputation-based and nonregulatory factors. For instance, cost savings can occur from the efficiency gains that often arise from reducing energy and resource use associated with carbon reductions.[100] Garvey, Iyer, and Nash find that ESG performance is positively related to future profitability and improved stock returns in large part because there is a "fundamental connection between carbon emissions and overall productive efficiency," so ESG initiatives can reduce the emission input and the costs of production.[101]

These drivers of firm behavior are important, but reputation-based concerns may provide strong additional motivations for inclusion of environmental requirements in supply-chain-contracting. If retail customers, employees, and likely local communities hold beliefs consistent with the survey results, a firm manager cannot treat a third-party supplier as an unrelated third party without accounting for reputational concerns. Environmental harms caused by the supplier will be attributed to the buyer by key stakeholders, thus prudent managers may find ways to reduce the harms caused by the seller or at least obscure them from view.

The moral boundary is nuanced, however. For instance, the assignment of blame occurs among consumers but appears to have limited effects on whether they will buy a firm's products. Similarly, the assignment of blame increases with the level of control the buyer exercises over the supplier, potentially creating reputational risks for those firms that impose controls on suppliers but fail to implement them successfully. The results suggest not only that firms face reputational risks from suppliers' polluting activities, but also that they may have incentives to avoid imposing pollution-reduction conditions in their supply-chain contracts because consumers are less likely to assign moral responsibility to them if they do not appear to exert control over

100. *See* Khan M.R. Taufique et al., *Revisiting the Promise of Carbon Labelling*, 12 NATURE CLIMATE CHANGE 132, 134–40 (2022) (discussing examples of corporations identifying efficiencies); *see also* Witold Henisz, Tim Koller & Robin Nuttall, *Five Ways that ESG Creates Value*, MCKINSEY Q., Nov. 2019, at 5, https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/Strategy%20and%20Corporate%20Finance/Our%20Insights/Five%20ways%20that%20ESG%20creates%20value/Five-ways-that-ESG-creates-value.ashx [https://perma.cc/A5TC-NS44] (discussing how ESG can substantially reduce costs).

101. *See* Gerald T. Garvey, Mohanaraman Iyer & Joanna Nash, *Carbon Footprint and Productivity: Does the "E" in ESG Capture Efficiency as Well as Environment?*, 16 J. INV. MGMT. 59, 60 (2018). As we note earlier, litigation is underway on the allegation that ESG activities reduced profits.

their suppliers' emissions. In addition, the survey results are consistent with the observed pattern of corporate buyers focusing more on first-tier suppliers than second- or other-tier suppliers. Our respondents attributed moral responsibility to first- and second-tier suppliers, but the intensity of the attribution faded as the distance between the buyer and the supplier grew.

B. Assessing the Policy Implications of the Legal and Moral Boundaries

The economics and management literatures have explored the economic determinates of the "make" versus "buy" decision by corporations.[102] This literature focuses on comparative production costs. More recent literature focuses on the economic question of who should be held liable for harms caused in the upstream production process as between the purchasing firm and the upstream supplier.[103] We have observed that, at least in the United States, corporations are largely protected from legal liability for harms caused by their upstream suppliers.[104] This arrangement may be efficient if upstream suppliers are better situated to prevent harms to the environment or to their workforce than the downstream purchasing firms. But even if upstream suppliers have a lower cost of avoiding harms, they may not do so if they do not internalize the costs imposed on others by their production methods. Downstream buyers, however, may be in a position to impose the costs of avoiding harms on their suppliers, thus encouraging them to adopt harm prevention strategies. Downstream buyers may also be willing to pay more to the suppliers who adopt harm-reduction operating processes. But why would they do this if they cannot be held liable?

Despite the apparent lack of direct financial incentives encouraging buyer corporations to address social harms caused by their suppliers, there is evidence that many corporations are becoming more active in pressing their upstream suppliers to meet stricter standards for environmental and social performance.[105] In this Essay, we have explored whether customers and

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102. *See generally* Oliver E. Williamson, *Transaction-Cost Economics: The Governance of Contractual Relations*, 22 J.L. & ECON. 233 (1979) (discussing the impact of transaction costs); Joseph L. Badaracco, Jr., *The Boundaries of the Firm*, *in* SOCIO-ECONOMICS: TOWARD A NEW SYNTHESIS 293 (Amitai Etzioni & Paul R. Lawrence eds., 1991); *see also* Bengt Holmström & John Roberts, *The Boundaries of the Firm Revisited*, 12 J. ECON. PERSPS. 73, 75–80 (1998); John T. Mentzer et al., *Defining Supply Chain Management*, 22 J. BUS. LOGISTICS 1, 2–3 (2001).

103. *See, e.g.*, Carsten Koenig, An Economic Analysis of Supply Chain Liability 4 (Sept. 2024) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4819667 (on file with the *Iowa Law Review*); SARAH LABOWITZ & DOROTHÉE BAUMANN-PAULY, BUSINESS AS USUAL IS NOT AN OPTION: SUPPLY CHAIN SOURCING AFTER RANA PLAZA 26–28 (2014), http://www.stern.nyu.edu/sites/default/files/assets/documents/con_047408.pdf [https://perma.cc/YC98-EFAG].

104. *See supra* note 7 and accompanying text.

105. *See, e.g.*, Livia Ventura, *Supply Chain Management and Sustainability: The New Boundaries of the Firm*, 26 UNIF. L. REV. 599, 603 (2021) (observing the growth in environmental supply chain contracting).

potential future employees might be motivated by moral judgments against buyer corporations for harms that happen up in the supply chain. These moral judgments may be costly to corporations if potential customers reduce their demand for the downstream buyer's products, or if potential employees are discouraged from accepting or remaining in jobs with the downstream buyer. In the terms used in this paper, potential customers and employees are operating under a "moral boundary" of firms that is broader and encompasses more activity than would create liability under the "legal boundary" of the firm.

As the survey results demonstrate, firms operate in an economic and social milieu in which they are being held morally responsible for some actions that are not legally required and do not create meaningful risks of legal liability. Accounting for this moral boundary is important when assessing not only the motivations of firm managers, but also the firm-specific and society-wide effects of the legal boundary. In short, the narrow legal boundary creates incentives for risk-taking by investors and externalization of harms by corporate buyers. These incentives may increase economic activity, but they also can lead to investments that have negative social effects to the extent that firms do not have to account for the harms such as those arising from their GHG and other air pollutant emissions.

In contrast, the more extensive moral boundary provides countervailing pressure against the incentives for risk-taking and externalization by creating risks of reputation-based economic harms to the firm's ability to sell products to retail consumers, recruit and retain employees, and gain the support of community stakeholders for facility expansions and other activities. But it does so by moderating rather than eliminating those incentives. In fact, this combination of a formal legal boundary that is risk- and externality-promoting combined with an informal socially and economically enforceable moral boundary that is risk- and externality-inhibiting creates strong legal and economic incentives for productive activity but also surprisingly strong, if soft, social and economic pressures to reduce negative externalities.

It is unclear if the legal and moral boundaries create the optimal balance of hard and soft incentives for firm behavior, but the interplay of these boundaries raises interesting questions that should be explored in greater detail by researchers and in the classroom. In particular, assessments of the effects of the legal boundary should account for these moral boundary effects on firm behavior. Research is also needed to better define the contours and effects of the moral boundary.

The two boundaries not only interact, but they also likely shift over time. Courts reduce or expand the legal boundary, such as through expanding or narrowing the risk that firms will be liable for the torts of third parties. At the same time, the public's moral norms shift in response to new information, such as through retail customers and other stakeholders using social media to increase information flow and broaden ascriptions of moral responsibility as they become aware of new environmental threats such as climate change.

When the public confronts the effects of narrowing legal boundaries and government gridlock on climate mitigation actions, the narrowing legal boundary may provoke a widening moral boundary, with the public expressing widely held preferences for climate mitigation through naming and shaming of firms and their suppliers. Of course, this public naming and shaming can work both ways.

In the last several years, anti-ESG naming and shaming on the right has led large corporate buyers, such as Tractor Supply Company, and investment funds, such as Blackrock, to retreat from climate-related ESG statements, including climate-related supply-chain contracting.[106] An accurate understanding of the moral boundary of the firm and its interactions with the legal boundary can inform assessments of the efficiency of the resulting combination of legal and moral effects on firm behavior and thus can contribute to reforms to the legal boundary.

The survey results also suggest a response to critiques that managers are allowing their preferences to inappropriately affect their decision-making. Well-informed managers are likely aware of the broad moral boundary held by their retail customers, employees, and community stakeholders regarding environmental issues, and these managers may be folding the resulting reputations risks into their efforts to improve shareholder monetary returns. The moral boundary evident from the survey results support corporate managers' efforts to police their suppliers' behavior more strictly than the tort and government regulatory requirements would suggest—for instance, to insist on reductions in the carbon emissions and other climate impacts of their suppliers (e.g., scope 3 GHG emissions) even when there is no regulatory requirement to do so. It is important to recognize, though, that the survey results suggest that if firms are perceived to be increasing their control over their suppliers, they also may be increasing their exposure to moral blame-casting.

The extensive literature on corporate overcompliance or "voluntary" environmental measures has identified brand or reputation pressure as a driver of corporate activity, but corporate responses are often assumed to be limited to consumer willingness to pay for green goods. The survey results reinforce the notion that retail consumers in the United States often have limited willingness to change purchasing behavior based on environmental factors, but retail consumers do include suppliers within a firm's moral boundary, and the views of employees and community stakeholders are likely to play an important role as well. The survey results thus bolster the view that managers are likely often acting not just in response to their own values but in response to the potential effects on firm profitability of employees and others beyond retail consumers. The moral boundary-driven influences may

106. *See* Press Release, Tractor Supply Co., Tractor Supply Company Statement (June 27, 2024), https://corporate.tractorsupply.com/newsroom/news-releases/news-releases-details/2024/Tractor-Supply-Company-Statement/default.aspx [https://perma.cc/LW8R-U773].

not be hard law commands that are enforceable through a court order, but they may have equal or greater effect on a firm's incentives to engage in climate mitigation or reduce pollution than a risk of tort liability or government regulatory enforcement.[107]

CONCLUSION

We investigate the moral and legal boundaries of the firm regarding climate and environmental initiatives. We report on the results of an empirical study demonstrating that the public perception of the moral boundary of the firm is much broader than the legal boundary of the firm regarding responsibility for the actions of third-party supply chain contractors. In other words, our study suggests that people hold corporations ethically and morally responsible for actions far outside their legal responsibilities. The results suggest that potential retail customers, employees, and others assign moral blame to corporate buyers for the GHG and other air pollution emissions of their first- and second-tier suppliers. The environmental requirements imposed by corporate buyers on corporate sellers thus may be a rational response to the economic risks perceived by these stakeholders. The moral boundary is nuanced, however: The assignment of blame has limited effects on consumer behavioral intentions, increases with the level of control the buyer exercises over the supplier, and decreases from tier one to tier two suppliers.

By establishing the existence of a moral boundary of the firm that is broader than the legal boundary, the survey results increase our ability to explain firm behavior regarding climate change and a wide range of other ESG issues. Additional research is needed, though, to understand the extent and contours of the moral boundary and the implications for corporate management and environmental law and policy. Additional research is also needed on the ways that the moral and legal boundaries interact. The narrow legal boundary incentivizes risky behavior and externalization of harms, while the reputational effects of the broader moral boundary provide softer but important social and economic constraints on those incentives. The optimal balance between the legal and moral boundaries is difficult to assess, but an understanding of firm behavior and the optimal legal boundary is not complete without a more thorough understanding of the moral boundary.

107. *See* Wesley A. Magat & W. Kip Viscusi, *Effectiveness of the EPA's Regulatory Enforcement: The Case of Industrial Effluent Standards*, 33 J.L. & ECON. 331, 343 (1990) (concluding that substantial compliance with Clean Water Act requirements occurred only seventy-five percent of the time); OFF. OF INSPECTOR GEN., U.S. ENV'T PROT. AGENCY, REP. NO. 12-P-0113, EPA MUST IMPROVE OVERSIGHT OF STATE ENFORCEMENT 19–20 (2011), https://www.epa.gov/sites/default/files/2015-10/documents/20111209-12-p-0113.pdf [https://perma.cc/YB8U-XLHT] (concluding that many facilities are rarely inspected by government enforcement officials).