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EXTERNALITIES AND THE COMMON OWNER

Madison Condon *

Abstract: Due to the embrace of modern portfolio theory, most of the stock market is controlled by institutional investors holding broadly diversified economy-mirroring portfolios. Recent scholarship has revealed the anti-competitive incentives that arise when a firm’s largest shareholders own similarly sized stakes in the firm’s industry competitors. This Article expands the consideration of the effects of common ownership from the industry level to the market portfolio level and argues that diversified investors should rationally be motivated to internalize intra-portfolio negative externalities. This portfolio perspective can explain the increasing climate change related activism of institutional investors, who have applied coordinated shareholder power to pressure fossil fuel producers into substantially reducing greenhouse gas emissions.

While institutional investors have protested their ability to influence firm-level supply and pricing decisions in the service of muting competition, they are more willing to advertise their role in seeking emissions reduction commitments, even admitting they are for the benefit of portfolio returns. These commitments, however, affect product supply and imply market power in much the same way, and provide further evidence that institutional investors are able to influence managerial decisions at the firm level for the benefit of their broader portfolio. This insight requires amendment of the traditional view that diversified investors are “rationally reticent” and lack the incentive to engage in monitoring of firm behavior. It additionally challenges a fundamental norm of corporate governance law: the theory of shareholder primacy rests on the premise that shareholders homogeneously seek to maximize corporate profits and share value. This Article shows that in certain circumstances a majority of minority shareholders may direct the firm away from a profit-maximizing objective.

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INTRODUCTION

In December 2018, Royal Dutch Shell announced that it was setting emissions reduction targets, aiming to reduce its net carbon footprint (including emissions from the sale of its products) 20% by 2035, and 50% by 2050.¹ According to *The Wall Street Journal*, Shell executives were initially opposed to these goals—the CEO had described them as “onerous and cumbersome” just six months before—but they eventually capitulated “to months of investor pressure.”² The announcement was jointly made with Climate Action 100+, a coalition made up of more than 360 institutional investors that control \$34 trillion in assets, or 40% of global GDP.³ In a press release, Climate Action 100+ stated that its success at

1. Press Release, Joint Statement Between Institutional Investors on Behalf of Climate Action 100+ and Royal Dutch Shell Plc (Shell) (Dec. 3, 2018) [hereinafter Shell Emissions Commitment], <https://www.shell.com/media/news-and-media-releases/2018/joint-statement-between-institutional-investors-on-behalf-of-climate-action-and-shell.html> [https://perma.cc/2HE8-KH2A].

2. Sarah Kent, *Shell to Link Carbon Emissions Targets to Executive Pay*, WALL ST. J. (Dec. 3, 2018), <https://www.wsj.com/articles/shell-to-link-carbon-emissions-targets-to-executives-pay-1543843441> [https://perma.cc/7HRL-32FB].

3. GDP (current US\$), *World Bank national accounts data and OECD National Accounts data files*, WORLD BANK, <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

Shell “demonstrates the power of collective global investor engagement” and that the coalition planned to “use the commitment to raise the bar for the oil and gas industry as a whole.”⁴ Shortly thereafter, investors filed shareholder proposals for the 2019 proxy season seeking similar emissions targets from Exxon Mobil, Chevron, and BP.⁵

The climate activism of Shell’s investors presents two paradoxes for scholars of corporate governance. First, much of the theory behind the law of corporate governance rests on the assumption that shareholders’ rational self-interest drives them to exercise their governance rights with the singular goal of maximizing corporate value.⁶ But voluntary emissions reduction is at odds with the aim of profit maximization.⁷ Pollution regulation is “supposed” to be the exclusive realm of government actors, not the investment community.⁸ And second, broadly diversified investors are typically described as poor monitors of corporate behavior, lacking the incentive and capacity to exercise their shareholder power to discipline management.⁹ Because engagement is costly and they own only a small

[<https://perma.cc/6PB4-MMAD>] (listing world GDP as \$80.951 trillion in 2017). Since the December 2018 announcement, several more institutional investors have joined the coalition. Ranks now stand at more than 450 investors controlling more than \$40 trillion. *Frequently Asked Questions*, CLIMATE ACTION 100+, <https://climateaction100.wordpress.com/faq/> [<https://perma.cc/WM7P-XCQ6>].

4. Press Release, Climate Action 100+, Shell Announces Comprehensive Carbon Emissions Reductions Commitment with Climate Action 100+ Investors (Dec. 3, 2018) [hereinafter Press Release, Shell], <https://www.ceres.org/news-center/press-releases/shell-announces-comprehensive-carbon-emissions-reductions-commitment> [<https://perma.cc/F36Z-FZKV>].

5. Ed Crooks, *Investors Push Exxon to List Emissions Targets in Annual Reports*, FIN. TIMES (Dec. 16, 2018), <https://www.ft.com/content/ba611d60-0152-11e9-99df-6183d3002ee1> [<https://perma.cc/D7WB-X257>]; Jennifer Hiller & Shadia Nasralla, *Five Oil Majors Face 2019 Climate Target Pressure by Investors*, REUTERS (Dec. 19, 2018), <https://www.reuters.com/article/us-chevron-shareholders-resolution/five-oil-majors-face-2019-climate-target-pressure-by-investors-idUSKBN1O114V> [<https://perma.cc/Z2BF-U5VD>].

6. See, e.g., FRANK H. EASTERBROOK & DANIEL R. FISCHER, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* 69–70 (1991) (arguing that shareholders homogenously desire the firm to maximize profits); Henry Hansmann & Reinier Kraakman, *End of History for Corporate Law*, 89 GEO. L.J. 439, 441 (2001) (arguing that a company’s share valuation provides “the principal measure of its shareholders’ interests”); Roberta Romano, *Metapolitics and Corporate Law Reform*, 36 STAN. L. REV. 923, 961 (1984) (arguing “profit maximization is the only goal for which we can at least theoretically posit shareholder unanimity”).

7. See, e.g., Michael C. Jensen, *Value Maximization, Stakeholder Theory, and the Corporate Objective Function*, 14 J. APP. CORP. FIN. 8, 16 (2001) (arguing that the regulation of externalities “is the legitimate domain of the government in its rule-setting function” and that “[c]ompanies that try to [voluntarily internalize externalities] will be eliminated by competitors that choose not to be so civic minded”).

8. See, e.g., *id.*; Hansmann & Kraakman, *supra* note 6, at 442 (“[T]he most efficacious legal mechanisms for protecting the interests of nonshareholder constituencies . . . lie outside of corporate law.”).

9. See, e.g., Lucian Bebchuk et al., *The Agency Problems of Institutional Investors*, 31 J. ECON.

share of each company, they are “rationally reticent” to spend resources overseeing individual firm management.¹⁰

This paradoxical behavior is in fact quite widespread. Shell’s commitment is just one example of the growing trend of institutional investor activism related to climate change. In recent proxy seasons, shareholders have filed proposals seeking a range of climate change related outcomes, including disclosure of climate risk, suspension of lobbying efforts to fight carbon regulation, and commitments to clear emissions reduction targets.¹¹ Each type of proposal has received growing shareholder support, and in 2017 and 2018 the world’s largest asset managers joined in votes against the advice of the boards of five major energy companies, successfully passing climate resolutions with majority support.¹² Several dozen other resolutions have been withdrawn prior to voting due to board acquiescence to shareholder demands.¹³

Beyond shareholder resolutions, institutional investors have applied pressure to corporate management using a variety of means: private conversations, public declarations, dissent over executive compensation, and votes against re-electing noncompliant board members.¹⁴ These

PERSP. 89, 103 (2017) (arguing that investment managers have “limited economic incentive . . . to generate governance gains in portfolios companies”); Edward B. Rock, *Institutional Investors in Corporate Governance* 12 (University of Pennsylvania, Working Paper No. 1458, Jul. 21, 2015) [hereinafter Rock, *Institutional Investors in Corporate Governance*] (explaining that the “traditional passivity” of institutional investors in corporate governance can be explained by insufficient incentives); Edward B. Rock, *The Logic and (Uncertain) Significance of Institutional Shareholder Activism*, 79 GEO. L. J. 445, 472 (1991) [hereinafter Rock, *The Logic and (Uncertain) Significance*] (arguing that “it is not rational for any individual money manager to assume the burden of disciplining” management).

10. Ronald J. Gilson & Jeffrey N. Gordon, *The Agency Costs of Agency Capitalism: Activist Investors and the Revaluation of Governance Rights*, 113 COLUM. L. REV. 863, 867 (2013).

11. See *infra* section I.B.

12. James Copland & Margaret O’Keefe, *Climate Change Proposals Break Through*, PROXY MONITOR (2017), <http://www.proxymonitor.org/Forms/2017Finding1.aspx> [<https://perma.cc/HL2E-K6Y8>]; Shirley Westcott, *Surprises from the 2018 Proxy Season*, HARV. L. SCH. F. CORP. GOVERNANCE. & FIN. REG. (June 27, 2018), <https://corpgov.law.harvard.edu/2018/06/27/surprises-from-the-2018-proxy-season/> [<https://perma.cc/E9GK-6HBH>].

13. This and following voting data obtained by searching CERES, Engagement Tracker, available at: <https://engagements.ceres.org/> [<https://perma.cc/N482-EAEW>] [hereinafter CERES, Engagement Tracker]. In 2017, twenty-six climate-related resolutions were withdrawn after a commitment was reached and twelve were withdrawn when the companies agreed to begin dialogue on the issue. *Id.* (search year field “2017,” status field “Withdrawn: Commitment,” and ESG field “Environment,” producing twenty-six results, from which two not specific to climate may be eliminated). In 2018, thirty-three climate-related resolutions were withdrawn after commitments and six were withdrawn as a part of beginning dialogue. *Id.* (same search in 2018, producing thirty-nine results, from which six not specific to climate may be eliminated).

14. See *infra* section II.A.

investors have enormous stakes in the companies they are targeting, ensuring that managers pay attention to their demands. At Exxon's 2017 annual meeting the company's largest shareholder, BlackRock, voted against the re-election of two board members in protest of a "non-engagement" policy that precluded directors from talking to shareholders about the company's strategic response to climate change.¹⁵ Following the vote, Exxon announced that it had reconsidered its opposition to climate risk disclosure, and further, was renouncing its non-engagement policy, permitting directors to meet with shareholders going forward.¹⁶

This Article argues that this paradoxical behavior can be explained by revising traditional corporate governance theory to account for institutional investors' motivations at a *portfolio* rather than a *firm* level. This insight draws from the recent "economic blockbuster" that has attracted the attention of scholars and regulators alike: evidence that the rapid rise of massive institutional shareholders has decreased market competition.¹⁷ A growing number of empirical studies show that in concentrated industries, where many of the key players are owned by the same large shareholders, common ownership leads to anti-competitive price increases.¹⁸ That is, the increasing prevalence of institutional investors owning sizable shares of competing firms has resulted in these firms behaving more like oligopolies. These findings suggest that diversified shareholders are able to influence corporate managers into making firm-level decisions for the benefit of the broader investment portfolio.

A true portfolio maximizing strategy should look not just across firms, but across industries. If diversified investors prioritize industry-wide

15. Press Release, BlackRock, Supporting a Shareholder Proposal Following Extensive Management Engagement (May 31, 2017), <https://www.blackrock.com/corporate/en-br/literature/press-release/blk-vote-bulletin-exxon-may-2017.pdf> [<https://perma.cc/6W3N-WUMM>]. At the time of writing, BlackRock has slipped to second largest shareholder, holding 6.3% of Exxon, while Vanguard holds 7.8%. Andrew R. Sorkin, *BlackRock's Message: Contribute to Society, or Risk Losing Our Support*, N.Y. TIMES (Jan. 15, 2018), <https://www.nytimes.com/2018/01/15/business/dealbook/blackrock-laurence-fink-letter.html> (last visited Jan. 11, 2020).

16. Sorkin, *supra* note 15.

17. Einer Elhauge, *Horizontal Shareholding*, 129 HARV. L. REV. 1267, 1267 (2016); *see also* Eric A. Posner, Fiona M. Scott Morton, & E. Glen Weyl, *A Proposal to Limit the Anticompetitive Power of Institutional Investors*, 81 ANTITRUST L. J. 669, 675 (2017).

18. *See, e.g.*, José Azar, Martin Schmalz & Isabel Tecu, *Anticompetitive Effects of Common Ownership*, 73 J. FIN. 1513, 1550 (2018); José Azar, Sahil Raina, & Martin Schmalz, *Ultimate Ownership and Bank Competition* 25 (May 4, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2710252 [<https://perma.cc/5XVK-BDY3>]; Jin Xie & Joseph Gerakos, *Institutional Cross-Holdings and Generic Entry in the Pharmaceutical Industry* (Tuck Sch. of Business Working Paper No. 3285161, 2018), <https://ssrn.com/abstract=3285161> [<https://perma.cc/U8Q5-YG96>].

profit over firm-specific profit, they should also prioritize economy-wide profit over industry-specific profit. If a subset of firms in a portfolio impose costs on the broader portfolio through the generation of negative externalities, a portfolio-wide owner should be motivated to curtail those externalities at the source.¹⁹ A rational owner would use its power to internalize externalities so long as its share of the costs to the externality-creating firms are lower than the benefits that accrue to the entire portfolio from the elimination of the externality.

Accordingly, this Article argues that institutional investors' climate activism is motivated by their desire to mitigate climate change risks and damages to their economy-mirroring portfolios. Unchecked emissions contribute to an increase in global average temperature that is predicted to have a devastating effect on the world economy.²⁰ One large asset manager predicts that we are headed to a world of 4°C of warming, and that "global economic losses could build to \$23 trillion over the next 80 years; equal to permanent damage three to four times the scale of the 2008 Global Financial Crisis, and continuing to escalate."²¹ The institutional investors most active on corporate climate engagement have massive portfolios broadly diversified across the entire economy. As "universal owners,"²² it is in their financial self-interest to take action to reduce global emissions, including those generated by the publicly traded fossil fuel companies in which they invest.

While the concept of a "universal owner" was initially raised in the 1980s and 1990s,²³ this Article links that theory with recent empirical studies on the anti-competitive effects of common ownership and argues that that these studies provide proof of the portfolio-wide perspective required for the internalization of corporate externalities. The literature on common ownership to date has focused on its measured or predicted

19. Robert G. Hansen & John R. Lott Jr., *Externalities and Corporate Objectives in a World with Diversified Shareholder/Consumers*, 31 J. FIN. & QUANTITATIVE ANALYSIS 43, 47–49 (1996); Roger H. Gordon, *Do Publicly Traded Corporations Act in the Public Interest?* (Nat'l Bureau of Econ. Research, Working Paper No. 3303, 1990).

20. See *infra* section I.C, summarizing the literature on projections of global climate damages.

21. *Schroders Climate Dashboard Points to Four Degree Rise - Despite Increase in Carbon Prices*, SCHRODERS (Oct. 19, 2018), <https://www.schroders.com/en/au/institutions/insights/investment-insights/schroders-climate-dashboard-points-to-four-degree-rise—despite-increase-in-carbon-prices/> [<https://perma.cc/NE73-78JJ>].

22. ROBERT MONKS & NELL MINOW, WATCHING THE WATCHERS: CORPORATE GOVERNANCE IN THE 21ST CENTURY 121 (1996); see also JAMES HAWLEY & ANDREW WILLIAMS, THE RISE OF FIDUCIARY CAPITALISM: HOW INSTITUTIONAL INVESTORS CAN MAKE AMERICA MORE DEMOCRATIC 3–5, 170–72 (2000); Hansen & Lott, *supra* note 19.

23. See MONKS, *supra* note 22, at 121.

impacts on competition and labor demand, but discussion of its impacts on inter-firm externalities has been limited.²⁴ This is the first Article to systematically examine institutional investor activism on environmental issues using the economic incentives of common ownership as a framework.

In response to inquiry over common ownership's anti-competitive effects, institutional investors have been careful to deny their ability to have any control over product pricing decisions.²⁵ However, they are considerably more willing to advertise their success persuading companies to commit to environmental and social objectives.²⁶ This Article shows that these objectives can have a direct relationship to product supply and pricing, disputing institutional investors' general claims to powerlessness. Further, in the climate context, some institutional investors have admitted that the motivation for their firm-specific interventions originates from their portfolio perspective. A group of seventy-four investors controlling \$4.5 trillion in assets recently outlined their expectation that portfolio companies refrain from lobbying against carbon regulation, in service to "the long-term value in our portfolios *across all sectors and asset classes*."²⁷ This Article contributes to the ongoing debate over common ownership by identifying the causal mechanisms by which institutional investors influence corporate directors

24. An exception is two recent papers that examine one positive externality that results from common ownership: investment in innovation. Ángel L. López & Xavier Vives, *Overlapping Ownership, R&D Spillovers, and Antitrust Policy*, 127 J. POL. ECON. 2394, 2396 (2019); Miguel Antón, Florian Ederer, Mireia Giné, & Martin Schmalz, *Innovation: The Bright Side of Common Ownership?* (Working Paper June 21, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3099578 [<https://perma.cc/GXT3-QQUL>].

25. See, e.g., Comments from Kenneth A. Bertsch, Council of Institutional Investors, Regarding FTC Hearing #8: Competition and Consumer Protection 4 (Dec. 6, 2018), https://www.ftc.gov/system/files/documents/public_comments/2018/12/ftc-2018-0107-d-0003-163746.pdf [<https://perma.cc/4GSX-L4D8>] (arguing that there is "no convincing evidence yet on a mechanism" by which common ownership causes anti-competitive behavior); see *infra* section II.A.

26. See, e.g., Press Release, Office of the New York State Comptroller, DiNapoli Presses Worst Greenhouse Gas Emitters to Meet Paris Climate Agreement Goals (Apr. 3, 2018), <https://www.osc.state.ny.us/press/releases/apr18/040318.htm> [<https://perma.cc/M9SE-ZD8J>].

27. PRINCIPLES FOR RESPONSIBLE INV. (PRI), CONVERGING ON CLIMATE LOBBYING 8 (2018), <https://www.unpri.org/download?ac=4707> [<https://perma.cc/2LW7-X6JG>] (emphasis added) (citing INVESTOR EXPECTATIONS ON CORPORATE CLIMATE LOBBYING, https://www.unpri.org/Uploads/i/k/t/Investor-Expectations-on-Corporate-Climate-Lobbying_en-GB.pdf [<https://perma.cc/4J36-LDJT>]). This same text has been sent by individual investors directly to targeted energy companies. See THE CHURCH OF ENGLAND, EUROPEAN INVESTOR EXPECTATIONS ON CORPORATE LOBBYING ON CLIMATE CHANGE (Oct. 2018), https://www.churchofengland.org/sites/default/files/2018-10/Investor.Expectations.Climate.Lobbying.Oct_.2018.pdf [<https://perma.cc/5JGF-35QM>].

into deviating from profit-maximizing objectives.²⁸

This exploration of the externality internalizing effect of diversified ownership adds to the growing understanding of the net welfare effects of common ownership.²⁹ The socially desirable diminution of harmful externalities must be weighed against the pernicious effects of investor market power, like monopoly pricing and monopsony wages. Beyond a mere tallying of positive and negative economic outcomes, the role of investor as private regulator should raise concerns about the compatibility of concentrated corporate control with democratic society—concerns dating back at least as far back as Adolf Berle and Gardiner Means.³⁰ Self-regulation of externalities through direct contraction of supply brings the market back into efficiency in much the same way as a Pigouvian tax—a key difference being that no revenue is lost to the government, and instead remains within the portfolio.³¹

These welfare effects must be understood in order to craft corporate law's response to common ownership. The norm of shareholder primacy,³² and the related theoretical justification for shareholder voting rights,³³ are founded on the premise that shareholders uniformly desire share-value maximization. This Article, however, shows that diversified shareholder interests can diverge from both the interests of concentrated shareholders and the objective of maximizing share price. In questioning a key assumption underlying the norm of shareholder primacy, this Article

28. This is responsive to those claims by skeptics of the common ownership empirical findings who doubt investors' ability to influence firm-level product decisions and point in particular to the lack of specific evidence on causal pathways between investor influence and managerial decisions. See Daniel P. O'Brien & Keith Waehrer, *The Competitive Effects of Common Ownership: We Know Less Than We Think*, 81 ANTITRUST L.J. 729, 761–64 (2017); *infra* section II.A (addressing those claims).

29. See Scott Hemphill & Marcel Kahan, *The Strategies of Anticompetitive Common Ownership* 7 (NYU Law & Econ. Research Paper No. 18-29, Nov. 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3210373 [<https://perma.cc/932P-4NWS>] (arguing that the welfare effects of common ownership are ambiguous); *cf.* Posner et al., *supra* note 17, at 717–21 (arguing that limiting common ownership would lead to positive social welfare effects that outweigh the loss of diversification benefits to investors).

30. Adolf Berle, *Implications of the Corporate Revolution in Economic Theory*, in ADOLF BERLE & GARDINER MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* xxxviii (Harcourt, Brace and World rev. ed. 1968); see also Zephyr Teachout & Lina Khan, *Market Structure and Political Law: A Taxonomy of Power* 9 DUKE J. CONST. L. & PUB. POL'Y 37, 56 (2014).

31. See *infra* section III.B.

32. See, e.g., Lucian Bebchuk, *The Case for Increasing Shareholder Power*, 118 HARV. L. REV. 833, 908 (2005) (arguing that increasing managerial accountability to shareholders would “enhance shareholder value”).

33. Frank H. Easterbrook & Daniel R. Fischel, *Voting in Corporate Law*, 26 J.L. & ECON. 395, 403 (1983) (arguing that shareholders, as “the residual claimants to the firm’s income” have the best incentives to direct the firm toward maximizing profits).

compels the reassessment of a substantial body of scholarship and jurisprudence.³⁴ Further, while intra-shareholder conflicts of interest have been contemplated elsewhere, most scholars have argued that managers should prioritize diversified shareholder interests because they are better aligned with the goal of increasing social welfare.³⁵ The proponents of this mandate, however, ignore diversified investor incentives to reduce inter-firm costs, and fail to consider the net welfare effects of common ownership.³⁶ This insight further undermines the efficiency-based rationale for shareholder primacy's ultimate service to social welfare welfare maximization.³⁷

The Article proceeds as follows. Part I explains the theoretical and empirical literature that suggests diversified investors seek to maximize profits at the portfolio, rather than firm, level and explains how this portfolio perspective can be extended to explain why institutional investors seek to internalize harmful climate-change externalities. Not only does investor climate action diminish future climate damages, it also reduces the systemic climate risks that cannot be diversified away. Part I

34. See, e.g., Grant Hayden & Matthew Bodie, *Arrow's Theorem and the Exclusive Shareholder Franchise*, 62 VAND. L. REV. 1217, 1218 n.1 (2009) ("Shareholder primacy is generally viewed as the normative foundation for modern corporate law theory."); *infra* section III.B. Most academic arguments against the shareholder primacy norm focus on the interests of the corporation's stakeholders beyond shareholders, or on shareholders' ability to effectively oversee corporate management, rather than the underlying assumption that shareholders seek maximization of share value. See, e.g., Lynn A. Stout, *The Toxic Side Effects of Shareholder Primacy*, 161 U. PA. L. REV. 2003, 2015–16 (2013) (describing shareholder primacy's toxic effect on other stakeholder interests); William W. Bratton & Michael L. Wachter, *The Case Against Shareholder Empowerment*, 158 U. PA. L. REV. 653, 696–703 (2010) (arguing that shareholders are poor monitors of management due to insurmountable information asymmetries).

35. RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW*, 370–71, 380 (3d ed. 1986); Richard A. Booth, *Stockholders, Stakeholders, and Bagholders (or How Investor Diversification Affects Fiduciary Duty)*, 53 BUS. LAW. 429, 434 (1998) (summarizing literature and concluding that "[m]ost scholars" advocate that "management should manage with the interests of diversified stockholders in mind" (citing EASTERBROOK & FISCHER, *supra* note 6, at 25–30, 339–40)); Henry T.C. Hu, *Risk, Time, and Fiduciary Principles in Corporate Investment*, 38 UCLA L. REV. 27, 350 (1990); cf. Iman Anabtawi, *Some Skepticism About Increasing Shareholder Power*, 53 UCLA L. REV. 561, 583–85 (2006) (noting that the interests of diversified and undiversified shareholders may diverge when considering the case of inter-firm externalities but providing no examples).

36. Others have similarly argued that shareholder welfare is not adequately measured by share price alone. Oliver Hart and Luigi Zingales also posit that shareholders might desire externality-internalization, but in their model, this interest stems from shareholders' altruistic personal desires as members of society, not because they themselves are harmed by negative externalities. Oliver Hart & Luigi Zingales, *Companies Should Maximize Shareholder Welfare Not Market Value*, 2 J.L. FIN. ACCT. 247, 266–67 (2017); see also Einer Elhauge, *Sacrificing Corporate Profits in the Public Interest*, 80 N.Y.U. L. REV. 733, 791 (2005).

37. See Hansmann & Kraakman, *supra* note 6, at 441 (arguing that "there is convergence on a consensus that . . . aggregate social welfare . . . [is best achieved by making] corporate managers strongly accountable to shareholder interests and . . . only to those interests"); cf. Milton Friedman, *The Social Responsibility of Business Is to Increase Profits*, N.Y. TIMES MAG. (Sept. 13, 1970).

then breaks shareholder climate interventions into three categories of outcomes sought: (1) emissions reduction goals, (2) cessation of anti-carbon regulation lobbying, and (3) climate risk disclosure. To be consistent with the externality internalizing theory, each of these objectives must result in reduced emissions levels beyond those that would have been achieved by profit-seeking managers responding to regulatory and market forces. Thus, each objective is assessed as to its (1) likelihood to reduce emissions and (2) legitimacy of firm-specific purpose. Next, a rough cost-benefit analysis is presented to demonstrate that the firm-specific marginal emissions reductions sought can significantly reduce predicted portfolio climate damages—enough so that the devaluation of the fossil fuel stock is outweighed by portfolio benefits. Part II applies this account of climate activism to the broader common ownership debate, arguing that it provides clear evidence of diversified shareholder power to influence managerial motives at the product level. It argues that institutional investors, contrary to traditional assumptions of investor passivity, have both the incentive and the capacity to serve as monitors of corporate behavior, so long as returns are justified at the portfolio level. Finally, Part III considers how this externality-internalizing account of investor objectives is at odds with the claim that managers face no conflict when attempting to serve the interests of the corporation, its shareholders, and its market valuation. While a normative solution to this challenge to shareholder primacy is beyond the scope of this Article, it contemplates initial implications of diversified investor economy-wide control, including ambiguous net welfare effects and the concern that the market power to self-regulate operates as a form of unaccountable private governance.

I. INSTITUTIONAL INVESTORS’ EXTERNALITY INTERNALIZATION

Just six shareholders control 24% of Exxon Mobil, the world’s largest publicly owned originator of greenhouse gases, responsible for 1.2% of annual global emissions.³⁸ These *same* six shareholders also control 26%

38. The shareholders are BlackRock, Vanguard, State Street, Northern Trust, Bank of America, and Capital Research Global Investors. Ownership data taken from Morningstar tables on “Major Shareholders” for XOM as of Feb. 4, 2020, MORNINGSTAR <https://www.morningstar.com/> (last visited Feb. 4, 2020); DR. PAUL GRIFFIN, THE CARBON MAJORS REPORT 2017, CDP (2017) [hereinafter CDP REPORT], <https://b8f65cb373b1b7b15fec70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/002/327/original/Carbon-Majors-Report-2017.pdf> [<https://perma.cc/LL2E-UKSX>] (discussing XOM emissions data). These shareholders are each investment managers holding the assets for the benefit of underlying beneficiaries, so they “own” the shares insofar as the shares are listed in their name and they

of Chevron, responsible for 0.8% of emissions.³⁹ They also hold similarly sized-stakes in two of the world's biggest food and beverage conglomerates, PepsiCo and General Mills—companies highly exposed to the negative impacts of climate change: temperature rise, extreme weather events, drought, and decreased labor productivity, to name a few.⁴⁰ The question arises: when exercising their sizable shareholder power over the boards of fossil fuel companies, do massive investors consider the impact of climate change on their broader portfolio? Would it make any difference?

The financial world is increasingly aware of the danger climate change poses to business operations.⁴¹ In the World Economic Forum's 2019 Global Risk Perception Survey, business leaders ranked "extreme weather events" and "failure of climate change adaptation and mitigation" as the greatest risks in the next ten years.⁴² Climate-related risks, from forest fires, to increased rates of disease, to decreased efficiency in the electric grid, so broadly effect the economy, they are "systemic" and cannot be diversified away.⁴³ Institutional investors know that the climate threat to their assets is generated by companies within their own portfolios, over

retain the right to vote the shares.

39. *Morningstar tables on "Major Shareholders" for CVX as of Jan. 13, 2020*, MORNINGSTAR, <https://www.morningstar.com/> (last visited Jan. 13, 2020); CDP REPORT, *supra* note 38.

40. *See, e.g., Feeding Ourselves Thirsty: Tracking Food Company Progress Toward a Water-Smart Future*, CERES (Sept. 7, 2017), <https://feedingourselfsthirsty.ceres.org/> [<https://perma.cc/DLU6-85RC>] (finding that the world's largest food companies are already experiencing losses from extreme weather events and reporting that \$198 billion in agricultural revenue is at risk from changing precipitation patterns). The six shareholders hold 24% of PepsiCo and 25% of General Mills. *Morningstar tables on "Major Shareholders" for PEP and GIS as of Feb 4, 2020*, MORNINGSTAR, <https://www.morningstar.com/> (last visited Feb. 4, 2020).

41. *See, e.g., RISKY BUSINESS, THE ECONOMIC RISKS OF CLIMATE CHANGE IN THE UNITED STATES* (2014), https://riskybusiness.org/site/assets/uploads/2015/09/RiskyBusiness_Report_WEB_09_08_14.pdf [<https://perma.cc/8FRD-UQMD>].

42. WORLD ECON. F., *THE GLOBAL RISKS REPORT 2019*, 5 (2019) http://www3.weforum.org/docs/WEF_Global_Risks_Report_2019.pdf [<https://perma.cc/A2YV-MTP5>].

43. Modern portfolio theory identifies two types of financial risk: (1) economy-wide, systematic risk, and (2) firm-specific, idiosyncratic risk. Investors can diversify away firm-specific risk by investing across the economy. Systematic risk, however, cannot be eliminated through diversification because its effects are felt economy-wide. *See* RICHARD A. BREALEY, STEWART C. MYERS & FRANKLIN ALLEN, *PRINCIPLES OF CORPORATE FINANCE* 168–70 (10th ed. 2011); INST. FOR SUSTAINABILITY LEADERSHIP, UNIV. OF CAMBRIDGE, *UNHEDGEABLE RISK: HOW CLIMATE CHANGE SENTIMENT IMPACTS INVESTMENT* (2015), <https://www.cisl.cam.ac.uk/resources/publication-pdfs/unhedgeable-risk.pdf> [<https://perma.cc/9L6K-E8E4>]; Stefano Battison et al., *A Climate Stress-Test of the Financial System*, 7 *NATURE CLIMATE CHANGE* 283, 288 (2017) (performing a network analysis of the financial sector's exposure to climate-related risk and concluding that "financial actors' portfolios are both interdependent and largely exposed to the outcome of the climate policy cycle"); Steven L. Schwarcz, *Systemic Risk*, 97 *GEO. L.J.* 193, 200 (2008).

which they themselves exercise shareholder power. One investor group recently tabulated a list of 100 public companies responsible for two-thirds of all industrial greenhouse gas emissions through their operations and product sales.⁴⁴

Recently, institutional investors have been increasing their engagements with portfolio companies on environmental issues, and empirical work finds that the presence of institutional share ownership significantly increases portfolio firms' environmental performance.⁴⁵ A study examining the private dialogues undertaken by just one relatively small institutional investor found that the engagements significantly increased target companies' climate risk disclosure and decreased levels of emissions.⁴⁶ Investor activism on environmental and social issues is typically attributed to two causes. Investment managers are either: (1) imposing "social norms" on portfolio corporations⁴⁷ in a way that decreases firm profits; or (2) promoting firm-specific profits through a business strategy somehow overlooked by firm managers, like regulatory preparedness.⁴⁸ This Article proposes a third explanation: that institutional investors are pursuing profit maximizing objectives unrelated to any personal moral agenda, but this profit maximization is directed at the portfolio, rather than firm level. Investors address negative externalities at their source, minimizing harms to their broader portfolio.

A. *Portfolio-Maximizing Objective of Common Owners*

The term "institutional investor" can refer to a variety of different types of organizations. There are asset management companies, like BlackRock and Fidelity, that manage investments on behalf of widely dispersed retail

44. *Focus List of Companies*, CLIMATE ACTION 100+, <https://climateaction100.wordpress.com/companies/> [<https://perma.cc/8M6G-XCFD>].

45. Alexander Dyck et al., *Do Institutional Investors Drive Corporate Social Responsibility? International Evidence*, 131 J. FIN. ECON. 693, 694 (2018).

46. William Rees & Tatiana Rodionova, *Investor Engagement to Mitigate Climate Change: Evidence from an Experiment with Mid-Cap Companies* 23 (Working Paper Jan. 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2904553 [<https://perma.cc/222A-WFH9>] (finding that behind-the-scenes engagements undertaken by resulted in a 15–20% likelihood of improved climate risk disclosure and 17–18% likelihood of improved emissions performance).

47. These social norms can either be the investment manager's own personal beliefs, or those imputed to her underlying beneficiaries. *Id.*; see also Elhauge, *supra* note 36, at 755.

48. See, e.g., JOHN BYRD & ELIZABETH COOPERMAN, *SHAREHOLDER ACTIVISM FOR STRANDED ASSET RISK: AN ANALYSIS OF INVESTOR REACTIONS FOR FOSSIL FUEL COMPANIES* (2017), <https://corporate-sustainability.org/wp-content/uploads/Shareholder-Activism.pdf> [<https://perma.cc/TH2J-RTS3>] (arguing that shareholder resolutions related to carbon risks draw investor attention to the possibility of mis-valuation and the risk of stranded assets).

investors for a profit. These can be either publicly or privately held. There are mutual funds that are investor-owned, like Vanguard. There are public employee pension funds like The California Public Employees' Retirement System (CalPERS), and the New York State Common Retirement Fund. There are insurance companies that collect and invest premiums from their customers, using the returns to pay out claims, like AXA. Finally, there are sovereign wealth funds, like Norway's Norges Bank Investment Management (NBIM), the largest in the world.⁴⁹

In recent years, institutional investor equity ownership has reached unprecedentedly massive proportions. This growth can be attributed, in part, to capital market innovations that enabled individuals to place their investments in the hands of intermediary money managers for a low fee.⁵⁰ Because broad diversification reduces risk, and because in an efficient market it is difficult to consistently pick stocks that result in gains relative to the market, retail investors increasingly turn their savings over to institutions that manage large funds with few employees. In 1950, institutions owned 6.1% of total equities, in 1980 they owned 28.4%, in 2009 they owned 50.6%.⁵¹ By 2017, their ownership share of the broad-market Russell 3000 index (which represents about 98% of all U.S. equities) had grown to 78%.⁵²

Due to the embrace of modern portfolio theory,⁵³ most of these institutions diversify their public equity assets broadly across the stock market. At the extreme are index funds, which passively match portfolios to an index, but the majority of all institutional investors can be classified as "quasi-indexers," meaning they hold a broadly diversified portfolio with low turnover.⁵⁴ Matthew Backus and his coauthors have found that over the last four decades the typical investor portfolio has increasingly

49. Sovereign wealth funds are government-owned investment funds that invest state resources in global financial assets. Information on Norway's fund can be found at <https://www.nbim.no/> [<https://perma.cc/48PZ-W9M7>].

50. Gilson & Gordon, *supra* note 10, at 884–86.

51. *Id.* at 874.

52. Charles McGrath, *80% of Equity Market Cap Held by Institutions*, PENSIONS & INVESTMENTS (Apr. 25, 2017), <https://www.pionline.com/article/20170425/INTERACTIVE/170429926/80-of-equity-market-cap-held-by-institutions> [<https://perma.cc/9NZC-99PA>].

53. Modern portfolio theory holds that investors can maximize their return, given a desired amount of risk, by diversifying their portfolios. See Harry Markowitz, *Portfolio Selection*, 7 J. FIN. 77, 79 (1952).

54. Brian J. Bushee, *Identifying and Attracting the Right Investors: Evidence on the Behavior of Institutional Investors*, 16 J. APPLIED CORP. FIN. 28, 29–31 (2004) (finding that from 1983–2002, 61% of institutional shareholders were quasi-indexers, defined as those firms which "tend to make buy-and-hold investments in a broad set of companies and trade only when there is a major change in a given firm"). The percentage of "quasi-indexing" investors has increased since this time.

grown to mirror the “market portfolio” on an asset weighted basis.⁵⁵ As institutional investors weight their portfolios to resemble the market, they are also progressively mirroring one another’s portfolios.

This trend means that investors not only hold diverse stakes across the economy, but also within industries. By 2014, there was a 90% chance that any two competing firms within an industry shared a large common stockholder (larger than 5% stake)—up from a 16% chance in 1994.⁵⁶ Noting the beginnings of this trend in the 1980s and 1990s, business and finance scholars theorized that diversification might change a traditional—and fundamental—assumption of corporate law: shareholder desire for firm-specific profit maximization.⁵⁷ These scholars developed models to predict how diversified investor incentives might change “conventional conclusions about corporate behavior.”⁵⁸ These theoretical models predicted that as market-wide investor diversification increased, individual firms would direct their objectives to joint, rather than firm-specific, profit maximization. Because large institutional investors are diversified across an entire industry, they are not incentivized to maximize one firm’s profits at the expense of another’s. Indeed, the Chairman of the Board of Vanguard, Bill McNabb, has confirmed that the fund is “indifferent, for example, about how shares of Coke performed vs. Pepsi last quarter.”⁵⁹

Recently, this body of literature has attracted new interest, as empirical studies on the market-effects of concentrated ownership have emerged that support the theoretical conclusion that diversified investors are able to maximize their portfolio returns by influencing choices made at the firm level. In 2014, a trio of economists published a study showing that key players in the airline industry compete less with one another as a result

55. Matthew Backus, Christopher Conlon & Michael Sinkinson, *Common Ownership in America: 1980-2017*, at 22–23 (NBER Working Paper No. 25454, 2019).

56. Einer Elhauge, *How Horizontal Shareholding Harms Our Economy – and Why Antitrust Law Can Fix It* 10 (Working Paper, Aug. 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3293822 [https://perma.cc/5DZ5-54GY] (citing José Azar, *Portfolio Diversification, Market Power, and the Theory of the Firm* 2 fig.2 (Working Paper, Mar. 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3293822 [https://perma.cc/HPP8-P6NY]).

57. Gordon, *supra* note 19, at 17, 21; *see also* Julio J. Rotemberg, *Financial Transaction Costs and Industrial Performance* 16 (Mass. Inst. of Tech. Alfred P. Sloan Sch. of Mgmt., Working Paper No. 1554–84, Apr. 1984).

58. Gordon, *supra* note 19, at ii.

59. Bill McNabb, *The Ultimate Long-Term Investors*, VANGUARD BLOG INSTITUTIONAL INV’RS (July 6, 2017), <https://www.vanguard.nl/portal/site/institutional/nl/en/articles/research-and-commentary/topical-insights/ultimate-long-term-investors> [https://perma.cc/ZR6Q-H9PF].

of being all partially owned by the same institutional investors.⁶⁰ In a two-year window, the same seven shareholders who controlled 60% of United Airlines's stock also had large ownership shares in United's competitors: Delta, JetBlue, and Southwest. Overall, from 2001 to 2013, large diversified investors controlled 77% of all airlines operating in the average domestic flight route.⁶¹ The study found that this common ownership resulted in ticket prices three to seven percent higher than they would otherwise have been.⁶²

Similar effects have been found in the banking and pharmaceutical industries. One study of retail banking revealed that changes in the concentration of common ownership of banks are positively correlated with increases in account fees charged, and negatively correlated with deposit rates paid.⁶³ Further evidence suggests that common ownership results in portfolio maximizing behavior, at the *expense* of some individual firms in a portfolio: banks give larger loans, with lower interest rates, to firms with which it shares a common owner.⁶⁴ While this relationship benefits the commonly owned firms, the commonly owned banks collect lower profits.⁶⁵ Common ownership has also been found to affect the chances that a generic drug manufacturer successfully challenges a brand-name incumbent's monopoly status.⁶⁶

These industry-specific studies have prompted some initial consideration of the economy-wide anti-competitive effects of common ownership. Backus and his coauthors have suggested common ownership as an explanation for the significant increase in average markups (of price relative to marginal cost) by publicly traded firms in recent decades.⁶⁷

60. Azar, Schmalz & Tecu, *supra* note 18, at 1514–17.

61. Elhauge, *supra* note 17, at 1267.

62. Azar, Schmalz & Tecu, *supra* note 18, at 1517.

63. Azar, Raina & Schmalz, *supra* note 18, at 1551.

64. Waldo Ojeda, *Common Ownership in the Loan Market* 6 (Working Paper, Jan. 31, 2018), <http://waldotekampa.me/files/JMP.pdf> [<https://perma.cc/3HTJ-37T5>].

65. *Id.*

66. See Melisa Newham, Jo Seldeslachts & Albert Banal-Estañol, *Common Ownership and Market Entry: Evidence from the Pharmaceutical Industry* 21 (Econ. Working Paper Series, May 2018), <http://d.repec.org/n?u=RePEc:upf:upfgen:1612&r=law> [<https://perma.cc/64R6-HMKY>] (finding that a one standard deviation increase in common ownership decreases the probability of generic entry by 9–13%); Xie & Gerakosz, *supra* note 18, at 11, 22 (finding that overlapping ownership increased the chances that the brand and generic reach a settlement agreement, often resulting in the brand paying the generic to stay out of the market, a.k.a. “pay for delay”).

67. Backus et al., *supra* note 55, at 30–32 (citing Jan De Loecker & Jan Eeckhout, *The Rise of Market Power and the Macroeconomic Implications* (NBER Working Paper No. 23687, Aug. 2017), <https://www.nber.org/papers/w23687.pdf> [<https://perma.cc/9VRT-TT8R>] (finding that average markups rise from 21% in 1980 to 61% in 2017 across all sectors of the publicly traded economy)).

Others have observed that common ownership could theoretically explain why labor share has declined relative to capital share, as firms acting jointly could generate monopsony wage effects just as they generate monopoly price effects.⁶⁸ Thus, common ownership could be implicated in the problem of rising inequality.⁶⁹

A true portfolio-wide investment strategy should look not just across firms, but across industries. If large diversified investors indeed prioritize industry-wide profit over firm-specific profit, they should also prioritize economy-wide profit over industry-specific profit. An owner whose portfolio success tracks the entire market should be motivated to curtail the negative externalities generated by some of the firms in its portfolio if the owner's share of the cost of internalizing the externality are lower than its share of the benefits that accrue to the entire portfolio from the elimination of the externality.⁷⁰

The body of theoretical finance literature that modeled the impact of diversification on competition also contemplated this externality-internalizing result. Robert Hansen and John Lott drew attention to the role a large pension fund claimed to play in pressuring portfolio firms to settle costly inter-firm litigation.⁷¹ Jon Harford first argued this theory of diversified investor incentives could explain why firms undertake voluntary pollution control measures in the absence of mandatory regulation.⁷² Harford, however, focused on relatively localized externalities, like the release of toxic chemicals, and neither connected their voluntary reduction with portfolio-wide returns nor demonstrated how they were unexplained by market pressures.⁷³ Further, Harford did not explain the causal relationship between shareholder ownership and

68. Azar, *supra* note 56, at 2 (observing that corporate profits doubled as a share of GDP between 2000 and 2010).

69. Elhauge, *supra* note 17, at 1281–301; Elhauge, *supra* note 56, at 12.

70. I am not proposing that investors are motivated by anything other than the bottom line. I am not arguing, for example, that institutional investors are motivated to counter societally harmful externalities that are not directly linked to diminished profits. Cf. Einer Elhauge, *Sacrificing Corporate Profits*, *supra* note 35, at 738.

71. Hansen & Lott, *supra* note 19, at 47 (relaying a speech given by a TIAA-CREF executive in which it was claimed that the pension fund pushed for a quick resolution of two inter-firm lawsuits: *Pennzoil v. Texaco* and *Apple v. Microsoft*).

72. Jon D. Harford, *Firm Ownership Patterns and Motives for Voluntary Pollution Control*, 18 *MANAGERIAL DECISION ECON.* 421, 422 (1997); see also HAWLEY & WILLIAMS, *supra*, note 22, at 23 (using the term “fiduciary capitalism” to argue that because the economy-mirroring portfolio of an institutional investor bears the costs of externalities, its “returns would be directly enhanced by a proper treatment of the externality in the first place”).

73. Harford, *supra* note 72, at 422.

corporate decisions impacting levels of pollutions.⁷⁴ At the time these predictions were made, institutional ownership had not ballooned into what it is today. CalPERS, which was suggested as an example of an economy-wide investor with externality-internalizing interests, controlled \$85 billion in assets at the time, a little more than 2% of what BlackRock controls today.⁷⁵

B. Reduction of Systemic Climate Risks

Investor's actions aim not only to reduce climate damages, but also to reduce the systemic risks of climate change to which their portfolios are exposed. Modern portfolio theory identifies two types of financial risk: economy-wide, systematic risk, and firm-specific, unsystematic risk.⁷⁶ Investors can diversify away firm-specific risk by investing across the economy. Systemic risk, however, cannot be eliminated through diversification because its effects are felt economy-wide.⁷⁷ The three types of climate-change related risks—transition risk, physical risk, and liability risk—so broadly affect the economy, they are considered systemic risks.⁷⁸ One study, for example, found that 53% of portfolio value is “unhedgeable” from climate change-related risk.⁷⁹

Traditionally, systemic risks have been thought to be a factor beyond the control of investment managers.⁸⁰ They affect the market return,

74. *Id.*

75. Hansen & Lott, *supra* note 19, at 48; *CPI Investment Calculator*, <http://www.in2013dollars.com/us/inflation/1997?amount=85> (discussing how \$85 billion in 1997 is \$136 billion today and 38% of the \$344.8 billion CalPERS now controls).

76. See RICHARD A. BREALEY, STEWART C. MYERS & FRANKLIN ALLEN, *PRINCIPLES OF CORPORATE FINANCE* 168–70 (10th ed. 2011).

77. Schwarcz, *supra* note 43, at 200 (“To the extent systemic risk affects markets, however, it is positively correlated with the markets and cannot be diversified away.”).

78. See UNIV. OF CAMBRIDGE INST. FOR SUSTAINABILITY LEADERSHIP, *UNHEDGEABLE RISK: HOW CLIMATE CHANGE SENTIMENT IMPACTS INVESTMENTS* 28 (2015) [hereinafter UNIV. OF CAMBRIDGE, UNHEDGEABLE RISK], <https://www.cisl.cam.ac.uk/resources/publication-pdfs/unhedgeable-risk.pdf> [<https://perma.cc/FS72-HBUS>] (showing, through modeling, that “it is possible to cut the maximal loss potential by up to 47 percent” through hedging). See also European Systemic Risk Board, *Too Late, Too Sudden: Transition to a Low-Carbon Economy and Systemic Risk* 9 (ESRB ASC Report No. 6, Feb. 2016) (finding that climate transition impacts on financial institutions “could generate contagion in the broader financial system by interacting with other financial frictions”); Battiston et al., *supra*, note 43, at 288; Written Testimony of Alicia Seiger, “Examining the Macroeconomic Impacts of a Changing Climate,” Prepared for the U.S. House of Representatives, Comm. on Financial Services, Subcommittee on Nat'l Security, International Development and Monetary Pol'y 2–3 (Sept. 11, 2019), <https://www.congress.gov/116/meeting/house/109911/witnesses/HHRG-116-BA10-Wstate-SeigerA-20190911.pdf> [<https://perma.cc/N74P-KCJG>].

79. UNIV. OF CAMBRIDGE, UNHEDGEABLE RISK, *supra* note 78, at 6, 21.

80. *But see* Frederick H. Alexander, *The Benefit Stance: Responsible Ownership in the Twenty-*

which is taken as a given that passive funds simply match and active funds try to beat. Most systemic risks, like the Federal Reserve's change in interest rates, cannot be influenced by the choices made by investors—they must passively ride them out as market-wide fluctuations. Climate risk, however, is substantially generated by the publicly traded companies within institutional investors' own portfolios. In this way, climate risk is an example of a systemic risk over which institutional investors can uniquely exercise control. For indexers and quasi-indexers whose investment strategy is to match the market (i.e., achieve beta rather than spend resources on generating alpha), this ability to influence the market beta itself is unprecedented. This uniqueness can explain why institutional investors have taken on the role of proactive overseers of management and undertaken many of the climate-related corporate engagements discussed in the following section.

The literature to date on the externality-internalizing incentives of institutional investors has been primarily theoretical, and largely forgotten.⁸¹ This Article is the first to (1) document just *how* shareholders are influencing corporate choices to reduce externalities and (2) provide the economic rationale for *why* they do so, showing that firm-specific profit losses are outweighed by portfolio gains. These arguments follow in sections C and D.

C. *Shareholder Activism for Climate Change Mitigation*

Investor activism related to climate change seeks a wide range of outcomes from a broad array of public companies. In 2017, shareholders asked financial institutions to stop funding high-carbon projects, retailers to commit to using more renewable energy, and restaurant chains to report on deforestation in their supply chain.⁸² This Article focuses particularly on investor targeting of high emissions industries, like fossil fuel production and mining, and on campaigns that seek outcomes directly related to emissions reductions.

First Century, 36 OXFORD REV. ECON. POL'Y 6 (forthcoming Apr. 2020) (arguing precisely that large diversified investors can influence beta through ESG activity).

81. With the exception of Antón et al., *supra* note 24, and López & Vives, *supra* note 24, two empirical studies on the positive innovation externalities that arise from common ownership.

82. CVS HEALTH, REPORT ON RENEWABLE ENERGY GOALS (2017), https://engagements.ceres.org/ceres_engagementdetailpage?recID=a0112000005PW7cAAG [<https://perma.cc/4A9L-J3UF>]; BANK OF AMERICA CORP., LIMIT HIGH CARBON FINANCING (2017), https://engagements.ceres.org/ceres_engagementdetailpage?recID=a011H00000CixCKQAZ [<https://perma.cc/2KLJ-YCNP>]; MCDONALD'S CORP., REPORT ON SUPPLY CHAIN DEFORESTATION IMPACTS (2017), https://engagements.ceres.org/ceres_engagementdetailpage?recID=a011H00000C4UpjQAF [<https://perma.cc/3XKE-H7A8>].

For these outcomes to be characterized as internalizing negative climate externalities, they must result in emissions reductions beyond those that would have been achieved by profit-seeking managers responding to regulatory and market forces. Diversified shareholders must be forcing firms to forgo profit at the expense of share value maximization. Said in another way, there must be a conflict of interest between the diversified shareholders and those shareholders with a concentrated stake in the targeted fossil fuel company. However, for a variety of reasons, shareholders might characterize their interventions as for the benefit of the individual firm on which they are exerting pressure. Section 1 outlines the three categories of climate change outcomes sought by shareholders and highlights recent significant achievements in securing changes in corporate behavior. Section 2 discusses the extent to which each outcome legitimately serves a firm-specific profit-maximizing purpose. Section 3 assesses each of these outcomes' impact on actual emissions levels.

1. Outcomes Sought from Portfolio Companies

Investor climate activism targeting fossil fuel companies can be grouped into three main categories of outcomes sought: (1) commitment to emissions reduction targets; (2) discontinuance of political spending related to opposing greenhouse gas regulations; and (3) disclosure of climate risk (typically in the form of “two degree scenario analysis”).

a. Emissions Reduction Targets

In December 2017, a group of institutional investors joined together in an initiative called Climate Action 100+, asking their peers to sign a pledge committing their shareholder power to pressuring the companies in which they invest to adopt long-term emissions reduction targets.⁸³ By the 2019 proxy season, 360 institutional investors had signed the pledge, controlling a combined \$34 trillion in assets.⁸⁴ Membership includes three of the world's ten largest pension funds (those belonging to Japan, the Netherlands, and California) and twenty of the top fifty largest non-pension institutional investors, including PIMCO, Northern Trust, HSBC, and BNP Paribas.⁸⁵ Each of these investors have publicly agreed to seek

83. *About Us*, CLIMATE ACTION 100+, <https://climateaction100.wordpress.com/about-us/> [<https://perma.cc/QFB5-B7AV>].

84. *Investors*, CLIMATE ACTION 100+, <https://climateaction100.wordpress.com/investors/> [<https://perma.cc/ZBS9-43CR>].

85. THINKING AHEAD INSTITUTE, PENSIONS & INVESTMENTS - YEAR ENDED 2017 (2018),

commitments from the “boards and senior management” of their portfolio companies to “[t]ake action to reduce greenhouse gas emissions across their value chain.”⁸⁶ In early 2020, both BlackRock and JPMorgan made headlines by joining the investor coalition, which had previously lacked membership from most U.S.-based non-pension institutional investors.⁸⁷

The unveiling of Climate Action 100+’s agenda included the release of a list of 100 public companies that the group intended to prioritize for corporate engagement. The list was comprised of those companies that had the highest levels of emissions from their own operations as well as the sale of their products, accounting for two-thirds of all industrial greenhouse gas emissions.⁸⁸ The investor group’s reported strategy was to focus on behind-the-scenes engagement with target companies, using “private, not public, proposals.”⁸⁹ Certain investors were tasked as “leads for engaging with specific individual companies” on the list.⁹⁰

In December 2018, the shareholder group announced a significant victory. Royal Dutch Shell issued a joint statement in partnership with Climate Action 100+, announcing its intent to reduce its total emissions impact 20% by 2035, and 50% by 2050.⁹¹ These emissions reductions targets are not limited to the company’s own emissions, but include the greenhouse gases released from the sale of its fossil fuel products. Shell intends to link the achievement of these emissions reduction goals directly to metrics determining executive compensation.⁹²

https://www.thinkingaheadinstitute.org/en/Library/Public/Research-and-Ideas/2018/09/P_I_300_2018_research_paper [<https://perma.cc/9YKY-QG99>].

86. *Frequently Asked Questions*, CLIMATE ACTION 100+, <https://climateaction100.wordpress.com/faq/> [<https://perma.cc/P93E-EH3T>].

87. Dieter Holger & Maitane Sardon, *BlackRock Joins World’s Largest Investor Group on Climate Change*, WALL STREET J. (Jan. 9, 2020), <https://www.wsj.com/articles/blackrock-joins-worlds-largest-investor-group-on-climate-change-11578594349> [<https://perma.cc/AJ4B-6L6Y>]; Alastair Marsh, *JPMorgan Asset Management Joins Investor Climate Campaign*, BLOOMBERG GREEN (Feb. 25, 2020), <https://www.bloomberg.com/amp/news/articles/2020-02-25/jpmorgan-asset-management-joins-investor-climate-campaign> [<https://perma.cc/E78W-A9GK>].

88. *Climate Action 100+*, CERES, <https://www.ceres.org/initiatives/climate-action-100> [<https://perma.cc/E4X7-54BM>].

89. Lewis Braham, *Climate Change: Big Investors Bring Big Clout to the Debate*, BARRON’S (Apr. 27, 2018) <https://www.barrons.com/articles/big-investors-bring-big-clout-to-climate-battle-1524838935> [<https://perma.cc/V7YF-PLYA>].

90. *Id.*

91. Shell Emissions Commitment, *supra* note 1.

92. Miranda Green, *Shell to Enact First of Its Kind Policy Linking Executive Pay to Carbon Emissions*, THE HILL (Dec. 3, 2018), <https://thehill.com/policy/energy-environment/419450-shell-to-enact-first-of-its-kind-policy-linking-executive-pay-to> [<https://perma.cc/J4BT-KADB>]. This commitment goes beyond the company’s existing policy linking 10% of executive remuneration to reductions in emissions from Shell’s own operations.

Alongside the unveiling of Shell's targets, a Climate Action 100+ representative announced that the success "demonstrates the power of collective global investor engagement" and that the coalition planned to "use the commitment to raise the bar for the oil and gas industry as a whole."⁹³ Indeed, shortly following Shell's announcement, Climate Action 100+ members New York State Common Retirement Fund and the Church of England jointly filed a shareholder proposal for ExxonMobil's 2019 annual meeting requesting disclosure of emissions targets "aligned with the [greenhouse gas reduction] goals established by the Paris Climate Agreement."⁹⁴ A number of additional investors, with a combined \$1.9 trillion under management, joined in support of the proposal, including CalPERS and HSBC Global Asset Management.⁹⁵ Three additional oil majors, BP, Chevron, and Equinor, faced similar resolutions in the 2019 season.⁹⁶

The proposal against BP, brought by a coalition of fifty-eight investors owning a combined 10% of the oil company, passed with overwhelming support in May 2019.⁹⁷ In September, BP's CEO announced that the company planned to sell off some oil projects and slow down the development of others in order to meet shareholder demands to align BP's business plan with the Paris Agreement.⁹⁸

Shareholder resolutions requesting emissions reductions targets have been increasing in frequency and gaining more shareholder support in recent years.⁹⁹ In 2018, twenty-nine such proposals were filed, five were withdrawn prior to voting due to company adoption of shareholder

93. Press Release, Shell, *supra* note 4.

94. Press Release, NYS Comptroller DiNapoli and Church of England Call on ExxonMobil to Set Targets for Lowering GHG Emissions (Dec. 17, 2018), <https://www.ceres.org/news-center/press-releases/nys-comptroller-dinapoli-and-church-england-call-exxonmobil-set-targets> [<https://perma.cc/X5LF-VPEE>].

95. *Id.*

96. Hiller & Nasralla, *supra* note 5.

97. The coalition included Aviva Investors, HSBC Global, Legal & General, UBS, and Schroders. Michael Holder, 'Unprecedented: Why BP Investors Holding Billions in Shares Are Backing a Climate Resolution', GREENBIZ (May 20, 2019) <https://www.greenbiz.com/article/unprecedented-why-bp-investors-holding-billions-shares-are-backing-climate-resolution> [<https://perma.cc/HQN4-PDR9>].

98. Kelly Giblom, *BP CEO Plans Sale of Some Oil Projects to Hit Climate Target*, BLOOMBERG (Sept. 12, 2019), <https://www.bloomberg.com/news/articles/2019-09-12/bp-ceo-says-he-ll-sell-oil-projects-to-meet-climate-targets> [<https://perma.cc/6TUT-C4SS>].

99. Maximilian Horster & Kosmas Papadopoulos, *Climate Change and Proxy Voting in the U.S. and Europe*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Jan. 7, 2019) <https://corpgov.law.harvard.edu/2019/01/07/climate-change-and-proxy-voting-in-the-u-s-and-europe/> [<https://perma.cc/A6XP-BG54>].

demands, and one passed with majority shareholder support.¹⁰⁰ Significantly, the proposal at American Electric Power, “the largest electric power sector emitter of GHGs in the Western Hemisphere,”¹⁰¹ was withdrawn by the New York State Common Retirement Fund after the company agreed to adopt the goal of reducing emissions 60% by 2030 and 80 percent by 2050.¹⁰² At Genesee & Wyoming’s annual meeting, 57.2% of shareholders supported a request that the railroad company “adopt time-bound, quantitative, company-wide goals for reducing greenhouse gas” emissions.¹⁰³

Beyond direct investor engagement and shareholder resolutions, institutional investors have increasingly engaged in public-facing advocacy, aiming to gain broader support for their emissions reduction agenda. In advance of the 2018 proxy season, fifty-eight investors managing a combined \$10.4 trillion in assets issued an open letter in the *Financial Times* urging oil and gas companies to make “concrete commitments to substantially reduce carbon emissions” and explain “how the investments they make are compatible with a pathway towards the Paris goal” of less than 2°C of warming.¹⁰⁴ The signatories included BNP Paribas Asset Management, which manages \$480 billion in assets,¹⁰⁵ and AXA Investment Managers with €881 billion.¹⁰⁶ A similar investor letter published in December 2018 argued that, given the economic damage projected to result from climate change “it is essential that we deliver on the Paris Agreement.”¹⁰⁷ In service to that goal, the investors wrote, “we

100. *Id.*; CERES, Engagement Tracker, *supra* note 13. The companies that committed to emissions targets were: AK Steel Holding Company, American Electric Power, Kansas City Southern, Minerals Technologies, and Unites States Steel. *Id.*

101. *Commit to Climate*, CERES, <https://www.ceres.org/initiatives/commit-to-climate> [<https://perma.cc/P8DR-8388>].

102. Robert Steyer, *N.Y. State Common Withdraws Shareholder Request After AEP Sets Greenhouse Gas Reduction Targets*, PENSIONS & INV. (Feb. 9, 2018), <https://www.pionline.com/article/20180209/ONLINE/180209801/ny-state-common-withdraws-shareholder-request-after-aep-sets-greenhouse-gas-reduction-targets> [<https://perma.cc/3N2T-MV88>].

103. *Genesee and Wyoming 2018 Shareholder Resolution, Adopt GHG Reduction Targets*, CERES (2018), https://engagements.ceres.org/ceres_engagementdetailpage?recID=a011H00000C4a0TQAR [<https://perma.cc/TEL2-DBX8>].

104. Aberdeen Standard Investments et al., *Oil and Gas Groups Must Do More to Support Climate Accord*, FIN. TIMES (May 17, 2018), <https://www.ft.com/content/fda63c26-5906-11e8-b8b2-d6ceb45fa9d0> [<https://perma.cc/VZ8G-4J8F>].

105. *About Us: Key Figures*, BNP PARIBAS, <https://www.bnpparibas-am.com/en/about-us/the-asset-manager-for-a-changing-world/> [<https://perma.cc/NSU3-URNU>].

106. *Who We Are*, AXA INV. MANAGERS, <https://www.axa-im.com/about-us> [<https://perma.cc/EPY6-FDS7>] (reporting 808 billion euros under management).

107. Aberdeen Standard Investments et al., *Power Companies Must Accelerate Decarbonisation*

require power companies . . . to plan for their future in a net-zero carbon economy . . . [and request that they] set out transition plans” consistent with significant emissions reductions.¹⁰⁸ The investors outlined that they expected “explicit timelines and commitments for the rapid elimination of coal use by utilities in EU and OECD countries by no later than 2030.”¹⁰⁹ The letter was signed by ninety-five institutional investors controlling \$11.5 trillion in assets and sent directly to targeted power companies.¹¹⁰

In Climate Action 100+’s 2019 Progress Report, the investor coalition claimed credit for emissions commitments made by a large number of multinationals, including Nestle, Duke Energy, Southern Company, Maersk, Heidelberg Cement, and BHP Billiton.¹¹¹

b. Suspension of Anti-Regulation Lobbying

Institutional investors have not just pushed directly for emissions reductions but have been paying increasing attention to the resources companies devote to political lobbying efforts aimed at thwarting carbon regulation. One investor letter in the *Financial Times* highlighted the expectation that companies align their political agendas with the achievement of “ambitious climate policy.”¹¹² This obligation specifically extended to the trade associations through which companies often advance their political aims. Shell’s 2018 emissions target announcement included an acknowledgement that its membership in certain trade associations may be at odds with its stated support for the Paris Agreement.¹¹³ In 2019, the company released a review of its trade association memberships and withdrew from the American Fuel and Petrochemical Manufacturers because of the organization’s stance on carbon regulation.¹¹⁴

and *Support Ambitious Climate Policy*, FIN. TIMES (Dec. 19, 2018), <https://www.ft.com/content/8d80c8e4-02f7-11e9-99df-6183d3002ee1> [<https://perma.cc/TXM6-ZBU7>] [hereinafter Aberdeen et al., *Power Companies*].

108. *Id.*

109. *Id.*

110. Jennifer Thompson & Anjili Raval, *Investors Push Power Companies to End Coal Use by 2030*, FIN. TIMES (Dec. 19, 2018), <https://www.ft.com/content/1c65952e-03a4-11e9-99df-6183d3002ee1> [<https://perma.cc/8T4N-4TPM>].

111. CLIMATE ACTION 100+, 2019 PROGRESS REPORT 7, 33 (2019) [hereinafter CLIMATE ACTION 100+, PROGRESS REPORT], <https://climateaction100.files.wordpress.com/2019/10/progressreport2019.pdf> [<https://perma.cc/Q3E9-EQZX>]

112. Aberdeen et al., *Power Companies*, *supra* note 107.

113. Shell Emissions Commitment, *supra* note 1.

114. Steven Mufson, *Shell Quits Trade Group Over Climate Change Positions*, WASH. POST (Apr. 2, 2019), <https://www.washingtonpost.com/news/energy-environment/wp/2017/05/31/exxonmobil->

In the 2018 proxy season a coalition of seventy-four investors filed shareholder proposals at fourteen emissions-intensive companies seeking disclosure of expenditures for lobbying efforts, including payments to trade associations and other third-party organizations.¹¹⁵ The proposals specifically targeted companies for membership in groups devoted to fighting climate regulation, like the Chamber of Commerce and the American Legislative Exchange Council (ALEC).¹¹⁶ Of these, five proposals were withdrawn after the companies (including ConEd and ConocoPhillips) agreed to make disclosure commitments, and another two were withdrawn when the companies agreed to begin dialogues with investors on the issue.¹¹⁷

c. Climate Risk Disclosure

In addition to emissions reductions and cessation of lobbying, investors have pressed for disclosure of climate change related risks. Investor demand for climate risk disclosure can take several forms, but the most common is a request that the company assess and disclose its business model response to global climate regulations aimed at limited warming to 2°C, the goal of the Paris Agreement.¹¹⁸ This requires the targeted

is-trying-to-fend-off-a-shareholder-rebellion-over-climate-change/ [https://perma.cc/LU66-N78B].

115. Press Release, Walden Asset Mgmt., Institutional Investors Continue to Press Companies for Disclosure of Lobbying In 2018 (Mar. 9, 2018), <https://waldenassetmgmt.com/wp-content/uploads/2018/03/Announcement-of-2018-Lobbying-Disclosure-Resolutions-correct-Walden-Logo.pdf> [https://perma.cc/X8V5-M7NZ].

116. Targeted companies included Atmos Energy, Chesapeake Energy, Chevron, ConocoPhillips, Consolidated Edison, Devon Energy, Duke Energy, Emerson Electric, ExxonMobil, Encana, FirstEnergy, Ford Motor, FedEx, and Imperial Oil. See CERES, Engagement Tracker, *supra* note 13.

117. *Id.* Commitment: ConEd, Conoco Chesapeake Atmos First Energy; Dialogue: Devon Energy, Duke. Failed votes still received notable shareholder support: Chevron: 31.5%, Alliant 39%, Exxon 26.3%, Emerson Electric, 39.6%. *Id.* The remaining seven failed to receive majority support. See *id.* In 2017, two of the 17 resolutions filed were withdrawn with commitments to disclose their political spending. See *id.* Commitments were reached from Pinnacle West, an electric utility, and Andeavor, an oil producer. See *id.* Both Exxon and Chevron are targets of political spending resolutions in the upcoming 2019 proxy season. CHEVRON (CVX), 2019 RESOLUTION, REPORT ON LOBBYING (2019) https://engagements.ceres.org/ceres_engagementdetailpage?recID=a011H00000CEvKQAT [https://perma.cc/BYE4-KXD8]; EXXONMOBIL (XOM), 2019 RESOLUTION, REPORT ON LOBBYING (2019) https://engagements.ceres.org/ceres_engagementdetailpage?recID=a011H00000CEmhQAD [https://perma.cc/D7JS-VE7G]. Chevron's 2018 vote failed with 31.5% of shareholders in favor. CHEVRON (CVX), 2018 RESOLUTION, REPORT ON LOBBYING (2018), https://engagements.ceres.org/ceres_engagementdetailpage?recID=a011H00000C3zXvQAJ [https://perma.cc/74QL-VF7M].

118. State Street defines a “2-degree scenario” as a future emissions path that is consistent with “the global consensus to limit the global average temperature increase to under 2 degrees Celsius and the alignment of company strategy to this global commitment.” SSGA’S PERSPECTIVES ON EFFECTIVE CLIMATE CHANGE DISCLOSURE, STATE STREET GLOBAL ADVISORS 1 n.2 (Aug. 2017),

company to construct a “2-degree scenario” analysis, modeling its projected capital expenditure, profits, and risk exposure given that these warming limits would require leaving a significant percentage of already proven fossil fuel reserves in the ground.¹¹⁹

In the 2017 proxy season, eighteen shareholder proposals requested that fossil fuel and utility companies undergo and disclose two-degree scenario analysis.¹²⁰ The proposals received an average of 41% support, with three passing with majority approval.¹²¹ While similar votes in previous years had failed, the shareholder proposal at ExxonMobil’s annual general meeting received 62% of total votes cast, thanks to the backing of investment giants like BlackRock, Vanguard, and Fidelity.¹²² In the 2017 vote, BlackRock and Vanguard together controlled 13% of Exxon’s stock. Resolutions at Occidental Petroleum and PPL, a major utility that derives 60% of its power mix from coal, passed with 66% and 57% of the vote, respectively.¹²³ A two-degree proposal at Chevron was withdrawn “due to substantial implementation.”¹²⁴

In the 2018 season, twelve of the twenty shareholder proposals related to two-degree scenario analysis were withdrawn prior to voting due to board acquiescence.¹²⁵ Major energy companies like Valero, FirstEnergy,

<https://www.ssga.com/investment-topics/environmental-social-governance/2017/perspectives-on-effective-climate-change-disclosure.pdf> [<https://perma.cc/W37A-JAQ6>].

119. See, e.g., Christophe McGlade & Paul Ekins, *The Geographical Distribution of Fossil Fuels Unused When Limiting Global Warming to 2°C*, 517 NATURE 187, 187 (2015) (finding “that, globally, a third of oil reserves, half of gas reserves and over 80 per cent of current coal reserves should remain unused from 2010-2050 in order to meet the target of 2°C”).

120. Cristina Banahan, *Doubling Down on Two-Degrees: The Rise in Support for Climate Risk Proposals*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Jan. 23, 2018), <https://corp.gov.law.harvard.edu/2018/01/23/doubling-down-on-two-degrees-the-rise-in-support-for-climate-risk-proposals/> [<https://perma.cc/RZJ8-NDMS>].

121. *Id.*

122. Diane Cardwell, *Exxon Mobil Shareholders Demand Accounting of Climate Change Policy Risks*, N.Y. TIMES (May 31, 2017), <https://www.nytimes.com/2017/05/31/business/energy-environment/exxon-shareholders-climate-change.html> [<https://perma.cc/FCG7-LTP2>].

123. Steven Mufson, *Financial Firms Lead Shareholder Rebellion Against ExxonMobil Climate Change Policies*, WASH. POST (May 31, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/05/31/exxonmobil-is-trying-to-fend-off-a-shareholder-rebellion-over-climate-change/?utm_term=.dc58c7af6798 [<https://perma.cc/LU66-N78B>]; Robert Walton, *PPL Shareholders Pass Resolution for Climate Strategy Assessment*, UTILITYDIVE (May 23, 2017), <http://www.utilitydive.com/news/ppl-shareholders-pass-resolution-for-climate-strategy-assessment/443319/> [<https://perma.cc/QTW4-23R7>].

124. CALPERS, ANNUAL INVESTMENT REPORT 2016–17, at3 (2017) <https://www.calpers.ca.gov/docs/forms-publications/annual-investment-report-2017.pdf> [<https://perma.cc/WUR9-55E2>].

125. Andrew Logan, *The Hidden Story of Climate Proposals in the 2018 Proxy Season*, CERES (May 29, 2018), <https://www.ceres.org/news-center/blog/hidden-story-climate-proposals-2018->

and Dominion Energy all committed to analyzing and disclosing their exposure to climate risk. Of the remaining eight two-degree proposals, two received majority shareholder support: 59.7% at Kinder Morgan and 53% at Anadarko Petroleum.¹²⁶

Many institutional investors have made public statements indicating that their advocacy of climate risk disclosure will only be gaining momentum in the years ahead. Vanguard's CEO published an "open letter to directors of public companies worldwide" explaining that the asset manager's "evolving position on climate risk" was in service to its underlying investors who were "significant long-term owners of many companies in industries vulnerable to climate risk."¹²⁷ BlackRock sent a letter directly to "120 of the most carbon-intensive companies" in its portfolio asking them to disclose climate risks in accordance with voluntary standards outlined by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD).¹²⁸

2. *Legitimacy of Firm-Specific Business Purpose*

The investor activism described above targets the managers of individual companies in order to get them to change corporate objectives at the firm level. This Article argues that these objectives serve the purpose of maximizing long-term portfolio returns, to the detriment of firm-specific returns. While some investor statements directly acknowledge this portfolio perspective, see *infra* Section 2.b, most investors justify their advocacy as for the benefit of the firm they are targeting. They might do this for several reasons. While investors are legally permitted to vote their shares in a self-interested way, managers and directors are obligated to serve in the best interests of the

proxy-season [<https://perma.cc/P45U-ET6D>].

126. Westcott, *supra*, note 12; *Report on 2-degree analysis and strategy (KMI, 2018 Resolution)*, CERES, https://engagements.ceres.org/ceres_engagementdetailpage?recID=a011H00000C4C1oQAF [<https://perma.cc/KC9H-56M7>]; *Report on 2-degree analysis and strategy (APC, 2018 Resolution)*, CERES, https://engagements.ceres.org/ceres_engagementdetailpage?recID=a011H00000C47pKQAR [<https://perma.cc/W9BR-FL95>].

127. F. William McNabb, The Vanguard Group, An Open Letter to Directors of Public Companies Worldwide (Aug. 31, 2017), <https://about.vanguard.com/investment-stewardship/governance-letter-to-companies.pdf> [<https://perma.cc/ZR6Q-H9PF>].

128. PRINCIPLES FOR RESPONSIBLE INVESTMENT (PRI), TRANSPARENCY REPORT: BLACKROCK 64 (2018) [hereinafter PRI, TRANSPARENCY REPORT], <https://wikirate.s3.amazonaws.com/files/3753861/14978614.pdf> [<https://perma.cc/C39L-43WK>]; Emily Chasan, *BlackRock Wields Its \$6 Trillion Club to Combat Climate Risks*, BLOOMBERG MKTS. (Dec. 8, 2017), <https://www.bloomberg.com/news/articles/2017-12-08/blackrock-wields-its-6-trillion-club-to-combat-climate-risks> [<https://perma.cc/D745-8DRM>].

corporation.¹²⁹ By couching their advocacy in terms of firm-specific benefits, investors provide cover to managers who might otherwise be accused of violating their fiduciary duty to the corporation and individual shareholders. Further, institutional investors are under increasing scrutiny for their potential power to induce anti-competitive behavior on the part of firms within their portfolio. Admitting that they are able to influence firm-level objectives, in the context of limiting climate damage, contradicts their protestations that they are uninterested and powerless when it comes to product supply decisions in the anti-competitive context.¹³⁰

a. Assessing Outcomes

Each of the three climate-change related outcomes identified above may not serve profit maximization at the targeted firm. The extent to which a firm-specific rationale is lacking serves as further evidence suggesting that investor motivations are guided by net portfolio returns.

Emissions Reduction Goals: Most investors advocating for emissions reduction goals argue that the fossil fuel or utility company being targeted is failing to adequately prepare for government regulation of greenhouse gases and the growth of renewable alternatives.¹³¹ By taking this position, institutional investors are arguing that they themselves have a better understanding of the growth that will be needed to meet expected demand than the executives who work within the energy industry.

Most reduction commitments ask firms to reduce emissions in line with the goals of the Paris Agreement, enough to keep warming below 2°C.¹³² But the argument that world regulators are themselves on track to meet this goal is a questionable one, and at odds with the assessment of many expert observers regarding the sufficiency of the global effort to limit emissions. By an October 2018 tally, just seventeen countries and the EU had enacted domestic laws consistent with achieving their commitments under the Paris Agreement.¹³³ In the United States, President Trump

129. See section II.B *infra*.

130. See section II.A *infra*.

131. See, e.g., EXXON MOBIL, EXXON EMISSIONS TARGETS PROPOSAL 2019, <https://www.osc.state.ny.us/press/docs/xom-resolved.pdf> [<https://perma.cc/PJ39-HWQ6>] (arguing that the “transition to a low carbon economy . . . could limit returns to ExxonMobil’s investors by increasing the company’s operating costs or by reducing demand for its products”).

132. See *Ceres Shareholder Resolutions Database*, CERES, <https://www.ceres.org/shareholder-resolutions-database> [<https://perma.cc/A5RJ-MKQU>] (displaying all resolutions requesting companies to “Adopt GHG reduction targets”).

133. Michal Nachmany & Emily Mangan, *Aligning National and International Climate Targets*,

announced his intention to withdraw from the Paris Agreement entirely.¹³⁴ Consistent with this intent, the Trump Administration is in the process of systematically rolling back existing federal climate policy, proposing to, among other actions, repeal the Clean Power Plan, freeze vehicle fuel efficiency standards, and deregulate methane leaks.¹³⁵ These actions taken together could increase annual emissions in 2030 by as much as California emitted in 2016.¹³⁶ Going forward, given the Supreme Court's composition shift toward skepticism of administrative powers, the partisan divide regarding climate legislation, the number of senate seats possible for Democrats to gain, and the remaining existence of the filibuster, it would be reasonable for a well-informed industry manager to conclude that the risks of imminent federal climate policy are low, even after Trump leaves office.¹³⁷

In urging its shareholders to vote against a climate resolution, the oil and gas company Noble Energy directly highlighted the Trump Administration's deregulatory efforts.¹³⁸ Indeed, ExxonMobil has

GRANTHAM RESEARCH INST. ON CLIMATE CHANGE & ENV. 1 (Oct. 2018), <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/10/Aligning-national-and-international-climate-targets-1.pdf> [<https://perma.cc/D35P-PBZ5>].

134. Michael D. Shear, *Trump Will Withdraw U.S. From Paris Climate Agreement*, N.Y. TIMES (June 1, 2017), <https://www.nytimes.com/2017/06/01/climate/trump-paris-climate-agreement.html> [<https://perma.cc/7N2U-3749>].

135. See, e.g., Chris Mooney, *Trump Withdrew From the Paris Climate Deal a Year Ago. Here's What Has Changed.*, WASH. POST (June 1, 2018, 7:26 AM), https://www.washingtonpost.com/news/energy-environment/wp/2018/06/01/trump-withdrew-from-the-paris-climate-plan-a-year-ago-heres-what-has-changed/?utm_term=.6f30a59b392b [<https://perma.cc/6KNS-HCVP>]; Clifford Krauss, *Trump's Methane Rule Rollback Divides Oil and Gas Industry*, N.Y. TIMES (Aug. 29, 2019), <https://www.nytimes.com/2019/08/29/business/energy-environment/methane-regulation-reaction.html> [<https://perma.cc/4G8A-T625>].

136. CLIMATE ACTION TRACKER, USA: 25 Oct. 2018, <https://climateactiontracker.org/countries/usa/2018-10-25/> [<https://perma.cc/KP7X-STYT>].

137. See, e.g., Samuel Moyn & Aaron Belkin, *The Roberts Court Would Likely Strike Down Climate Change Legislation*, TAKE BACK THE COURT (Sept. 2019), <https://static1.squarespace.com/static/5ce33e8da6bbec0001ea9543/t/5d7d429025734e4ae9c92070/1568490130130/Supreme+Court+Will+Overturn+Climate+Legislation+FINAL.pdf> [<https://perma.cc/AKX3-SVMV>] (analyzing past rulings of each justice and predicting which legal doctrines the court would likely use to strike down new climate related regulation and legislation); Nathaniel Rakich, *The Senate Will Be Competitive Again In 2020, But Republicans Are Favored*, FIVETHIRTYEIGHT (Nov. 28, 2018, 3:08 PM), <https://fivethirtyeight.com/features/the-senate-will-be-competitive-again-in-2020-but-republicans-are-favored/> [<https://perma.cc/64QG-2TP9>] (describing the odds of Democrats taking over the Senate in 2020).

138. David Hasemyer, *3 Dozen Shareholder Climate Resolutions Target Oil, Gas and Power Companies*, INSIDE CLIMATE NEWS (Mar. 8, 2018), <https://insideclimateneeds.org/news/07032018/shareholder-resolutions-climate-change-2-degrees-methane-lobbying-trump-administration> [<https://perma.cc/DHZ7-ZRQ9>]. The resolution eventually failed with 45.7% of shareholders in favor. *Report on 2-Degree Analysis and Strategy (NBL, 2018*

announced that by 2025 it expects its own oil and gas production to be 25% higher than in 2017, with profits three times as large.¹³⁹ As a *Wall Street Journal* columnist recently quipped, “it is at least plausible, perhaps likely, that there will be insufficient global effort to limit or tax carbon emissions. From a purely financial point of view, the best response is to buy stocks in companies pumping out carbon.”¹⁴⁰

Until very recently, Shell and BP shared this view. In a 2014 letter to investors Shell pushed back against claims that it was over-investing in exploration, explaining that the company did not “see governments taking the steps now that are consistent with the 2°C scenario.”¹⁴¹ In 2017, Shell’s board continued to maintain that setting emissions targets was “not in the best interest of the company.”¹⁴² In 2015, BP noted the International Energy Agency’s prediction that global emissions levels in 2035 would be more than double that required in order to keep warming below 2°C.¹⁴³ The oil company acknowledged that its own business model was consistent with an emissions pathway “well above the path recommended by scientists.”¹⁴⁴

Now, after having been the targets of aggressive investor engagement, both of those companies have radically changed their positions. Shell’s board has agreed to drastic emissions cuts.¹⁴⁵ BP’s board now supports a shareholder resolution requesting similar emissions targets following

Resolution), CERES https://engagements.ceres.org/ceres_engagementdetailpage?recID=a011H00000C3feXQAR [<https://perma.cc/VB3D-MHYM>].

139. *ExxonMobil Gambles on Growth*, ECONOMIST (Feb. 9, 2019), <https://www.economist.com/briefing/2019/02/09/exxonmobil-gambles-on-growth> [<https://perma.cc/7UDW-7T3W>].

140. James Mackintosh, *What Could Go Wrong With Climate Change Investing*, WALL ST. J. (Dec. 13, 2018) <https://www.wsj.com/articles/what-could-go-wrong-with-climate-change-investing-11544716801> [<https://perma.cc/7WGF-452V>].

141. Letter from Royal Dutch Shell PLC to S’holders 6 (May 16, 2014), https://www.shell.com/investors/environmental-social-and-governance/esg-news-presentations-and-annual-briefings/_jcr_content/par/tabbedcontent/tab_667142067/textimage_1262076677.stream/1519763050501/cef6b2b3be9e8a6eb27c1550a70578fce52ad826/sri-web-response-climate-change-may14.pdf [<https://perma.cc/88SZ-EJ23>].

142. Kalyeena Makortoff, *Nearly 94% of Shell Shareholders Reject Emissions Reduction Target in Line with Paris Climate Agreement*, INDEPENDENT (May 23, 2017, 3:17 PM), <https://www.independent.co.uk/environment/shell-shareholders-94-per-cent-emissions-reduction-target-reject-paris-agreement-climate-change-a7751681.html> [<https://perma.cc/G6SW-KF6A>].

143. Greg Muttiitt, *BP Out of Touch on Climate and Clean Energy Technology*, OIL CHANGE INT’L (Feb. 18, 2015), <http://priceofoil.org/2015/02/18/bp-touch-climate-clean-energy-technology/> [<https://perma.cc/E89K-GA75>].

144. *Id.*

145. Shell Emissions Commitment, *supra* note 1.

“constructive engagement” with Climate Action 100+.¹⁴⁶ There has not been a significant change to the global political situation with respect to action on climate, and yet without any such changes both of these companies have reversed their position. The explanation does not seem to have come as a result of reassessment of the imminence of carbon regulation, but rather as the direct result of shareholder pressure. Indeed, a director of mining giant Glencore explained that shareholder protest votes were the cause of the company’s abrupt change in policy on its investment in coal.¹⁴⁷ The *Wall Street Journal* called the company’s coal commitments “a major reversal” for a company that had recently made large coal mining acquisitions with a CEO “among the world’s biggest cheerleaders for coal.”¹⁴⁸

Just how these sizable emissions cuts—in Shell’s case 50%¹⁴⁹—can be met without severely limiting production has not been explained. In 2018, EOG Resources successfully sought permission from the Securities and Exchange Commission to omit a shareholder proposal seeking emissions reductions goals from consideration at the annual meeting.¹⁵⁰ The oil and gas company argued that the proposal would force management to prioritize “arbitrary emissions targets”¹⁵¹ over other factors including “operational considerations [and] rate-of-return economics.”¹⁵² These targets, it argued, were “unrelated to legal requirements”¹⁵³ and would come at the “expense of management’s own judgment.”¹⁵⁴ EOG explained

146. *BP to Support Investor Group’s Call for Greater Reporting Around Paris Goals*, BP (Feb. 1, 2019), <https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bp-to-support-investor-groups-call-for-greater-reporting-around-paris-goals.html> [<https://perma.cc/HD77-W8MW>].

147. Tim Wallace, *Protest Votes Made Us Change Tack on Coal Mining, Says Glencore Director Martin Gilbert*, TELEGRAPH (May 16, 2019, 3:05 PM), <https://www.telegraph.co.uk/business/2019/05/16/protest-votes-made-us-change-tack-coal-mining-says-glencore/> [<https://perma.cc/CB7S-HPBJ>].

148. Scott Patterson & Oliver Griffin, *Glencore, the King of Coal, Bows to Investor Pressure Over Climate*, WALL ST. J. (Feb. 20, 2019, 5:08 PM), <https://www.wsj.com/articles/glencore-once-a-big-coal-backer-is-capping-output-11550655803> [<https://perma.cc/M9KQ-YMJY>].

149. *Shell Emissions Commitment*, *supra* note 1.

150. SEC Dec. Letter from Att’y-Adviser William Mastrianna to EOG Res., Inc. at 2 (Feb. 26, 2018) [hereinafter SEC Decision Letter], <https://www.sec.gov/divisions/corpfin/cf-noaction/14a-8/2018/trilliummiller022618-14a8.pdf> [<https://perma.cc/2WJR-3JU4>].

151. Letter from EOG Res., Inc. Exec. Vice President Michael P. Donaldson to SEC 22 (Dec. 20, 2017), [hereinafter 2017 Letter from EOG Resources] <https://www.sec.gov/divisions/corpfin/cf-noaction/14a-8/2018/trilliummiller022618-14a8.pdf> [<https://perma.cc/P5G6-RHMA>].

152. Letter from EOG Res., Inc. Exec. Vice President Michael P. Donaldson to SEC 6 (Jan. 12, 2018), [hereinafter 2018 Letter from EOG Resources] <https://www.sec.gov/divisions/corpfin/cf-noaction/14a-8/2018/trilliummiller022618-14a8.pdf> [<https://perma.cc/B3G6-WZKH>].

153. 2017 Letter from EOG Res., *supra* note 151, at 24.

154. 2018 Letter from EOG Res., *supra* note 152, at 6.

that its “primary business operations are the exploration, development, production and marketing” of fossil fuels and that its “operational strategies cannot be separated from emissions management because drilling and production levels necessarily affect emissions levels.”¹⁵⁵ EOG further took issue with the proposal’s characterization of emissions targets as “a sound business strategy.”¹⁵⁶ For support, the proposal had cited to a study finding that companies with emissions targets enjoy a “9% better return on invested capital than companies without targets.”¹⁵⁷ EOG argued that it was misleading to suggest that emissions targets would lead to a similar increase return on investment, and that it was in fact “an almost impossible outcome.”¹⁵⁸ One industry observer blogged, “Shocking! The SEC rules that activist shareholders can’t force oil companies to stop being oil companies!”¹⁵⁹ In the case of emissions targets, the business rationale for meeting them remains unclear. Indeed, companies themselves argue that their self-interest points sharply away from doing so.

Disclosure of Lobbying: In one set of shareholder proposals requesting disclosure of anti-carbon regulation lobbying expenditures, institutional investors argued that they were seeking the information because “investors are concerned lobbying can pose reputational risks if it contradicts a company’s publicly stated positions.”¹⁶⁰ This justification is confusing. If the investors are arguing the disclosure is necessary because information on spending is not already publicly available, it is unclear where this reputational risk would originate. If anything, disclosure would open the companies up to broader public sanction and targeting by environmentalists.¹⁶¹ Further, energy and fossil fuel companies are less

155. 2017 Letter from EOG Res., *supra* note 151, at 21–22.

156. *Id.* at 29.

157. “Greenhouse Gas Emissions Targets” Proposal from S’holders to EOG Res., Inc. (Nov. 13, 2017), SEC No-Action Letter Docket at 34, <https://www.sec.gov/divisions/corpfin/cf-noaction/14a-8/2018/trilliummiller022618-14a8.pdf> [<https://perma.cc/X7DM-LUYH>].

158. 2017 Letter from EOG Resources, *supra* note 150, at 29.

159. David Middleton, *Shocking! The SEC Rules That Activist Shareholders Can’t Force Oil Companies to Stop Being Oil Companies!*, WATTS UP WITH THAT? (Apr. 4, 2018), <https://wattsupwiththat.com/2018/04/04/shocking-the-sec-rules-that-activist-shareholders-cant-force-oil-companies-to-stop-being-oil-companies/> [<https://perma.cc/PU4X-555K>].

160. *Investor Coalition Files Proposals at 50-Plus Companies on Lobbying Activities*, PENSIONS & INVS. (Mar. 9, 2018, 12:00 AM), <https://www.pionline.com/article/20180309/ONLINE/180309806/investor-coalition-files-proposals-at-50-plus-companies-on-lobbying-activities> [<https://perma.cc/UR8C-YVDY>].

161. See, e.g., Cynthia A. Williams, *The Securities and Exchange Commission and Corporate Social Transparency*, 112 HARV. L. REV. 1197, 1212, 1294–95 (1999) (describing ways in which disclosure can shame managers into avoiding socially undesirable activities, and quoting Justice

exposed to reputational risk than other companies that sell directly to consumers. Because utilities' economies of scale make them natural monopolies, they are often the sole operator in certain regional markets.¹⁶² If you live in an area serviced solely by one utility, there's not much you can do to express consumer displeasure with the utility's record on political spending. Fossil fuel companies are insulated from some amount of consumer censure because they sell to a range of intermediaries. It is near impossible to know what energy source powered the factory that made your shoes, or what gas station your local farmer refills at before driving to the market.

Beyond the dubious impact of reputational risk on profits, it is additionally contradictory that the same investors that argue companies have failed to adequately prepare for impending carbon regulation are *also* asking these companies to lend support for these regulations. Institutional investors are simultaneously arguing both that fossil fuel companies are failing to respond to imminent climate regulation, and also requesting that they stop thwarting this regulation, so as to hasten its imminence. From the perspective of the boards of oil and gas companies that repeatedly oppose shareholder resolutions related to political spending, these proposals do not serve the best interests of the target companies.¹⁶³

Disclosure of Climate Risk: Shareholder demand for disclosure of energy companies' exposure to climate risk is typically justified by the argument that these companies are inadequately prepared for the impending carbon-regulated future. This "transition risk" comes from a failure to adapt in time to a changing, less carbon-intensive economy as governments implement carbon regulations, and innovations in green technology make alternative energy cheaper.¹⁶⁴ "Stranded assets" in the fossil fuel industry are a classic example of transition risk.¹⁶⁵ Investors

Brandeis's view that disclosure can serve "as a remedy for social and industrial diseases").

162. STEVEN STOFT, POWER SYSTEM ECONOMICS: DESIGNING MARKETS FOR ELECTRICITY 9 (2002).

163. *See, e.g.*, EXXONMOBIL, EXXONMOBIL NOTICE OF 2019 ANNUAL MEETING AND PROXY STATEMENT 66–69 (Apr. 11, 2019), <https://corporate.exxonmobil.com/-/media/Global/Files/investor-relations/annual-meeting-materials/proxy-materials/2019-proxy-statement.pdf> [<https://perma.cc/M6G6-AXFQ>] (recommending that shareholders vote against proposals related to disclosure of political spending and lobbying).

164. *See* RISKY BUSINESS, *supra* note 41.

165. McGlade & Ekins, *supra* note 119, at 189, table 1 (estimating that in order to keep warming below 2°C, approximately 35% of current oil reserves are unusable); MARK LEWIS ET AL., KEPLER CHEUVREUX ENERGY TRANSITION AND CLIMATE CHANGE: STRANDED ASSETS, FOSSILISED REVENUES 16 (2014) (calculating that if greenhouse gas are kept below 450ppm of CO₂ equivalent in the atmosphere, the fossil fuel industry will lose \$28 trillion in projected revenue through 2035, with the oil industry experiencing a \$19.3 trillion loss).

argue that these risks are poorly understood by the market and have not been accurately incorporated into the pricing of corporate equities. They argue increased disclosure is necessary to remedy this overvaluation.

Whether or not this concern is justified has been a matter of recent debate by corporate scholars and industry observers. Many commentators have expressed skepticism that the market has failed to price climate risk. One recent paper by corporate law experts argues, for example, that “[i]nformation concerning stranded assets is publicly available, and proponents offer no explanation for why this risk is not already reflected in existing stock prices.”¹⁶⁶ The assertion that many companies are overvalued due to a systemic failure to assess exposure to climate risk is contrary to the efficient markets hypothesis (EMH), which posits that the price of a firm’s stock reflects all available information about the firm, and is therefore an unbiased estimate of the firm’s underlying value.¹⁶⁷

If climate risks are indeed mispriced, investor statements regarding climate risk disclosure remain puzzling for two reasons. First, if institutional investors are convinced that portfolio firms are overvalued due to stranded asset risk, why are they not selling off their shares? And second, those investors that cannot sell their shares, index funds, are not supposed to be motivated to devote resources to firm-specific information gathering. Their passive investment model involves no equity analysis at all. A rational response from an investor that believes a company is overvalued is to sell the stock, i.e. perform the “Wall Street walk.” One explanation for why a large institutional investor may be less inclined to exercise this option is because it owns such a large portion of shares that it would not be able to divest all of its assets before the market responded by lowering share price, resulting in losses for the seller.¹⁶⁸ But this doesn’t seem to be the whole story, for even if they are limited in their ability to divest completely, institutional investors might nevertheless try to sell some of their shares.

A better explanation might be that retaining control in the company

166. Paul Brest, Ronald Gilson, & Mark Wolfson, *How Investors Can (and Can't) Create Social Value* 23 (Eur. Corp. Governance Inst., Working Paper No. 394/2018, 2018), https://ecgi.global/sites/default/files/working_papers/documents/finalbrestgilsonwolfson.pdf [<https://perma.cc/Q4F2-7XBP>].

167. Eugene Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383 (1970); Thomas Lee, *Fossil Fuel Stranded Assets: Efficient Market or Carbon Bubble?*, WHARTON PUB. POL'Y INITIATIVE (Apr. 12, 2017), <https://publicpolicy.wharton.upenn.edu/live/news/1807-fossil-fuel-stranded-assets-efficient-market-or-for-students/blog/news.php> [<https://perma.cc/V3SA-RMDB>].

168. Jayne Zanglein, *From Wall Street Walk to Wall Street Talk: The Changing Face of Corporate Governance*, 11 DEPAUL BUS. L.J. 43, 46 (1998).

provides benefits to the wider portfolio, even as the investor facilitates a managed decline in the company's share price. As Luigi Zingales has observed, "divesting from oil stocks may have the undesirable effect of transferring ownership to investors who will pollute more" and thus the solution remaining to climate concerned investors is to "invest and engage."¹⁶⁹ Indeed, increasingly asset managers are admitting that they are choosing not to divest for precisely this reason. Japan's pension fund has explained that divestment "would only result in a transfer of ownership to investors who are not as concerned about climate issues and thus would do little to contribute to a less carbon-intensive world."¹⁷⁰ The chief investment officer of Zurich Insurance provided a similar explanation for his fund's choice to lobby for change rather than divest: "[Divestment] is not the solution—it does not change the physical world as far as emissions are concerned."¹⁷¹

Index funds, who cannot sell their shares, have been some of the most vocal investors in demanding disclosure of climate risk.¹⁷² This, too is a puzzle. Index funds are not supposed to be particularly concerned about firm-specific valuations or disclosure. These investment managers employ a passive investment strategy for the majority of their assets: they commit to matching and maintaining their portfolio to a meet certain stock index, rather than analyzing the fundamentals of any one company to

169. Luigi Zingales, *Public Companies Should Prioritise Shareholder Welfare, Not Value*, FIN. TIMES (Nov. 11, 2018), <https://www.ft.com/content/52240e18-e412-11e8-a8a0-99b2e340ffeb> (last visited Feb. 13, 2020). The institutional investor Schroders has explained that it believes "dialogue with individual companies about their plans will be more effective than divesting from the industry completely." *It's Not Black and White for Fossil Fuel Investing*, SCHRODERS (Dec. 12, 2017), <https://www.schroders.com/en/insights/economics/its-not-black-and-white-for-fossil-fuel-investing/> [<https://perma.cc/R2MN-57HA>]; see also James Mackintosh, *If You Want to Do Good, Expect to Do Badly*, WALL ST. J. (June 28, 2018), <https://www.wsj.com/articles/if-you-want-to-do-good-expect-to-do-badly-1530185698> [<https://perma.cc/N5VW-2VS6>] (arguing that environmentally-minded investors' "best chance of changing the world may be through" behind the scenes engagement with corporate boards rather than "making it more expensive for the corporate sinners to access capital markets").

170. Hiro Mizuno, *How Making Smart Financial Decisions Can Have a Positive Impact on Climate Change*, TIME (Sept. 12, 2019), <https://time.com/5669045/climate-change-investment/> [<https://perma.cc/R9RL-KT77>].

171. Tim Wallace, *Protest Votes Made Us Change Tack on Coal Mining, Says Glencore Director Martin Gilbert*, TELEGRAPH (May 16, 2019, 3:05 PM), <https://www.telegraph.co.uk/business/2019/05/16/protest-votes-made-us-change-tack-coal-mining-says-glencore/> [<https://perma.cc/X5DQ-Q86C>].

172. See, e.g., Gabriel T. Rubin, *Show Us Your Climate Risks, Investors Tell Companies*, WALL STREET J. (Feb. 28, 2019, 5:30 AM), <https://www.wsj.com/articles/show-us-your-climate-risks-investors-tell-companies-11551349800> [<https://perma.cc/J8DW-HUA7>] (describing BlackRock, Vanguard, and State Street's demands for climate risk disclosure).

determine if its stock should be bought or sold.¹⁷³ Passive investors leave the accurate pricing of equities to active traders in the market, and have no incentive to expend resources to obtain information about a firm's individual risk exposure.¹⁷⁴ Increased firm-level disclosure may ensure that the firm's stock is more accurately priced, but this accuracy reduces only firm-specific, idiosyncratic, risk—risk that index funds are immune to through their diversification.¹⁷⁵ Scholars have traditionally thought that index funds spending resources on firm-specific information gathering would be “irrational.”¹⁷⁶ This understanding of index fund incentives regarding disclosure is at odds with the lengths some have gone to pressure specific companies to increase their disclosure of climate risk.¹⁷⁷

b. Portfolio Purpose and Retail Opposition

Increasingly, institutional investors seem to be abandoning the pretense of a firm-specific business purpose entirely and admitting the portfolio-level aims of their climate advocacy. UBS recently released a white paper

173. See John H. Langbein & Richard A. Posner, *Market Funds and Trust-Investment Law*, 1976 AM. B. FOUND. RES. J. 1, 1 (defining index investing as “creat[ing] and hold[ing] essentially unchanged a portfolio of securities that is designed to approximate some index of market performance such as the Standard & Poor’s 500”). This is in contrast to active fund managers who analyze specific stocks and make bets on which stocks will bring higher returns. If an active manager expects that a specific company’s stock price might fall, the manager can sell the stock before she accrues major losses. The appeal of index investing is that a passive management strategy requires less time and effort on the part of the fund manager, and index funds therefore charge significantly lower fees than actively managed equity funds. Because it is hard (or with any consistency, impossible) for an active fund manager to beat the overall market by a significant margin, these fee savings result in higher returns for the investor.

174. Gilson & Gordon, *supra* note 10, at 867; Jill E. Fisch, *Confronting the Circularity Problem in Private Securities Litigation*, 2009 WIS. L. REV. 333, 346 (2009) (“Because a diversified portfolio largely eliminates firm-specific rewards as well, it reduces the incentive for investors to engage in costly information gathering. At the extreme, for the indexed investor, whose investments are completely independent of firm-specific information, the cost of research is wholly irrational.”).

175. See Merritt B. Fox, *Civil Liability and Mandatory Disclosure*, 109 COLUM. L. REV. 237, 253 (2009) (“Issuer disclosure may reduce risk—on average bringing price closer, on one side or the other, to actual value—but it reduces only *unsystematic* risk.” (emphasis added)).

176. Fisch, *supra* note 174.

177. BlackRock sent targeted letters to 120 high emitting companies, voted against Exxon board members, and reports that in the 2018 season undertook engagements with 232 companies regarding climate risks. BLACKROCK, BLACKROCK INVESTMENT STEWARDSHIP: 2018 ANNUAL REPORT 11 (Aug. 30, 2018), <https://www.blackrock.com/corporate/literature/publication/blk-annual-stewardship-report-2018.pdf> [https://perma.cc/WUN6-SCTY]; PRI, TRANSPARENCY REPORT, *supra* note 128, at 64; Sorkin, *supra* note 16. State Street voted against management on climate risk disclosure 80% of the time during the 2017 season and “engaged” with 108 companies regarding their climate risk. STATE STREET GLOBAL ADVISORS, STEWARDSHIP 2017 at 34, 37 (2017), <https://www.ssga.com/investment-topics/environmental-social-governance/2018/07/annual-stewardship-report-2017.pdf> [https://perma.cc/5VKH-ATV6].

describing its climate engagements, explaining that because climate change is the greatest systemic risk faced by its assets, the asset manager uses its engagements with fossil fuel companies within its portfolio “as a means of addressing large negative externalities.”¹⁷⁸ Similarly, the managing director of Japan’s Government Pension Investment Fund explained that his fund engages with high emitters, rather than divesting from them, because their goal is to reduce the systemic risk exposure of the entire portfolio of assets.¹⁷⁹

In a *Financial Times* open letter, sixty-eight institutional investors explained that their demand for corporate emissions commitments was motivated by their “fiduciary responsibility” to avoid the projected trillions of dollars of *global* economic damages.¹⁸⁰ In October 2018, a group of institutional investors managing \$2 trillion in assets issued targeted letters to fifty-five corporations highlighting concern that the companies’ public position on carbon regulation was at odds with their behind-the-scenes lobbying efforts and membership in certain trade groups: “Our expectation is that, when companies engage with public policy makers, they will support . . . [policy measures that reduce] climate change risks [in the service of] protecting the long-term value in our portfolios *across all sectors and asset classes*.”¹⁸¹ The Church of England explained that its motivation for joining the letter was due in part to the “[s]ystemic economic risks” resulting from opposition to carbon regulation: “Delay in the implementation of the Paris Agreement increases the physical risks of climate change, posing a systemic risk to economic stability, and introducing uncertainty and volatility into investor portfolios.”¹⁸² The chief investment officer of Robeco, a Dutch

178. Francis Condon & Valeria Piani, *Collaborating for a Low-Carbon World: UBS Asset Management’s Climate Engagement Progress One Year In*, UBS (July 2019), <https://www.ubs.com/global/en/asset-management/insights/sustainable-and-impact-investing/2019/climate-engagement.html> [<https://perma.cc/ZBP5-PNP6>] (click to “[d]ownload full white paper”).

179. Mizuno, *supra* note 170.

180. Aberdeen Standard Investments et al., *Power Companies*, *supra* note 107 (emphasis added).

181. SWEDISH NAT’L PENSION FUND AP7 & CHURCH OF ENGLAND PENSIONS BD., EUROPEAN INVESTOR EXPECTATIONS ON CORPORATE LOBBYING ON CLIMATE CHANGE (Oct. 2018), https://www.churchofengland.org/sites/default/files/201810/Investor.Expectations.Climate.Lobbying.Oct._2018.pdf [<https://perma.cc/D259-JB63>] (emphasis added).

182. *Pension Funds Challenge Major European Emitters on Climate Lobbying*, CHURCH OF ENG. (Oct. 28, 2018), <https://www.churchofengland.org/more/media-centre/news/pension-funds-challenge-major-european-emitters-climate-lobbying> [<https://perma.cc/ZEM4-Y7GP>]; see also Jeff McMahon, *Corporations Are Starting to Perform on Climate Issues, Investors Say*, FORBES (June 28, 2018, 12:01 AM), <https://www.forbes.com/sites/jeffmcmahon/2018/06/28/corporations-are-starting-to-perform-on-climate-issues-activist-investors-say/> [<https://perma.cc/7KWS-FC8Y>] (quoting

institutional investor managing nearly \$200 billion in assets, justified his companies' support of Shell's emissions commitments by explaining, "When it comes to meeting the demands of the Paris Agreement on climate change, we believe it is necessary to strengthen partnerships between investors and their investee companies to accelerate progress towards reaching such an ambitious common goal."¹⁸³ A recent U.N. Principles for Responsible Investment report listed risk to "[t]he universal owner's portfolio" as a motivating factor for investors to pressure companies into stopping climate related lobbying activities.¹⁸⁴

Internalization of harmful climate externalities benefit the broader portfolio at the expense of the externality generating firms. If these climate outcomes are in fact in the best interest of the company, one would expect concentrated shareholders, with an overweight ownership interest, to similarly lend their support. It appears, however, that retail shareholders holding shares directly, rather than through an investment intermediary, in fact give less support to climate-related resolutions than their institutional co-owners. An analysis of the seven most popular climate change proposals of the 2017 season showed that institutional investors voted 66% of their shares in favor of the resolutions, while retail investors only voted 13% of shares in support.¹⁸⁵ This is partially due to the fact that retail shareholders are generally more likely to be unengaged and abstain from voting entirely—in the 2017 season an average of only 29% of all retail shares cast votes for proposals of all types.¹⁸⁶ More data is needed, but this nevertheless suggests that concentrated shareholders are proportionally less likely to support climate-related goals than their institutional co-owners.

Catherine Howarth of ShareAction UK characterizing shareholder sentiments that climate risk "is a risk for our entire portfolio, not just for you as an individual stock, and we need to see action now").

183. Press Release, Shell, Leading Investors Back Shell's Climate Targets (Dec. 3, 2018), <https://www.shell.com/media/news-and-media-releases/2018/leading-investors-back-shells-climate-targets.html> [<https://perma.cc/XE8A-QVCK>].

184. PRINCIPLES FOR RESPONSIBLE INV. (PRI), CONVERGING ON CLIMATE LOBBYING: ALIGNING CORPORATE PRACTICE WITH INVESTOR EXPECTATIONS 10 (2018), <https://www.unpri.org/climate-change/converging-on-climate-lobbying-aligning-corporate-practice-with-investor-expectations/3174.article> [<https://perma.cc/QC86-K6NX>].

185. PROXYPULSE, 2017 PROXY SEASON REVIEW 3, 4 (Sept. 2017), https://www.broadridge.com/_assets/pdf/broadridge-2017-proxy-season-review.pdf [<https://perma.cc/CUL9-Q4W3>]. For environmental proposals in general, institutional support was 32%, while only 10% of retail shareholders voted in favor. *Id.*

186. *Id.* at 2.

3. *Impact on Emissions Reductions*

Under this theory of externality-internalization, economists are beginning to explore whether, empirically, diversified investor ownership leads to emissions reductions in portfolio companies.¹⁸⁷ Theoretically, each of them can be expected to lower individual company emissions.

Emissions Goals: Of all the outcomes sought by shareholders, explicit emissions reductions goals have the clearest causal relationship to actual emissions reductions. Certainly, these goals must be genuine, not empty statements made for public relations. Investors are increasingly pushing not just for goals, but the linking of emissions reduction achievements to executive compensation.¹⁸⁸ This is a significant change from status quo compensation incentives, many of which link executive pay directly to a company's "reserve replacement" ratio, or the amount of fossil reserves added relative to the amount extracted that year.¹⁸⁹ This adjustment of managerial incentives indicates that institutional investors are putting their money where their mouths are.

Corporate Lobbying: Investors are asking companies not only to disclose their spending on lobbying efforts to oppose carbon regulation, but also to refrain from such spending, or even proactively support the passage of emissions limiting laws. Given the massive amounts of money corporations have devoted to this effort in the past (and the success reaped by these efforts),¹⁹⁰ reversing course can only serve to help the

187. See José Azar et al., *The Big Three and Corporate Carbon Emissions Around the World* (working paper, on file with author) (finding a "strong and robust negative association between Big Three [BlackRock, Vanguard, StateStreet] ownership and subsequent carbon emissions"); Sophie Shive & Margaret Forster, *Corporate Governance and Pollution Externalities of Public and Private Firms* (Feb. 21, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3339517 [<https://perma.cc/AL6V-7L5R>] (finding that within public firms, there is a negative relationship between mutual fund ownership and emissions, concluding that "either mutual funds search for companies that emit less, or that mutual fund managers pressure their portfolio companies").

188. See, e.g., Shareholder Proposal, *Pinnacle West Capital: Link GHG Emissions to Executive Compensation*, AS YOU SOW (Dec. 21, 2018), <https://www.asyousow.org/resolutions/2018/12/21/link-ghg-emissions-to-executive-compensation> [<https://perma.cc/79H7-AUDH>].

189. INST. FOR POL'Y STUDIES, MONEY TO BURN: HOW CEO PAY IS ACCELERATING CLIMATE CHANGE 13 (Sept. 2, 2015), <https://ips-dc.org/wp-content/uploads/2015/09/EE2015-Money-To-Burn-Upd.pdf> [<https://perma.cc/GQK3-MMQS>]; see also CONOCOPHILLIPS, 2017 PROXY STATEMENT 86 (2017), http://static.conocophillips.com/files/resources/conocophillips_2017proxystatment.pdf [<https://perma.cc/69Q7-7YV8>] (citing the removal of the Reserves Replacement Ratio metric from the compensation incentive program as part of the company's long term strategy for adapting to climate change).

190. INFLUENCEMAP, HOW MUCH BIG OIL SPENDS ON OBSTRUCTIVE CLIMATE LOBBYING 2 (Apr. 2016), http://senate.ucsd.edu/media/206150/lobby_spend_report_april.pdf [<https://perma.cc/M28U-KESF>] (estimating that fossil fuel companies spend \$115 million annually to lobby against climate regulation; this figure includes direct spending (\$22 million by Shell alone) as well as contributions to trade associations like the American Petroleum Institute).

implementation of regulatory measures. This will in turn lead to actual emissions reductions.

Disclosure of Climate Risk: Two-degree scenario analysis enables comparison and tabulation of projected emissions across firms, enabling assessment of how much these total emissions diverge from the “carbon budget” necessary to meet certain warming pathways. This can lead to emissions reductions in two ways. First, scenario analysis exposes corporate projections of future emissions, potentially supporting arguments for the necessity of government regulation, and enabling firm-specific targeting by environmental activists. Second, in the event that the market has in fact underpriced fossil fuel companies’ exposure to climate risk, increased disclosure can facilitate accurate pricing. This mispricing could occur either as a result of market-wide underassessment of climate risk—as argued by those who claim the existence of a “carbon bubble”¹⁹¹—or from the deliberate fraud on the part of fossil fuel company executives trying to mask their risk exposure.¹⁹² In either case, disclosure may lead to a decline in the value of fossil fuel industry stock, which in turn will limit present capital expenditures on the exploration and development of reserves.

Incomplete disclosure of projected emissions allows companies to evade exposure to both regulatory action and reputational damage. One recent report estimates that between 40% and 50% of ExxonMobil’s upstream capital expenditure through 2025 will be spent on developing fossil resources that exceed the carbon budget allowed under a scenario that limits warming to 2°C.¹⁹³ Forcing companies (who have the best access to their own production plans) to assess their carbon budget

191. “Carbon bubble” refers to the hypothesis that the valuations of fossil-fuel intensive companies (particularly oil and gas companies) do not reflect either the inevitable regulatory action to reduce carbon emissions or declining demand due to competition from renewables. Fiona Harvey, *What is The Carbon Bubble and What Will Happen if it Bursts?*, GUARDIAN (June 4, 2018, 11:00 AM), <https://www.theguardian.com/environment/2018/jun/04/what-is-the-carbon-bubble-and-what-will-happen-if-it-bursts> [<https://perma.cc/LZZ7-L2NU>]. If these companies are overvalued, and then sharply adjust in unison to reflect accurate prices, the bubble could burst, with its effects rippling through the entire market. See, e.g., *id.*; Jean-Francois Mercure et al., *Macroeconomic Impact of Stranded Fossil-Fuel Assets*, 8 NATURE CLIMATE CHANGE 588, 589 (2018).

192. See, e.g., John Schwartz, *Fossil Fuels on Trial: New York’s Lawsuit Against Exxon Begins*, N.Y. TIMES (Oct. 22, 2019), <https://www.nytimes.com/2019/10/22/climate/new-york-lawsuit-exxon.html> [<https://perma.cc/V4AD-AJWK>] (reporting on New York Attorney General’s claim that Exxon failed to disclose internal assessments of carbon risk to its investors).

193. CARBON TRACKER INITIATIVE, 2 DEGREES OF SEPARATION: TRANSITION RISK FOR OIL AND GAS IN A LOW CARBON WORLD 27 (2017) (predicting that Exxon is the most exposed of the world’s oil and gas firms to wasted capital expenditure if the atmospheric CO₂ concentration is kept below 450 ppm).

exceedances exposes the potential social undesirability of their business models. Transparent acknowledgement of the plans most at odds with combatting global warming enables regulators to better target their regulatory interventions. The Governor of the Bank of England has said that “[a]ny efficient market reaction to climate change risks as well as the technologies and policies to address them must be founded on transparency of information.”¹⁹⁴

There is a well-developed literature on “regulation by revelation,” showing that socially undesirable corporate practices can be reduced through disclosure alone.¹⁹⁵ Corporate behavior can be influenced by consumer reaction and activist targeting, but knowledge of those practices is a prerequisite. The Toxics Release Inventory (TRI) Program has helped reduce toxic chemical releases by 58% through mandatory disclosure requirements.¹⁹⁶ This regulatory effect operates through a number of channels, including continually re-establishing a baseline against which to compare industry laggards.¹⁹⁷ A recent paper estimates that mandatory disclosure of emissions in the UK had the effect of reducing average company-level emissions by 15% to 18%.¹⁹⁸

Disclosure can also lead to decreased future emissions through limiting the amount of capital that is allocated to the exploration and development of fossil fuel reserves. Because share prices reflect the market’s assessment of corporate profitability, they influence managerial decisions to undertake contemplated investment projects. A manager will continue to ignore climate risk when making investment decisions if the market does not respond negatively to this behavior. As Merritt Fox writes, “an inaccurately high share price may lead to the implementation of socially undesirable projects.”¹⁹⁹ Managers of oil and gas companies make internal decisions to pursue certain extractive projects based on an assessment of

194. Mark Carney, Governor, Bank of Eng. & Chairman, Fin. Stability Bd., *Breaking the Tragedy of the Horizon: Climate Change and Financial Stability*, Speech at Lloyd’s of London (Sept. 29, 2015), <https://www.bis.org/review/r151009a.pdf> [<https://perma.cc/8TDV-XR87>].

195. Andrew Schatz, Note, *Regulating Greenhouse Gases by Mandatory Information Disclosure*, 26 VA. ENVTL. L.J. 335, 336 (2008) (citing JAMES T. HAMILTON, *REGULATION THROUGH REVELATION* 5 (2005); David W. Case, *The Law and Economics of Environmental Information as Regulation*, 31 ENVTL. L. REP. 10773 (2001)).

196. *Id.* (citing U.S. ENVTL. PROT. AGENCY, EPA 260-R-07-001, 2005 TOXICS RELEASE INVENTORY (TRI) PUBLIC DATA RELEASE REPORT 4 (2005) (data as of March 2005)).

197. *Id.* at 355.

198. Benedikt Downar et al., *Fighting Climate Change with Disclosure? The Real Effects of Mandatory Greenhouse Gas Emission Disclosure*, DIW BERLIN DISCUSSION PAPERS (2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3352390 (last visited Jan. 28, 2020).

199. Fox, *supra* note 175, at 262.

the investment's net present value (NPV).²⁰⁰ An NPV that fails to account for transitions risks will be over-inflated and may result in the decision to invest in certain projects that would not have been greenlit given proper risk accounting.

However, because so much of an oil company's valuation is based on its reserves, managers may have an incentive to mask their company's exposure to future climate regulation in service of maintaining an artificially high share price.²⁰¹ They may deliberately ignore climate risk in order to pursue projects that are not NPV-justified. Nevertheless, once these projects have been brought online, the expense of development will be a sunk cost.²⁰² Oil and gas companies may decide to continue to process and sell fossil fuels at slightly above cost in order to recoup some, but not all, of the money spent, rather than abandoning the project entirely.²⁰³ For this reason, the mispricing of carbon risk in the present inefficiently subsidizes the future production of fossil fuels.²⁰⁴

An overvalued stock may be the result of a market-wide mis-assessment of risk, i.e. a carbon bubble,²⁰⁵ or it could result from intentional misstatements on the part of management seeking to withhold share-price decreasing information from the market. Disclosure of two-

200. Marcel Kahan, *Securities Laws and the Social Costs of Inaccurate Stock Prices*, 41 DUKE L.J. 977, 1040 (Apr. 1992) (“Companies invest in a project if the discounted value of the cash inflows exceeds the discounted value of the required cash outlays, i.e., when the project has a positive net present value.”).

201. Marcel Kahan, *Securities Laws and the Social Costs of Inaccurate Stock Prices*, 41 DUKE L.J. 977, 1030–31 (1992) (describing managers' attempts to “adapt” to a market mis-valuation by pursuing strategies that result in overvaluation even though “[p]ursuing business plans favored by the market even if they are not profitable . . . is obviously undesirable”); Roger L. Martin & Alison Kemper, *The Overvaluation Trap*, HARV. BUS. REV. 102, 107–08 (Dec. 2015) (arguing that oil executives overinvest in adding reserves, even though they know future climate regulation will render them unprofitable, to prop up an overvalued stock price) (referencing Michael C. Jensen, *Agency Costs of Overvalued Equity*, 34 FIN. MGMT. 5 (2005)).

202. CARBON TRACKER INITIATIVE, UNDER THE MICROSCOPE: ARE COMPANIES' CLIMATE SCENARIO ANALYSES MEETING INVESTORS' REQUIREMENTS? 15 (May 2018) (“[A]lready producing wells have some built-in resilience to declining demand. This is due principally to sunk costs—those assets will continue to produce if revenues exceed operational costs — even if those projects ultimately fail to recover capital.”).

203. In Chevron's climate stress test report, the company acknowledges this fact by noting that certain planned projects would be able to generate cash but not earnings in a future world with aggressive carbon regulation. CHEVRON, CLIMATE CHANGE RESILIENCE: A FRAMEWORK FOR DECISION MAKING 33 (2018), <https://www.chevron.com/-/media/shared-media/documents/climate-change-resilience.pdf> [<https://perma.cc/Z5FW-T7BK>].

204. See Andrea Liesen, *Climate Change and Financial Market Efficiency*, 54 BUS. & SOC'Y 511, 531 (2015) (explaining that the incorrect valuation of financial assets affects the allocation of investment capital in the real economy).

205. See *supra* note 192.

degree scenario analyses can correct both of these sources of mispricing. It forces managers, who have the best information about their company's exposure to climate risk, to disclose this information in a format accessible to the market.²⁰⁶ Making socially undesirable behavior readily accessible to investors can have a regulating effect on the behavior of the company doing the reporting. A mine safety disclosure requirement implemented under Dodd Frank resulted in a significant decline in safety citations and worker injuries at publicly owned mining companies as compared to their non-reporting private peers.²⁰⁷ This effect was observed even though safety records had always been publicly available online; the information simply had not been handed to investors directly through disclosure filings.²⁰⁸

Finally, requiring public disclosure in this way opens up managers to liability for fraudulent misstatements and decreases the incentives for managers to conceal risk exposure. In October 2018, the New York Attorney General filed a lawsuit against ExxonMobil claiming that the company had engaged in “a longstanding fraudulent scheme” to conceal its climate risk exposure from investors.²⁰⁹ Since 2007, Exxon has assured its investors that the company was accounting for potential future carbon regulations by including a “proxy cost” of greenhouse gases in its capital allocation decisions.²¹⁰ The suit alleges, however, that investigations revealed that Exxon was in fact using a much lower proxy cost than it reported to investors.²¹¹ In some cases, it allegedly disregarded the future cost of greenhouse gases entirely.²¹² Disclosure in the form of two-degree scenario analysis requires the company to show how and whether it would be able to respond to global climate regulation, and allows investors to assess the likelihood of such comprehensive regulation on their own.

206. Fox, *supra* note 175, at 253 (“Disclosure does, however, enhance efficiency by improving corporate decisions relating to which proposed new investment projects in the economy are selected for implementation and how already existing projects are operated.”).

207. Hans B. Christensen et al., *The Real Effects of Mandated Information on Social Responsibility in Financial Reports: Evidence from Mine-Safety Records*, 64 J. ACCT. & ECON. 284 (2017).

208. *Id.* In another example, high-polluting companies experienced large losses in stock valuation following the initial publication of TRI data, and firms “whose environmental performance worsened over time and relative to other firms” continued to see negative stock reactions when their TRI data was released. Madhu Khanna et al., *Toxics Release Information: A Policy Tool for Environmental Protection*, 36 J. ENVTL. ECON. & MGMT. 243, 245 (1998).

209. Complaint at 1, *New York v. Exxon*, No. 452044 (Sup. Ct. N.Y. Cnty. Oct. 24, 2018).

210. *Id.*

211. *Id.* at 2.

212. *Id.*

D. Internalization of Climate Externalities: Cost-Benefit Analysis of Climate Intervention

One objection to the arguments advanced thus far might be skepticism as to how much impact firm-by-firm targeting of emissions reductions can really have on a single investor's portfolio. Whether or not it is worthwhile for an institutional investor to expend resources on climate activism depends on many factors, including: the magnitude of climate damages to future portfolio value, the extent to which firm-specific emissions reductions contribute to net global reductions, how much portfolio value is lost by forgoing fossil fuel profits, and by how much climate damages are diminished by a marginal reduction in greenhouse gas emissions.

Predicting economy-wide costs of climate change is extremely challenging due to uncertainty about what policies governments will implement to reduce emissions, how energy markets and technologies will develop, just how much the earth will warm, and how that warming will affect the earth's natural systems. In the absence of aggressive government action to regulate greenhouse gases, business as usual (BAU) emissions pathways are projected to lead to warming 4.1°C–4.8°C above industrial levels by the end of the century.²¹³ Even if governments fully implement their commitments under the Paris Agreement, and continue these policies throughout the century with comparable action, the world is nevertheless likely to warm 2.9°C–3.4°C by 2100.²¹⁴ As it stands, it appears unlikely that countries will fully meet their Paris commitments.

Top-down economy-wide estimations of the impact of this warming have been attempted, though the long-term impacts are difficult to predict as they touch every aspect of the economy and each assumption comes with a great deal of uncertainty. A 2015 study in *Nature* analyzed only the predicted impacts of temperature change (it did not include, for instance, sea-level rise and increased incidents of storms) and found that average global incomes would be reduced 23% by 2100.²¹⁵ A more recent study

213. CLIMATE ACTION TRACKER, TEMPERATURES: ADDRESSING GLOBAL WARMING (Dec. 2019), <https://climateactiontracker.org/global/temperatures/> [<https://perma.cc/UD5F-FZRN>]; Patrick T. Brown & Ken Caldeira, *Greater Future Global Warming Inferred From Earth's Recent Energy Budget*, 552 NATURE 45, 47 (2017) (calculating a 93% chance of reaching 4°C under a "business as usual" emissions pathway).

214. UNITED NATIONS ENV'T PROGRAMME, THE EMISSIONS GAP REPORT 2017 18 (2017); Adrian Raftery et al., *Less than 2 °C Warming by 2100 Unlikely*, 7 NATURE CLIMATE CHANGE 637 (2017) (projecting that under current emissions pathways, including mitigation regulation, there is a 90% chance that by 2100 the earth will have warmed between 2 and 4.9 °C, with a median of 3.2°C).

215. Marshall Burke, Solomon M. Hsiang & Edward Miguel, *Global Non-Linear Effect of Temperature on Economic Production*, 527 NATURE 235, 235 (2015).

in *Science* estimated the economic cost of climate change in the United States, incorporating predicted changes in agriculture, crime, coastal storms, energy, human mortality, and labor (but neglecting sea level rise and many other costs).²¹⁶ The authors found that for every one degree rise in average temperature roughly 1.2% of gross domestic product is lost per.²¹⁷ With a 4°C rise, that's a 4.8% decline. For comparison, in the recession in 2008 and 2009, U.S. GDP declined 0.1% and 2.5%, respectively.²¹⁸

A meta-analysis of forty-nine different climate damage studies summarized that “non-catastrophic damages are likely between 7 and 8% of GDP for a 3°C increase . . . and are between 9 and 10% when factoring in catastrophic risks.”²¹⁹ These damage estimates reflect *future* GDP losses as contrasted to growth projections without climate change. One recent paper estimates that 4°C of warming will result in losses of \$23 trillion—nearly one-third of *current* global GDP—and around 7% of projected GDP in the year 2100 without warming.²²⁰ The lead author noted that these estimates did not include the impact of extreme weather events, and that initial modeling suggested their incorporation would more than double the damage estimate.²²¹

A full review of the expert consensus on predicted economic impacts of climate change is beyond the scope of this Article. What matters, however, is how institutional investors themselves perceive the risks that threaten their long-term portfolio health. The asset management company Schroders maintains a “Climate Progress Dashboard,” which it updates

216. Solomon Hsiang et al., *Estimating Economic Damage From Climate Change in the United States*, 356 *SCIENCE* 1362, 1365 (2017) (explaining that uncertainty in prediction economic impacts increases as potential average temperatures increase, therefore the “very likely” range of losses at 4°C of warming is 1.5 to 5.6% of GDP while at 8°C warming it is 6.4 to 15.7% of GDP annually).

217. *Id.* at 1362.

218. *Table 1.1.2. Contributions to Percent Change in Real Gross Domestic Product, National Data, National Income and Product Accounts*, BUREAU OF ECON. ANALYSIS (Feb. 27, 2020), <https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey> (last visited Mar. 17, 2020).

219. Peter H. Howard & Thomas Sterner, *Few and Not So Far Between: A Meta-Analysis of Climate Damage Estimates*, 68 *ENVTL. & RESOURCE ECON.* 197, 222 (2017).

220. Tom Kompas et al., *The Effects of Climate Change on GDP by Country and the Global Economic Gains From Complying With the Paris Climate Accord*, 6 *EARTH'S FUTURE* 1153, 1160 (2018); see also Matthew E. Kahn et al., *Long-Term Macroeconomic Effects of Climate Change: A Cross-Country Analysis* 5 (Nat'l Bureau of Econ. Research, Working Paper No. 26167, 2019) (finding that “business as usual” warming will result in a 10.52% loss in U.S. GDP by 2100).

221. Tom Kompas, *U.S. \$23 Trillion Will Be Lost If Temperatures Rise Four Degrees by 2100*, *PHYS.ORG* (Aug. 15, 2018), <https://phys.org/news/2018-08-trillion-lost-temperatures-degrees.html> [<https://perma.cc/LRR2-UYRC>].

quarterly to reflect global progress on fighting climate change.²²² The October 2018 assessment predicts that we are headed to a world of 4°C of warming and that “[g]lobal economic losses could build to \$23 trillion over the next 80 years; equal to permanent damage three or four times the scale of the 2008 Global Financial Crisis, and continuing to escalate.”²²³ For an investor broadly diversified across the economy, climate damages’ negative impact on the economy’s future GDP will result in proportional impacts to institutional investor’s portfolio cash flows.²²⁴

Here, a hypothetical proposed intervention is considered in order to demonstrate the relationship between firm-level emissions decisions that can be influenced by an investor, and the mitigation in expected damages to that investor’s portfolio. Consider the analysis BlackRock makes when weighing whether or not to intervene to take a measure to curtail production at two firms, Chevron and Exxon. Assume this investor intervention forces each company to reduce its emissions by 40%, and this commitment results in that company’s share price falling by 20%.²²⁵

In 2015, Exxon released 577 million metric tons of CO₂-equivalent greenhouse gases into the atmosphere,²²⁶ making it responsible for 1.2% of global emissions.²²⁷ Out of all oil majors, Exxon has the largest share of resource reserves it claims will continue to be profitable despite climate regulation,²²⁸ and its BAU path indicates that the company plans to emit

222. SCHROEDERS, *supra* note 21.

223. *Id.*

224. UNEP FIN. INITIATIVE & PRINCIPLES FOR RESPONSIBLE INV., UNIVERSAL OWNERSHIP: WHY ENVIRONMENTAL EXTERNALITIES MATTER TO INSTITUTIONAL INVESTORS (2011); *see also* Simon Dietz et al., ‘Climate Value at Risk’ of Global Financial Assets, 6 NATURE CLIMATE CHANGE 676, 678 (applying this same proportional relationship between percent damages to global GDP and percent damages to investor portfolio when using DICE modelling outputs).

225. This rough estimate is based on the fact that more than half of oil and gas companies’ valuation is based on anticipated cash flows more than ten years in the future. If 40% of their projected reserves are unable to be sold, half of 40% is 20%. CARBON TRUST, CLIMATE CHANGE – A BUSINESS REVOLUTION? 13 (2008). In 2004, Shell downwardly adjusted its estimated proven reserves by 20%, and one of the company’s two stocks fell 10%. John Carey, *Shell: The Case of the Missing Oil*, BLOOMBERG BUSINESSWEEK (Jan. 25, 2004, 9:00 PM), <https://www.bloomberg.com/news/articles/2004-01-25/shell-the-case-of-the-missing-oil> [<https://perma.cc/A8ES-5DEP>].

226. CDP REPORT, *supra* note 38, at 15.

227. 2015 Global Emissions: 48.9 GtCO₂-eq. J.G.J. OLIVIER ET AL., TRENDS IN GLOBAL CO₂ AND TOTAL GREENHOUSE GAS EMISSIONS: 2017 REPORT 46 tbl.B.1 (2017), https://www.pbl.nl/sites/default/files/downloads/pbl-2017-trends-in-global-co2-and-total-greenhouse-gas-emissions-2017-report_2674.pdf [<https://perma.cc/J5B7-PPPV>].

228. CARBON TRACKER INITIATIVE, 2 DEGREES OF SEPARATION: COMPANY LEVEL TRANSITION RISK JULY 2018 UPDATE (2018), <https://www.carbontracker.org/reports/2-degrees-of-separation-update/> [<https://perma.cc/BB6Y-U8RS>] (predicting that Exxon is the most exposed of major public oil and gas firms to wasted capital expenditure if the atmospheric CO₂ concentration is kept below

a greater relative share of emissions in the future.²²⁹ Together, Chevron and Exxon are responsible for about 2% of annual global emissions.²³⁰

BlackRock owns 6.65%²³¹ of Exxon's total market capitalization of \$260.1 billion, or \$17.3 billion, and 6.89%²³² of Chevron's total market capitalization of \$206 billion, or roughly \$14.2 billion.²³³ If it loses 20% of the value of each of these assets, it will lose \$6.3 billion total.

In order to estimate the mitigated damage impacts to BlackRock's portfolio, this emissions reduction was modeled using William Nordhaus's Dynamic Integrated Climate Economy Model (DICE).²³⁴ This model "is the most widely used" and cited²³⁵ macroeconomic model of the costs of climate change and models results using a wide range of temperature predictions. For present purposes, the BAU pathway was modeled, first as a baseline, and then again, removing 1% of industrial emissions each year through 2100. The difference in the value of damages between these two model runs was compared, aggregated over 100 years, and then discounted using a private sector discount rate of 7%.²³⁶ Through this method, DICE predicts that by intervening to reduce 1% of annual industrial emissions each year, BlackRock could avoid damages to its portfolio with a net present value of \$9.7 billion.²³⁷

450 ppm); CARBON TRACKER INITIATIVE, 2 DEGREES OF SEPARATION AT A GLANCE (July 2018), https://www.carbontracker.org/wp-content/uploads/2018/11/2degrees-separation-infographic_horiz_Update-01.png [<https://perma.cc/F99J-V96M>].

229. Ken Crowley, *Exxon Doubles Down on Oil*, BLOOMBERG BUSINESSWEEK (June 15, 2018, 2:00 AM), <https://www.bloomberg.com/news/articles/2018-06-15/exxon-doubles-down-on-oil> [<https://perma.cc/K7HH-UPYY>] (reporting Exxon's newly announced plan to increase its oil output 25% by 2025).

230. Exxon emits 1.2% annually and Chevron emits 0.8% annually. Exxon emits 577 MtCO₂-eq, Chevron emits 377 MtCO₂-eq, see CDP REPORT, *supra* note 38, out of 48.9 GtCO₂-eq, see OLIVIER ET AL., *supra* note 227.

231. See MORNINGSTAR, *supra* note 38.

232. *Chevron Corp CVX*, MORNINGSTAR (Feb. 3, 2020), <https://www.morningstar.com/stocks/xnys/cvx/ownership> (last visited Feb. 16, 2020).

233. *Chevron Corporation (CVX)*, YAHOO! FINANCE, <https://finance.yahoo.com/quote/CVX?p=CVX&.tsrc=fin-srch> (last visited Feb. 23, 2020).

234. The modeling was done using the 2016 version of DICE, available in GAMS code as well as an Excel version on William Nordhaus's website: *Scientific and Economic Background on DICE model*, WILLIAM D. NORDHAUS (Feb. 3, 2020), <https://sites.google.com/site/williamdnordhaus/dice-ric> [<https://perma.cc/3JFL-K8AT>]. The damage modeling was conducted in GAMS and the aggregation, discounting, and application to specific asset managers was done in Excel. Modeling documentation on file with author.

235. See WEBDICE, <http://webdice.rdecp.org/> [<https://perma.cc/B2DK-WRSY>].

236. DICE itself models growth and costs of abatement using a public sector discount rate of around 5%, declining over time.

237. BlackRock has \$7.43 trillion in assets under management. See Christine Williamson, *BlackRock's AUM Hits New Record of \$7.43 Trillion*, PENSIONS & INVS. (Jan. 15, 2020, 12:19 PM), <https://www.pionline.com/money-management/blackrocks-aum-hits-new-record-743-trillion>

Because this value of mitigated damages outweighs the loss of share value from diminished expected fossil fuel profits by \$3.4 billion, it would be in BlackRock's rational economic interest to pursue this intervention and internalize the intra-portfolio climate externalities.

This cost benefit analysis is of course an extreme oversimplification of the trade-offs an investor must analyze in making a decision to support emissions reduction. It ignores, for example, leakage effects. A forced decline in Exxon's production will push up the price of oil, rendering a competitor's more expensive production processes viable in order to meet the demand. However, higher oil prices also discourage overall consumption, and render renewable energy sources more competitive.²³⁸ Further, many of the present governmental actions to combat emissions focus on demand reduction (like making power plants and vehicles more efficient), which decreases the price of fossil fuels, similarly generating leakage effects in the other direction.²³⁹ Effective climate policy must address both supply and demand,²⁴⁰ and supply-side regulation is presently lacking. In a world where massive investors limit the production of *all* publicly traded firms, this leakage effect would be especially muted. Of the total greenhouse gas emissions generated by the world's 224 fossil

[<https://perma.cc/46WW-YZ8G>]. For a 1% decrease in all future industrial emissions, DICE predicts the net present value of the reduction in global climate damages over a 100-year time period to be \$385 billion (or \$1 trillion over 200 years). If we assume the value of damage reduction to BlackRock's portfolio is in proportion to BlackRock's share of the global economy, the value of damage reduction to BlackRock is \$38 billion. Again, this number dwarfs the \$6.3 billion in losses from Exxon and Chevron stock decline. The 2016 DICE model employs a discount rate that reflects both the capital discount rate and the observed consumption discount rate, and declines from a rate of about 5% to about 2%. An imperfect adjustment of these rates to the commonly employed capital discount rate of 7% (the rate more likely to be used in asset valuation), results in damage reductions to BlackRock's portfolio valued at \$9.7 billion.

Unlike a related paper that assessed the financial risks of climate change, Dietz et al., *supra* note 224, this approach makes no amendments to the underlying damage function itself. Under Dietz's model, the BAU pathway reaches only 2.5°C of warming by 2100, which is drastically out of step with current consensus projections of BAU warming, and suggests that their approach in fact greatly underestimates the portfolio risk of climate change.

238. The U.S. Energy Information Administration found that for the U.S. market, a 1% increase in the price of petroleum leads to a 1.26% decrease in demand. U.S. ENERGY INFO. ADMIN., FUEL COMPETITION IN POWER GENERATION AND ELASTICITIES OF SUBSTITUTION 12 (June 2012).

239. OIL CHANGE INT'L, THE SKY'S LIMIT: NORWAY 15 (Aug. 2017), <http://priceofoil.org/content/uploads/2017/08/The-Skys-Limit-Norway-1.pdf> [<https://perma.cc/HHZ5-4GNK>] ("The key question is on which side climate action leaks more . . . if demand is more elastic than supply, leakage will be greater for demand policies, and vice-versa."); see also Michael Lazarus, Peter Erickson & Kevin Tempest, *Supply-Side Climate Policy: The Road Less Taken* 13–15 (Stockholm Env't Inst., Working Paper No. 2015-13, 2015).

240. The most efficient way for a government to do this would be to affect the price directly through a carbon tax (or trading scheme).

fuel companies, (30.6 GtCO₂e), 30% are public investor owned.²⁴¹ Further, institutional investors target not just suppliers but also large consumers of fossil fuels.²⁴² By tackling both supply and demand at once they can reduce the overall quantity of carbon sold while depressing the price fluctuations that create leakage effects. Climate Action 100+'s target list of 100 companies responsible for two-thirds of industrial emissions includes large carbon consumers like auto manufacturers and mining companies. A full understanding of the supply and demand effects of firm-specific targeting requires economic modeling which is beyond the scope of this Article. This simplified cost-benefit analysis is meant primarily to demonstrate the scale of the impact investors can have economy-wide.

II. ABILITY AND INCENTIVES OF COMMON OWNERS

The consideration of the externality-internalizing incentives of institutional investors grows out of the growing body of scholarship on the distortionary effects of common ownership. The actions documented *supra* provide further evidence of the power of institutional investors to influence corporate behavior down to the product level.²⁴³ While investors deny their ability to influence inter-firm competition, they are less hesitant to advertise their power to pressure firms into reducing emissions. One

241. CDP REPORT, *supra* note 38, at 10. This percentage would increase significantly if the world's largest emitter of GHGs, Saudi Aramco, follows through on its long-awaited IPO. Saudi Aramco is responsible for 4.6% of annual global emissions. *Id.* at 15.

242. Both Daimler and Volkswagen made carbon-neutral commitments in 2019 in response to shareholder pressure. CLIMATE ACTION 100+, *supra* note 111, at 38. Hermes Investment Management made public requests including at the companies' AGMs, that the companies align their business plans with the Paris Agreement. HERMES EOS, PUBLIC ENGAGEMENT REPORT 23 (2019), <https://isif.ie/uploads/publications/public-engagement-report-q2-2019.pdf> [<https://perma.cc/YZ4K-WE2Q>]; Hans-Christoph Hirt, *Hermes EOS to Raise Questions with German Automotive Manufacturers on Climate Change Related Risks*, FEDERATED HERMES (May 14, 2019), <https://www.hermes-investment.com/uki/press-centre/eos/hermes-eos-raise-questions-german-automotive-manufacturers-climate-change-related-risks/> [<https://perma.cc/YSA5-3MQC>]. In 2018, several proposals asked U.S. car companies—including Ford and GM—to ignore the Trump administration's rollback of car emissions standards. See, e.g., *Report on Fleet GHG Emissions and Regulation (F, 2018 Resolution)*, CERES (2018), https://engagements.ceres.org/ceres_engagementdetailpage?recID=a011H00000C4DhQQAV [<https://perma.cc/SQK9-R2KY>]. One year later, four companies, including Ford, announced in an agreement with the state of California that they intended to voluntarily comply with emissions standards, despite the federal regulatory rollback. See Timothy Puko & Ben Foldy, *Justice Department Launches Antitrust Probe into Four Auto Makers*, WALL STREET J. (Sept. 6, 2019, 5:55 PM), <https://www.wsj.com/articles/justice-department-launches-antitrust-probe-into-four-auto-makers-11567778958> (last visited Jan. 28, 2020).

243. Cf. Lucian Bebchuk & Scott Hirst, *The Misguided Attack on Common Ownership, Presentation to the Federal Trade Commission on Competition and Consumer Protection in the 21st Century* 5 (Harvard Public Law Working Paper No. 19-10, 2018), <https://ssrn.com/abstract=3298983> (last visited Mar. 17, 2020) (arguing that "active intervention in business strategy decisions [by institutional investors] is implausible and inconsistent with the evidence").

investor consortium threatened companies in the pages of the *Financial Times*: “If necessary, we will deploy all the tools available to us as shareholders to require” power companies to decarbonize in line with the goals of the Paris Agreement.²⁴⁴ Of course, for those companies whose sole profit comes from the sale of fossil fuels, emissions levels are inextricably linked to product sales, and significant emissions reductions can only be achieved through reduced sales of their product. In the broader debate over common ownership, skeptics have doubted the power of institutional investors to alter the profit-motivated behavior of corporate management. Corporate executives are not legally bound to do what shareholders ask of them, so why would they direct their firm away from a profit-maximizing objective, particularly when they have their own incentives to want to increase share value? In Section A of this Part, each of the “shareholder tools” that enable investors to pressure managers into diverting from a profit maximizing objective is examined.

Managers and directors have a fiduciary duty to undertake actions in the best interest of their company, and common ownership skeptics have additionally suggested this legal requirement inhibits their deviation from profit maximizing objectives.²⁴⁵ Further, asset managers themselves may be in violation of their own fiduciary duties to underlying beneficiaries—an objection as yet unraised in the common ownership literature. Section B considers these fiduciary duty arguments and explains how the law as applied in practice may not hinder investors’ ability to promote portfolio-maximizing behavior.

In addition to providing evidence of their *ability* to intervene, the internalization of portfolio externalities provides institutional investors with an *incentive* to intervene. The corporate governance literature has traditionally described institutional investors as poor monitors of corporate behavior, rendered powerless by their small relative ownership stakes and limited resources for oversight in the face of collective action problems. This model, however, has neglected to consider that engagements with individual firms can reap benefits at the *portfolio* level, as in the case of externalities. Further, this traditional account of institutional investor monitoring additionally omits that investors can coordinate amongst one another, sharing the costs of engagements among all owners receiving portfolio benefits. Section C amends this model of institutional investor “rational reticence.”²⁴⁶

244. Aberdeen et al., *Power Companies*, *supra* note 107.

245. Thomas A. Lambert & Michael E. Sykuta, *Calm Down About Common Ownership*, 41 REGULATION 28, 31 (2018); O’Brien & Waehrer, *supra* note 28, at 765–66.

246. Gilson & Gordon, *supra* note 10, at 867.

A. *Mechanisms for Influencing Managers*

The literature on common ownership's anticompetitive effects has forced institutional investors to adopt a narrow and internally incoherent line of argument. Investor representatives proudly highlight their power to direct companies to adopt socially desirable objectives, but simultaneously insist that there is no plausible mechanism for their influence on product pricing.²⁴⁷ For example, at a recent Federal Trade Commission (FTC) hearing on common ownership's anti-competitive effects, BlackRock co-founder Barbara Novick discussed corporate engagements related to women's representation on boards, the opioid epidemic, and climate change, but emphasized that discussions were "never about product pricing."²⁴⁸ A representative from the AFL-CIO similarly insisted its engagements were limited to "acceptable topics" like environmental issues, never "about product pricing."²⁴⁹ The argument presented here demonstrates that these "social" objectives of investor activism can in fact affect product supply, and therefore pricing.

Many skeptics doubt the power of institutional investors to alter the profit-motivated behavior of corporate management.²⁵⁰ They caution that an antitrust response would be premature given the lack of proof establishing the causal mechanism that ties common ownership to decreased competition.²⁵¹ However, Einer Elhauge and others have identified several pathways by which investors could influence managers to undertake portfolio maximizing behavior, including through board

247. See, e.g., Comments from Kenneth A. Bertsch, *supra* note 25, at 4 (arguing there is "no convincing evidence yet on a mechanism by which 'common ownership' promotes anti-competitive behavior"); BLACKROCK, INDEX INVESTING AND COMMON OWNERSHIP THEORIES (Mar. 2017), <https://www.blackrock.com/corporate/en-tw/literature/whitepaper/viewpoint-index-investing-and-common-ownership-theories-eng-march.pdf> [<https://perma.cc/6DKW-E465>] (denying that any "plausible causal link between common ownership and higher prices for consumers" had been provided).

248. Transcript of Competition and Consumer Protection in the 21st Century at 115, U.S. Fed. Trade Comm'n (Dec. 6, 2018) [hereinafter Transcript, Competition and Consumer Protection] https://www.ftc.gov/system/files/documents/public_events/1422929/ftc_hearings_session_8_transcript_12-6-18_0.pdf [<https://perma.cc/EG6M-D8XN>].

249. *Id.* at 91.

250. Noah Joshua Phillips, Commissioner, Fed. Trade Comm'n, Address at the Global Antitrust Economics Conference: Taking Stock: Assessing Common Ownership (June 1, 2018); Edward B. Rock & Daniel L. Rubinfeld, *Antitrust for Institutional Investors*, 82 ANTITRUST L.J. 221, 239 (2018).

251. Note by the United States to OECD, Hearing on Common Ownership by Institutional Investors and Its Impact on Competition, 7–9 (Dec. 6, 2017); Douglas H. Ginsburg & Keith Klovers, *Common Sense About Common Ownership*, CONCURRENCES REV. N° 2-2018 (May 2018) (arguing that common ownership claims "simply assume a causal relationship" and that "the mechanism of harm is unknown"); Phillips, *supra* note 250, at 5–6.

elections, direct communication, and compensation decisions.²⁵² In recent years, each of these three pathways were utilized by institutional investors in bringing about their desired climate change related objectives. Additionally, shareholder proposals and public statements, which have thus far remained undiscussed in the common ownership literature, are two more pathways by which investors can exert influence at the product level.

Board Elections: Some commentators have expressed doubt that director elections are a feasible pathway for shareholders to influence corporate behavior.²⁵³ But this goes against what institutional investors themselves have said about director elections. BlackRock's Larry Fink has said that the ability to vote against management serves as an "implicit sanction" in the event that a company is not responsive to shareholder demands, and that this power has led to "serious" corporate changes.²⁵⁴ Indeed, after BlackRock voted against two Exxon board members because the board had maintained a policy that precluded them from discussing climate change risks, the policy was changed, despite the board members receiving enough overall shareholder votes to retain their positions.²⁵⁵ In advance of the 2019 proxy season, one asset manager publicly advocated, through an op-ed in the *Financial Times*, that peer investors "should fire directors who fail to act on climate change."²⁵⁶ Legal and General, with more than \$1 trillion in assets under management, has publicly committed to vote against the board chairs of a list of companies it has identified as climate laggards.²⁵⁷

At a recent FTC hearing on common ownership, a BlackRock representative emphasized that the investor's engagement focus is on

252. Elhauge, *supra* note 56, at 33–42.

253. Rock & Rubinfeld, *supra* note 250, at 239–40; Hemphill & Kahan, *supra* note 29, at 30.

254. Tim Wallace, *Index Funds Must Use Their Huge Power Over Companies, Says BlackRock Chief Larry Fink*, TELEGRAPH (Apr. 29, 2018, 8:43 PM), <https://www.telegraph.co.uk/business/2018/04/29/index-funds-must-use-huge-power-companies-says-blackrock-chief/> (last visited Jan. 28, 2020). A State Street governance representative explained: "The option of exercising our substantial voting rights in opposition to management provides us with sufficient leverage and ensures our views and client interests are given due consideration." Mike Scott, *Passive Investment, Active Ownership*, FIN. TIMES (Apr. 6, 2014), <https://www.ft.com/content/7c5f8d60-ba91-11e3-b391-00144feabdc0> (last visited Jan. 27, 2020).

255. Sorkin, *supra* note 16.

256. Natasha Landell-Mills, *Investors Should Fire Directors Who Fail to Act on Climate Change*, FIN. TIMES (Jan. 28, 2019), <https://www.ft.com/content/8403fb3a-22df-11e9-b20d-5376ca5216eb> (last visited Jan. 27, 2020).

257. Press Release, Legal & General Investment Management Takes Action on Climate Change Risks (June 11, 2018) <http://www.lgim.com/uk/en/press/2018/legal---general-investment-management-takes-action-on-climate-change-risks.html> (last visited Jan. 28, 2020).

“higher level things,” like the board, governance, and risk management, rather than product pricing.²⁵⁸ But power over directorship positions can influence product-level decisions. The placement of a climate scientist on a fossil fuel company board, for example, might impact production decision responses to climate risk. After three years of opposing shareholder resolutions requesting the company appoint an “Independent Director with Climate Change Expertise,” ExxonMobil announced its newest board member would be an atmospheric scientist with just such qualifications.²⁵⁹ Investors have argued that the appointment of directors “supportive on climate issues” would make it “much easier to rally management behind a shareholder resolution that explicitly committed the company” to reducing emissions in line with the Paris Agreement.²⁶⁰ Further, a director seeking to retain her board position might consider that the majority of her votes in favor must come from broadly diversified shareholders with portfolio-wide interests.²⁶¹ This consideration might naturally encourage the director to pursue corporate objectives more aligned with the goals of externality-internalization rather than profit maximization.

Compensation: Common ownership skeptics have pointed out that managers should rationally be reluctant to sacrifice firm profits for portfolio returns because their compensation is often tied to corporate performance measures.²⁶² However, in the oil and gas industry, executive compensation is tied just as tightly to oil prices as it is to relative firm valuation.²⁶³ In the broader common ownership debate, several studies have found that managerial compensation is less likely to be tied to relative firm performance when the firm shares more common owners with industry competitors.²⁶⁴ As recent climate activism has shown,

258. Transcript, Competition and Consumer Protection, *supra* note 248, at 115.

259. Press Release from Interfaith Center on Corporate Responsibility, Shareholders Welcome Appointment of Climate Expert to ExxonMobil Board (Jan. 26, 2017), <https://www.iccr.org/shareholders-welcome-appointment-climate-expert-exxonmobil-board> [<https://perma.cc/4T8N-5JR3>].

260. Landell-Mills, *supra* note 256.

261. *See, e.g.*, Azar, *supra* note 56, at 12–14 (providing theoretical argument that managers seeking to maximize vote share for re-election should seek to maximize weighted average of shareholder profits from all portfolio companies).

262. *See, e.g.*, O’Brien & Waehrer, *supra* note 28, at 733.

263. Lucas Davis & Catherine Hausman, *Are Energy Executives Rewarded for Luck?* 1 (Nat’l Bureau of Econ. Research, Working Paper No. 25391, 2018), <https://www.nber.org/papers/w25391> (last visited Mar. 17, 2020).

264. Miguel Antón et al., *Common Ownership, Competition, and Top Management Incentives* 2–3 (Ctr. for Econ. Stud. & Info Inst., Working Paper No. 6178, 2018), <http://ssrn.com/abstract=2802332> (last visited Jan. 28, 2020). The authors point out that managerial wealth is a better measure than

investors are capable of directly amending compensation plans to align with their objectives. In response to investor pressure Shell announced that it planned to link its emissions reductions targets directly with executive compensation.²⁶⁵ The remuneration of 1,200 senior employees could be affected by this incentive structure.²⁶⁶ BP has announced its intention to link the bonuses of 36,000 employees to the achievement of emissions reductions.²⁶⁷ BHP, the world's largest mining company, announced that it planned to make concrete reduction targets for its "Scope 3" emissions—emissions from the sales of its products.²⁶⁸ The achievements of these targets will be tied directly to executive pay. Compensation incentives also play a role in Xcel Energy's emissions goals. In 2018, Xcel became the first major U.S. utility to announce a commitment to reduce its production of greenhouse gases to zero—setting goals of 80% emissions reduction by 2030, and 100% by 2050.²⁶⁹ Achievement of these targets determines 30% of Xcel executive pay.²⁷⁰ Like Shell, Xcel has been a target of shareholder engagement through the Climate Action 100+ investor initiative.²⁷¹

Direct Communications: Institutional investors regularly communicate with corporate management on climate related issues, either in face to face meetings or through correspondence. BlackRock has argued that "meetings behind closed doors can go further than votes against

"flow" pay as it more accurately captures managers' economic incentives. Applying to the climate case study, this suggests that compensation schemes incentivizing externality internalization might have to increase annual flow pay to compensate for lost wealth. *See also* Lantian Liang, *Common Ownership and Executive Compensation 1* (U. Tex. Dallas, Working Paper, 2016), https://acfr.aut.ac.nz/_data/assets/pdf_file/0008/58085/43082-L-Liang-Common_ownership_V2.pdf [<https://perma.cc/2WB7-V7W4>].

265. Anjali Raval et al., *Shell Yields to Investors by Setting Target on Carbon Footprint*, FIN. TIMES (Dec. 2, 2018), <https://www.ft.com/content/de658f94-f616-11e8-af46-2022a0b02a6c> (last visited Jan. 27, 2020).

266. *Id.*

267. Ivana Kottasová, *BP will link bonuses for 36,000 workers to climate targets*, CNN BUS. (Feb. 1, 2019), <https://www.cnn.com/2019/02/01/business/bp-shareholders-paris/index.html> [<https://perma.cc/E78Y-ZHBP>].

268. Neil Hume, *BHP to set targets for reducing customers' carbon emissions*, FIN. TIMES (July 22, 2019), <https://www.ft.com/content/90b8fdd0-ac87-11e9-8030-530adfa879c2> [<https://perma.cc/MBE2-FSDX>].

269. Press Release, Xcel Energy, Xcel Energy aims for zero-carbon electricity by 2050 (Dec. 4, 2018), https://www.xcelenergy.com/company/media_room/news_releases/xcel_energy_aims_for_zero-carbon_electricity_by_2050 [<https://perma.cc/49HM-EE7Q>].

270. *Xcel Energy Executive Compensation Program Aims to Foster Environmental Sustainability*, CERES, <https://www.ceres.org/node/1537> [<https://perma.cc/C6S2-KDZ2>].

271. Tim Sandle, *Q&A: How Any Energy Company Can Deliver Zero Carbon Emissions*, DIGITAL J. (Dec. 9, 2018), <http://www.digitaljournal.com/news/environment/q-a-how-any-energy-company-can-deliver-zero-carbon-emissions/article/538621> [<https://perma.cc/3FGY-5L4S>].

management.”²⁷² Climate Action 100+ announced its intent to seek emissions reduction commitments seeking “private, not public proposals.”²⁷³ The emissions commitments at Shell were reached through discussions directly with management, and were achieved despite being rejected by a majority of shareholder votes just months before.²⁷⁴ Asset Manager, Legal and General, sent letters to eighty-four companies it considered “pivotal” for meeting the Paris Agreement, and met directly with more than fifty of them.²⁷⁵ HSBC indicates it undertook hundreds of corporate engagements related to the environment in 2018, including “long-term decarbonisation plans.”²⁷⁶

These communications do not always have to be private. Diversified investors can also broadcast their desires to companies through public statements. In his 2018 letter to CEOs, BlackRock’s Larry Fink told companies that he expects their long-term growth strategy to consider “the societal impact of your business as well as the ways that broad, structural trends [including] climate change” affect growth potential.²⁷⁷ Investor members of Climate Action 100+ have penned numerous op-eds in financial news publications that clearly state their intentions to require industry-wide decarbonization.

Given that these investors exercise large voting blocks on issues such as compensation package approvals and board member elections, it is not difficult to see how corporate management would be eager to keep investors happy, and investors can indicate their desires directly through private and public communications.

Shareholder Proposals: Shareholder resolutions have thus far escaped

272. Sarah Krouse et al., *Meet the New Corporate Power Brokers: Passive Investors*, WALL STREET J. (Oct. 24, 2016), <https://www.wsj.com/articles/the-new-corporate-power-brokers-passive-investors-1477320101> (last visited Jan. 28, 2020); see also Joseph McCahery et al., *Behind the Scenes: The Corporate Governance Preferences of Institutional Investors*, 71 J. FIN. 2905, 2905 (2016) (conducting a survey of 143 large institutional investors regarding their corporate engagements in the past five years (across all topic areas) and finding that 63% had direct discussions with management and 45% had private discussions with a company’s board without management present).

273. Braham, *supra* note 89.

274. Kelly Gilblom, *Shell Changes Stance on Carbon as Investors Push for Disclosures*, BLOOMBERG (Dec. 3, 2018), <https://www.bloomberg.com/news/articles/2018-12-03/shell-changes-stance-on-carbon-as-investors-push-for-disclosures> (last visited Jan. 28, 2020).

275. Press Release, Legal & Investment Management, Legal & General Investment Management Takes Action on Climate Change Risks (June 11, 2018), <https://www.legalandgeneralgroup.com/media/2511/11062018-lgim-climate-impact-pledge-final-2.pdf> (last visited Jan. 28, 2020).

276. HSBC GLOBAL ASSET MANAGEMENT, 2018 STEWARDSHIP REPORT 12–13 (2018).

277. Larry Fink, *Larry Fink’s 2018 Letter to CEOs: A Sense of Purpose*, BLACKROCK (2018) [hereinafter *Larry Fink’s 2018 Letter*], <https://www.blackrock.com/corporate/investor-relations/2018-larry-fink-ceo-letter> [<https://perma.cc/W7QK-NDBC>].

attention in the common ownership literature. First, it is unlikely that an institutional investor would ask a company to raise prices and reduce supply in a public forum if the intent could be interpreted as collusive and oligopolistic. Second, companies are allowed to exclude shareholder proposals that micromanage managerial business decisions like product pricing. However, emissions reductions proposals at their core seek these same outcomes. Indeed, EOG Resources successfully petitioned the SEC for permission to exclude an emissions proposal because its core business operations, to develop and sell fossil fuels, “cannot be separate from emissions,”²⁷⁸ and such commitments would come at the “expense of management’s own judgment.”²⁷⁹ The success of institutional investors’ climate activism can be seen in the number of shareholder proposals that were withdrawn prior to being brought to a vote in recent years: thirty-eight in 2017 and thirty-nine in 2019.²⁸⁰ Because withdrawn proposals signify that the investor has been appeased, they are “one of the best indicators of activists’ success.”²⁸¹

In the broader common ownership debate, two pathways of institutional investor influence for promoting anti-competitive behavior have been proposed. The first is that investors actively work to encourage management to make monopoly-like decisions, using the shareholder tools described above.²⁸² The second is that they do nothing at all, but this inaction overwhelms the corrective oversight of active shareholders.²⁸³ Proponents of the latter theory argue that largely passive investors might fail to police corporate “laziness,” siding with management by default rather than with an activist hedge fund attempting to drive out management pursuing insufficiently competitive policies.²⁸⁴ While some of the observed anti-competitive effects of common ownership could result from a failure to monitor on the part of lazy owner-overseers, the

278. SEC Decision Letter, *supra* note 150, at 22.

279. *Id.* at 6.

280. See CERES, Engagement Tracker, *supra* note 13 and accompanying text (providing data from Ceres Engagement Tracker).

281. Virginia Harper Ho, *Risk-Related Activism: The Business Case for Monitoring Nonfinancial Risk*, 41 J. CORP. L. 647, 689 (2016).

282. See, e.g., Martin C. Schmalz, *Common-Ownership Concentration and Corporate Conduct*, 10 ANN. REV. FIN. ECON. 413, 434 (2018) (summarizing the two proposed pathways for observed anti-competitive effects).

283. *Id.* (explaining that common owners might harm competition by “doing nothing” and that “investors can be lazy owners . . . and harm competition at the same time”).

284. Azar Schmalz, & Tecu, *supra* note 18, at 1552 (“Lazy investors” may not insist on the implementation of such expansion strategies and instead let managers get away with the “quiet life that comes with choosing suboptimal quantities.” (internal quotation marks omitted)).

portfolio-maximizing account of the recent climate agenda requires affirmative action on the part of institutional investors. Rather than casting proxy votes that side with the board's position by default and inadvertently rewarding poor management,²⁸⁵ emissions reduction advocacy requires voting against corporate boards, and proactive engagement on the part of the investor. This account of common owner incentives is consistent with Scott Hemphill and Marcel Kahan's argument that the empirical common ownership studies are in fact only measuring a common owner's power to influence management to take actions that are firm value decreasing.²⁸⁶ They argue that all empirical common ownership studies employ a methodology that tests for changes in firm behavior that are in the interest of common owners but contrary to the interests of concentrated shareholders.²⁸⁷ Investor pressure to decrease emissions beyond the level required by market and regulatory pressures is precisely this type of behavior.

B. *Liability for Violation of Fiduciary Duty*

A further proposed limitation to institutional investors' ability to influence firm-specific objectives for the benefit of their portfolio (and the detriment of the firm) arises out of fiduciary duties. While shareholders are under no legal obligation to vote their shares in the best interest of the corporation, and as a general rule owe no fiduciary duties to fellow shareholders when exercising their votes,²⁸⁸ asset managers have a duty to

285. See Einer Elhauge, *New Evidence, Proofs, and Legal Theories on Horizontal Shareholding* (Jan. 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3096812 (last visited Jan. 28, 2020); Dorothy Shapiro Lund, *The Case Against Passive Shareholder Voting*, 43 J. CORP. L. 101, 118 (2018).

286. They argue that, contrary to many of its interpretations, the common ownership economic literature is actually *only* measuring the impact of common owners that have a conflict with non-common owners of the same firm. Each of these studies use the Modified Herfindahl-Hirshman Index (MHHI) as the metric for representing ownership overlap between competing firms, or more precisely, MHHIΔ (MHHI Delta). MHHIΔ increases as common ownership increases. The AST study found a statistical relationship between increases in MHHIΔ and increase in airline fares. As Hemphill and Kahan point out, many have overlooked that the MHHIΔ metric also *decreases* with the presence of non-common owners (NCOs), i.e., concentrated holders in a given firm that hold no ownership stakes in that firm's competitors. What the MHHIΔ metric is actually testing for, they argue, is whether the price change outcome results from the power of concentrated common owners (CCOs) *relative to* that of the concentrated owners. The fact that MHHIΔ "increases as CCO ownership goes up *but decreases as NCO ownership rises*" reflects a conflict of interest between CCOs and NCOs. Hemphill & Kahan, *supra* note 29, at 14.

287. *Id.*

288. See, e.g., *Tanzer v. Int'l Gen. Indus., Inc.*, 379 A.2d 1121, 1124 (Del. 1977) ("At a stockholders' meeting, each stockholder represents himself and his own interests solely and in no sense acts as a trustee or representative of others . . ." (internal quotation marks omitted)).

their underlying beneficiaries, individual retail investors.²⁸⁹ Further, managers and directors have a fiduciary duty to undertake actions in the best interest of their company, and sacrificing profits in the service of diversified investors likely violates that duty.²⁹⁰ In practice, however, these violations of duty may go unpunished by courts and regulators. Each case is considered in turn.

1. *Investor Duty to Underlying Beneficiaries*

The Securities and Exchange Commission (SEC) mandates that investment managers have a fiduciary duty of good faith to vote in the best interests of their beneficiaries.²⁹¹ The theory that institutional investors vote in the interests of their entire portfolio may not be consistent with this duty. Individual beneficiaries whose assets are managed by large institutional investors do not necessarily share the same portfolio diversity or asset allocation as the institution in charge of voting their shares. A voting strategy that minimizes portfolio-wide negative externalities is likely not in the best interests of an individual investor whose assets are concentrated in the industry generating the externality. An individual that has chosen to invest in the Vanguard Energy ETF, for example, 20% of which is Exxon stock, might not agree with the climate voting strategies desired by an investor in an S&P500 Index Fund, where Exxon makes up 1.4%.

The Department of Labor's 1994 Interpretive Bulletin provides that under the Employee Retirement Income Security Act, which governs the management of employee retirement plans, investment managers have a duty to split their proxy votes if two different plans have conflicting proxy voting policies.²⁹² However, investors typically exercise their votes in blocks, rarely splitting their power between funds. In 2014, only 0.04% of funds reported making split votes.²⁹³ BlackRock individually exhibited

289. See, e.g., Ann M. Lipton, *Family Loyalty: Mutual Fund Voting and Fiduciary Obligation*, 19 TENN. J. BUS. L. 175 (2017).

290. Lambert & Sykuta, *supra* note 245, at 31; O'Brien & Waehrer, *supra* note 28, at 765–66.

291. Disclosure of Proxy Voting Policies and Proxy Voting Records by Registered Management Investment Companies, 17 C.F.R. pts. 239, 249, 270, 274 (2003) (“The investment adviser to a mutual fund is a fiduciary that owes the fund a duty of . . . good faith This fiduciary duty extends to . . . the voting of proxies relating to the fund’s portfolio securities.”).

292. See Interpretive Bulletin Relating to Written Statements of Investment Policy, Including Proxy Voting Policy or Guidelines, 59 Fed. Reg. 38,860, 38,862 (July 29, 1994) (codified at 29 C.F.R. § 2509.94-2).

293. Scott Hirst, *Social Responsibility Resolutions*, 43 J. CORP. L. 217, 225 n.18 (2018) (citing ISS’s Voting Analytics database, which is based on the data released by mutual funds on Form N-PX).

split votes 0.018% of the time, Vanguard 0.006%, and StateStreet 0.2% of the time.²⁹⁴ A mutual fund found to be voting all of its proxies in service to its overall portfolio maximizing objective may be violating its duties to beneficiaries of individual funds, but it may be difficult to prove its underlying intent, especially given that the practice of voting all funds in the same way is customary.

In 2009, the SEC ruled that an asset manager had violated its duties by adopting a pro-labor proxy voting policy across all its funds, including those that had not indicated pro-labor preferences, in the hopes of attracting future business from union affiliates.²⁹⁵ The agency reasoned that while the fund was permitted to adopt a “predetermined voting policy,” that policy must be “designed to further the interests of clients rather than the adviser.”²⁹⁶ This is the only such enforcement action punishing conflicted proxy voting practices, and it hinged upon available evidence of the mutual fund’s underlying intention.²⁹⁷ If institutional investors are able to provide plausible business-purpose cover for the voting strategy, or carry out their objectives behind the scenes and outside of the proxy process, their true intentions may go undetected and unpunished.

Many institutional investors do not face this intra-beneficiary conflict, however, because of their investment mandate. Pension funds like CalPERS pay out to all plan participants from one giant fund, they do not allow beneficiaries to select between asset classes, so each beneficiary’s level of diversification is the same. Insurance companies, sovereign wealth funds, foundations, and university endowments are similarly managed with the singular mandate of maximizing portfolio-wide returns. For this category of investors, it is arguable that their fiduciary duties in fact *require* them to use their power to internalize firm-generating externalities in order to maximize portfolio returns for their beneficiaries. This insight is at odds with a recent spate of criticism from corporate commentators arguing that trustee climate activism violates their fiduciary duty to avoid using “other people’s money to pursue collateral benefits to

294. Jan Fichtner et al., *Hidden Power of the Big Three? Passive Index Funds, Re-concentration of Corporate Ownership, and New Financial Risk*, 19 BUS. & POL. 298, 316–17 (2017).

295. INTECH Inv. Mgmt., Admin. Proc. File No. 3-13463 (May 7, 2009), <https://www.sec.gov/litigation/admin/2009/ia-2872.pdf> [<https://perma.cc/3JDL-2UEM>].

296. *Id.* at 5 (internal quotation marks omitted) (footnote omitted).

297. Keith Johnson & Cynthia Williams, *Fiduciary Duty Guidance for Proxy Voting Reform: SEC Roundtable Submission*, SEC.GOV (Nov. 15, 2018), <https://www.sec.gov/comments/4-725/4725-4650533-176476.pdf> [<https://perma.cc/8XVT-S9KK>].

third parties.”²⁹⁸

That only certain types of institutional investors face this internal conflict of fiduciary duties may explain their varying levels of climate engagement. The “Big Three” asset managers, BlackRock, Vanguard, and State Street, are not members of ClimateAction 100+, and while they have supported some climate related proposals, they have been far less active in the space than their peer European funds, pension funds, and insurance companies. This may be because, given that these funds tend to vote their proxies as a family, and make decisions about engagements at the fund family level, they are cautious about using their power to support a certain subset of their clientele over another. Of course, one could argue that this intentional passivity breaches their duties to those clients that invest broadly in a market-mirroring portfolio.

2. *Fiduciary Duties of Managers*

A firm manager is typically said to have a fiduciary duty to manage in the best interests of “the corporation and its shareholders.”²⁹⁹ What happens when the interest of the corporation and its shareholders diverge? Or when different shareholder groups have divergent interests? The externality-internalizing measures examined here present a unique situation: the majority of (minority) shareholders desire the directors to adopt a business strategy that would be share-price decreasing, but shareholder portfolio-value maximizing given their diversification.

The business judgment rule (BJR) protects managers from liability for decisions made under “any rational business purpose.”³⁰⁰ Under the BJR, a court “begins with the presumption that in making a business decision the directors of a corporation acted on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the company.”³⁰¹ Given the BJR’s extreme deference to managers, fossil fuel company directors need only supply a reasonable argument for why their emissions-reducing decisions ultimately serve the long-term profit-making interests of the corporation. The increasing acquiescence to shareholder demand for climate risk disclosure easily satisfies this

298. Max M. Schanzenbach & Robert H. Sitkoff, ‘Investing for Good’ Meets the Law, WALL ST. J. (Dec. 9, 2018), <https://www.wsj.com/articles/investing-for-good-meets-the-law-1544396424> (last visited Jan. 27, 2020); see also Mackintosh, *supra* note 140.

299. N. Am. Cath. Educ. Programming Found., Inc. v. Gheewalla, 930 A.2d 92, 99 (Del. 2007); Mills Acquisition Co. v. Macmillan, Inc., 559 A.2d 1261, 1280 (Del. 1989).

300. Unocal Corp. v. Mesa Petroleum Co., 493 A.2d 946, 954 (Del. 1985).

301. eBay Domestic Holdings, Inc. v. Newmark, 16 A.3d 1, 36 (Del. Ch. 2010) (quoting Unitrin, Inc. v. Am. Gen. Corp., 651 A.2d 1361, 1373 (Del. 1995)).

standard: providing shareholders the information they demand guards against disgruntled stock sell-offs and assures future access to equity financing. Concrete emissions reduction targets, in order to receive BJR protection, would similarly need to be justified in market terms.

Companies may argue that they anticipate aggressive carbon regulation and that such targets enable their business model to be an industry leader in adapting to these limits. Shell's announcement of emissions targets explained that they were in line with the company's "strategic ambition" to "thrive through the energy transition."³⁰² A concentrated shareholder could attempt to argue that these targets are too excessive, and that in the absence of evidence of the imminence of such regulation they amount to an unjustified sacrificing of profits. In order to assess this claim, however, a court would need to evaluate the reasonableness of directors' stated beliefs about the probability of global greenhouse gas regulations. This is precisely the type of judgment substitution that courts are meant to avoid under the BJR.³⁰³ Whether or not a court could be persuaded to probe more deeply given public investor statements suggesting emissions goals are in service to their broader portfolio is an open question.³⁰⁴

C. *Incentive to Intervene: Amending Model of Rational Reticence*

The increasing climate activism of institutional investors defies the traditional conception of their limited role in corporate governance. Broadly diversified investors have been typically described as poor monitors of corporate behavior, lacking the incentive and capacity to exercise their shareholder power to discipline management.³⁰⁵ Because engagement is costly and they own only a small share of each company,

302. Shell Emissions Commitment, *supra* note 1.

303. See Bernard S. Sharfman, *The Importance of the Business Judgment Rule*, 14 N.Y.U. J.L. & BUS. 27, 45–47 (2017) (summarizing rationales behind judicial reluctance to second guess managerial expertise).

304. See Elhauge, *supra* note 36, at 746 (arguing that the BJR's protections are limited by the fact that "if managers attempted to sacrifice huge amounts of profit, it would be difficult to make even a strained argument that their conduct might increase profits in the long run"); Sean Griffith, *Opt-In Stewardship: Toward an Optimal Delegation of Mutual Fund Voting Authority*, 31 n.189 (European Corp. Governance Inst. -Law, Working Paper No. 463, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3404298 (last visited Mar. 17, 2020) (suggesting that a court could treat "the intentional imposition of harm [through externality internalization] as the equivalent of waste, which, because it cannot be ratified except by unanimous shareholder consent" would make the action illegal if not supported by shareholder unanimity) (citing *Michelson v. Duncan*, 407 A.2d 211 (Del. 1979)).

305. Bebchuk et al., *supra* note 9, at 102; Rock, *Institutional Investors in Corporate Governance*, *supra* note 9, at 12; Rock, *The Logic and (Uncertain) Significance*, *supra* note 9.

they are “rationally reticent” and decline to spend resources on interventions that produce only small returns to their portion of ownership, opting instead to assess proposals brought by hedge funds with concentrated stakes.³⁰⁶ This traditional model, however, neglects to consider that a firm-specific engagement can reap wider portfolio-wide returns, justifying the monitoring resources spent. Further, in emphasizing the costs of engagement, scholars have neglected to observe that institutional investors are able to coordinate action among large coalitions. In this way, they spread engagement expenses, like the cost of filing a resolution, among the wider group of beneficiaries. Seen from this perspective, institutional investor climate action is an example of firm-level interventions whose returns overcome the collective action disincentive to play a monitoring role.

As institutional investors grew in size through the 1980s and 90s, corporate governance scholars began to predict that they might develop into a solution to the classic Berle and Means’s problem of the separation of ownership from control.³⁰⁷ Because dispersed retail investors’ ownership stakes were now concentrated under the oversight of fund managers, this large ownership share might justify spending resources on firm monitoring in order to seek out higher returns.³⁰⁸ More recently, however, scholars agree that these predictions have not been borne out. Ronald Gilson and Jeffrey Gordon, noting the scholarship predicting that institutional investors would serve as effective monitors of management, conclude that, in actuality, they have “continually failed to play this role.”³⁰⁹ Justice Strine has written that “the segment of the investment community that is best positioned to vote with an eye toward sustainable value creation is the least active in exercising voice and judgment in American corporate governance.”³¹⁰

306. Gilson & Gordon, *supra* note 10, at 867 (describing institutional investors’ governance approach as “rationally reticent”).

307. Berle, *supra* note 30, at 81 (identifying the growing crisis of managerial accountability and identifying the “rational apathy” problem, wherein each individual investor owns too small a share of a given company to justify spending effort supervising management). The costs spent by one investor in exercising control (usually in the form of researching and casting a proxy vote) are greater than any eventual benefits she could receive from her share of higher corporate returns. *Id.*

308. See, e.g., Bernard Black, *The Value of Institutional Investor Monitoring: The Empirical Evidence*, 39 UCLA L. REV. 895 (1992); Alfred Conard, *Beyond Managerialism: Investor Capitalism?*, 22 U. MICH. J. L. REFORM 117 (1988).

309. Gilson & Gordon, *supra* note 10, at 888, 878 n.46 (noting that literature in the 1970s recognized the increasing ownership concentration of pension funds but “greatly overestimated how active pension funds would be in corporate governance”).

310. Leo E. Strine, Jr., *Can We Do Better by Ordinary Investors? A Pragmatic Reaction to the Dueling Ideological Mythologists of Corporate Law*, 114 COLUM. L. REV. 449, 477–78 (2014).

The explanation given for why institutional investors have failed to serve as corporate stewards is that, despite their size, they nevertheless lack the capacity and the incentive to intervene. All funds incur costs by becoming informed on issues raised in a proxy vote, and these costs are passed on to underlying beneficiaries in the form of higher fees. As funds compete with one another to attract investors, there is pressure to keep fees, and thus personnel, at a minimum.³¹¹ Dorothy Lund argues that the teams devoted to corporate engagement and proxy voting at the largest index funds are “understaffed” and could not possibly research each of tens of thousands of proxy votes that they cast each year.³¹² Critics suggest the limited resources institutional investors devote to governance initiatives necessarily implies that they employ a lazy default voting strategy, or blindly follow the recommendation of a hired shareholder advisory service.³¹³

Further, much like the individual stockholders they have replaced, institutional investors face their own collective action problems. While investment funds may own a large amount of stock relative to other shareholders, they rarely own more than 10% of any one company.³¹⁴ This leads to two related incentive problems: the “free-rider dilemma” wherein one investor must spend substantial resources to research, support, or advocate a certain position in a proxy fight, but the eventual gains made from that engagement accrue to other investors;³¹⁵ and the “rational apathy” problem, wherein the costs spent by one institution in undertaking a governance intervention or proxy fight are greater than the eventual benefits it receives.³¹⁶

Gilson and Gordon present a cost benefits analysis meant to demonstrate why institutional investors decline to make interventions in the companies they own:

Assume a major position by the fund, 3% of total assets, that represents a 5% ownership interest in the portfolio company, and

311. Lucian A. Bebchuk & Scott Hirst, *Index Funds and the Future of Corporate Governance: Theory, Evidence, and Policy* 12 (European Corp. Governance Inst., Working Paper Series in Law No. 433, 2018).

312. Lund, *supra* note 285, at 124.

313. *Id.*

314. Gilson & Gordon, *supra* note 10, at 868–69.

315. Roberta Romano, *Institutional Shareholders and Corporate Governance in the U.S.*, in *CORPORATE GOVERNANCE IN THE U.S. AND EUROPE: WHERE ARE WE NOW?* 52, 55 (Geoffrey Owen et al. eds., 2006); Robert C. Pozen, *The Role of Institutional Investors in Curbing Corporate Short-Termism*, *FIN. ANALYSTS J.*, at 10 (Sept./Oct. 2015).

316. Lisa M. Fairfax, *The Future of Shareholder Democracy*, 84 *IND. L. REV.* 1259, 1268–69 (2009); Rock, *Significance of Institutional Shareholder Activism*, *supra* note 9.

an intervention that results in a 10% gain in the portfolio company's stock price. The gain in the fund's assets will be 0.3% (a 10% increase in a 3% position); 95% of the benefit from the fund's actions goes to others, yet the fund may pay 100% of the costs, which will reduce its 0.3% gain.³¹⁷

Under their proposed model, governance is “split between specialists”: activist investors that specialize in monitoring company strategy and presenting alternatives to institutional investors, and institutional investors that specialize in “portfolio management” and in “evaluating proposals presented by activist investors.”³¹⁸ Some have argued that even the assumption that institutional investors rationally evaluate activist proposals gives them too much credit. Lund argues that the broad diversification of large passive investors renders them especially unlikely to improve performance in a single portfolio company.³¹⁹

Institutional investors do face collective action problems when weighing the costs and benefits of becoming informed enough to effectively engage on a given firm-specific issue. However, any accurate model of the agency costs of institutional investors must account for the investors' motivations at the *portfolio level*, rather than the firm level. Gilson and Gordon's model fails to consider that while an activist with a concentrated stake in a specific firm will measure the benefits of an intervention in terms of the returns to that firm, a diversified investor will observe impacts at the portfolio level.

Gilson and Gordon's cost-benefit analysis of governance intervention must be adapted. Consider the following hypothetical:

This fund has the same major position, 3% of total assets, representing a 5% ownership interest in the portfolio company, and considers an intervention that results in a 20% loss in the portfolio company's stock price. The loss in the fund's assets will be 0.6% (a 20% decrease in a 3% position). But, assume further that this intervention results in a 5% increase in 50% of the funds' portfolio assets—the gain to the fund's assets will be 2.5% (a 3% increase in a 50% position). If the cost of the intervention is less than 1.9% of the fund's total assets, the fund will proceed with the intervention. Of course, 95% of the loss from the fund's actions accrues to the other shareholders, so it will be unlikely to pass, *unless* there are other large blockholders whose portfolio assets will benefit from the intervention.

317. Gilson & Gordon, *supra* note 10, at 892 n.102.

318. *Id.* at 897.

319. Lund, *supra* note 285, at 119.

Diversified investors are unlikely to invest resources in many firm-specific interventions because the cost of the intervention does not justify the benefits at a portfolio-level. Researching a particular vote that increases the competitive edge of a given firm will likely just eat into the profits of that firm's competitor. The portfolio-wide impacts will be neutral, or even negative, as increased competition leads to diminished overall profits. In certain cases, however, the cost of firm-specific intervention may be overcome by benefits accruing to the wider portfolio.

Because institutional investors increasingly hold portfolios that mirror one another's asset diversification,³²⁰ they share similar portfolio-wide optimization incentives. Firm-level interventions that benefit the broader portfolio are in their common interest. This is especially true of interventions that require a coordinated effort across firms, as in the case of limiting fossil fuel production. In order to reduce leakage effects, reduction in supply only results in lower emissions if it is undertaken over a large enough portion of the industry (or accompanied simultaneously with reductions in demand from fuel consumers). For this reason, investors have an incentive to coordinate their efforts in engaging with firms across their portfolio in order to share the cost of their interventions. There is evidence that institutional investors are doing just this type of coordination through coalitions like Climate Action 100+.³²¹ Individual members are tasked with specific firms to target, dividing up leadership on the issue, with certain investors focusing on certain regions and industries.³²² UBS, for example, is "directly involved in 30 coalitions of investors within Climate Action 100+ and leads five of the company dialogues across regions."³²³

320. See Backus et al., *supra* note 55.

321. See, e.g., Press Release, Ceres, Nearly 400 Investors with \$32 Trillion in Assets Step Up Action on Climate Change (Sept. 14, 2018), <https://www.ceres.org/news-center/press-releases/nearly-400-investors-32-trillion-assets-step-action-climate-change> [<https://perma.cc/BGZ4-UZ29>] (quoting Manulife's CIO, "The Investor Agenda provides a powerful framework for us to collaborate with our peers to reduce the absolute risk in the capital markets from climate change").

322. Braham, *supra* note 89; HERMES EOS, 2017 ANNUAL VOTING AND ENGAGEMENT REPORT 10 (2017), <https://www.hermes-investment.com/ukw/wp-content/uploads/sites/80/2018/03/annual-report-2017.pdf> [<https://perma.cc/7355-PHLE>] (one fund indicated that it "volunteered to lead the dialogue with several high carbon-emitting companies" as part of its participation in the initiative); *Frequently Asked Questions*, CLIMATE ACTION 100+, *supra* note 86 (explaining that investors "nominate which companies they would like to engage" and they are assigned to target certain companies based on "consideration of previous history of engagement . . . geographic proximity, investor capacity and stock holding over the term of the initiative"); see also HSBC Global Asset Management, *supra* note 276, at 5 (noting HSBC is tasked with leading Climate Action 100+ initiative in four regions).

323. Condon & Piani, *supra* note 178.

III. IMPLICATIONS OF DIVERSIFIED SHAREHOLDER OBJECTIVES

Thus far, this Article has provided a positive account of institutional investors' portfolio perspectives, explaining just *how* and *why* investors seek emissions reductions. The Article now turns to considering the broader implications of this portfolio-level incentive and power, in the service of developing a normative response to the phenomenon of common ownership.

The externality-internalizing objective of diversified investors presents a challenge to the assumption that shareholders uniformly desire share price maximization. This assumption underlies the theoretical economic rationales for why managers should serve shareholder interests and why shareholders hold sole voting powers in the corporation. In cases where the existing literature has recognized a divergence between the interests of diversified and undiversified shareholders, most scholars have argued that the goals of diversified shareholders are more closely aligned with that of society, and so should be prioritized. This claim may not hold true once the inter-firm effects of diversified ownership are accounted for.

While common ownership internalization of negative externalities is a positive welfare effect when considered in isolation, there are reasons to be cautious about embracing this phenomenon as socially desirable. First, the net welfare effects of common ownership are yet to be fully considered and debated. Its positive effects, such as pollution reduction and innovation generation, must be weighed against its negative effects, like a dampening of competition and monopsony pricing in the labor market. Further, the ability of asset managers to "self-regulate" suggests this concentration of power can function as a form of private governance, raising important questions regarding democratic accountability and the potential to displace the role of "traditional" government. Sections A and B consider the net welfare effects of common ownership and the private governance implications of market power. Section C turns to explaining how newfound consideration of diversified investor incentives challenges "the normative foundation for corporate law theory."³²⁴

A. *Welfare Effects*

While there is a growing understanding of the economic distortions that can result from the centralization of corporate control brought about by common ownership, further empirical and theoretical work is needed in order to accurately assess the phenomenon's net welfare effects. The anti-

324. Hayden & Bodie, *supra* note 34, at 1218 n.1 (referring to shareholder primacy).

competitive supply and pricing decisions brought about by diversified investors acting as “one large superfirm”—undesirable from a societal perspective—has received the most scholarly attention, but further study is needed in a broader array of industries.³²⁵ This Article outlines one positive welfare effect that can occur: the internalization of negative externalities. Miguel Anton and co-authors have proposed an additional “bright side” of common ownership: greater investment in innovation.³²⁶ Research and development spending that results in innovation spillovers are *positive* externalities, desirable for an economy-wide owner.³²⁷ Similarly, one might expect that common owners would encourage companies to invest more in employee training as there is no loss, from a portfolio perspective, if the employee departs to work at another firm.³²⁸

In their paper advocating for legal limitations on common ownership, Eric Posner, Glen Weyl, and Fiona Scott Morton concede that their proposed policy to break up large funds would deprive society of some of the benefits of investment diversification.³²⁹ They argue, nevertheless, that this cost would be outweighed by the benefit of decreasing the societal deadweight loss of anti-competitive pricing. Their (admittedly rough) cost-benefit analysis neglects to consider a variety of other costs and benefits that stem from the rise of common ownership. Posner et al.’s proposal “conservative[ly]” generates \$60 billion in annual benefits.³³⁰ However, publicly traded companies generate two-thirds of all the emissions that contribute to the potential trillions of dollars of climate damage expected in the coming decades. Thwarting the ability of institutional investors to maximize portfolio returns may have the effect of abandoning these benefits of the internalization of climate externalities.

Robert Monks and Nell Minow first coined the term “universal owner” to describe investors that are significantly diversified across the entire economy such that they have a long-term interest in the health of the economy as a whole, as opposed to the relative performance of one firm

325. Azar, *supra* note 56, at 30.

326. Antón et al., *supra* note 24.

327. *Id.*; see also López & Vives, *supra* note 24.

328. A decrease in production coordination failures might be an additional positive effect. Competing firms have an incentive to hide their production plans from other producers and in the absence of this information individual producers might collectively under or over produce relative to demand. Common owners suffer from this inefficient loss and have an incentive to increase information sharing and coordination among competing producers. JOSEPH STIGLITZ, WHITHER SOCIALISM? 91 (1994).

329. Posner et al., *supra* note 17, at 717–21.

330. *Id.* at 730.

over another.³³¹ Minow and Monks explained that the holdings of universal owners:

are so diversified that they have the incentive to represent the ownership sector (and the economy) generally rather than any specific industries or companies. This endows them with a breadth of concern that naturally aligns with the public interest. For example, pension funds can be concerned with vocational education, pollution, and retraining, whereas an owner with a perspective limited to a particular company or industry would consider these to be unacceptable expenses because of competitiveness problems.³³²

Of course, the world's largest investors are not "universal owners" of the entire economy; they are "universal owners" of investment assets, which is not the same thing. They care about how externalized costs affect their portfolio, not how they affect consumers, or employees, or subsistence farmers on the other side of the world.³³³ Indeed, the executive director of the Council of Institutional Investors (CII), Ken Bertsch, neglected this fact when arguing to the FTC that investors' status as "universal owners" would make their encouragement of collusion irrational. Because his members own "the whole publicly listed economy," he argued, their interest is "in the prospering of the economy broadly."³³⁴ Therefore, he concluded, "it does not stand to reason that a universal owner would encourage anticompetitive behavior in certain industries (e.g., airlines and banks) at the expense of other companies in their portfolios and to the economy more generally."³³⁵ His position neglects to acknowledge that firms acting in concert can use their market power to shift surplus away from consumers and labor and toward portfolio capital.

While the world's largest investors may have an economic incentive to

331. MONKS & MINOW, *supra* note 22.

332. *Id.*

333. At base this boils down to a division of interests between those who hold capital and those who do not (i.e., labor). Indeed, Einer Elhauge, Eric Posner, and Glen Weyl all argue that the rise of horizontal shareholding has contributed to America's growing wealth inequality crises. Elhauge, *supra* note 17, at 1291–1301; Eric Posner & E. Glen Weyl, *Mutual Funds' Dark Side*, SLATE (Apr. 16, 2015), <https://slate.com/news-and-politics/2015/04/mutual-funds-make-air-travel-more-expensive-institutional-investors-reduce-competition.html> [<https://perma.cc/K829-K5H5>]. A recent paper attempts to model the labor effects of oligopolistic industries combined with common ownership. The authors conclude that the net labor effects depend on the "relative levels of the elasticities of labor supply and product substitution." JOSÉ AZAR & XAVIER VIVES, OLIGOPOLY, MACROECONOMIC PERFORMANCE, AND COMPETITION POLICY 3 (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3177079 (last visited Jan. 28, 2020).

334. Transcript, Competition and Consumer Protection, *supra* note 248, at 149.

335. Bertsch, *supra* note 25, at 5.

mitigate the harms climate change impose on their portfolios, this incentive is not aligned with the *socially* optimal level of emissions reduction. Many of the most extreme costs of climate change will be borne by those that do not participate in the global economy, and certainly not the economy that is reflected in asset valuation. This division can be illustrated by considering the divergence between BlackRock's monetary incentive for emissions reduction, the reduced harms to its portfolio which was calculated to be \$8.2 billion, *supra*, and the *social* value of these same emissions reductions as determined by the U.S. Interagency Working Group (IWG) on Social Cost of Greenhouse Gases under the Obama Administration. Based on the IWG's social cost of carbon, valued at \$36 per ton (and increasing with time), the net present value of a 0.77% permanent annual reduction in emission is worth \$913 billion.³³⁶ This \$906 billion divergence between how the global population and the massive asset manager value the externality reduction serves as an indication that investor action to combat climate change will most certainly not be "enough" from the perspective of the global population.

What about externalities beyond climate change? Localized pollutants? Or gun sales? Or reductions in employee training? Asset owners care about some externalities more than others, and it all depends on the aggregate impact on their portfolio of investments. Indeed, that is why common ownership can result in both the socially desirable internalization of climate externalities and the socially undesirable collusion to raise prices, resulting in deadweight welfare loss.

Beyond the fact that the ideal level of externality reduction is less for capital owners than the general population, institutional investors face many barriers to implementing their own interests in externality internalization. There are massive information gathering costs as well as methodological impediments to determining the "ideal" allocation of resources from the viewpoint of an economy-wide monopolist. While a monopolist may want to exercise its monopsony power to exploit labor, for example, it only wants to do this at the level that does not diminish consumer demand to the point of cutting into profits.³³⁷ Optimal performance would require a general equilibrium model, which can

336. INTERAGENCY WORKING GROUP ON SOCIAL COST OF GREENHOUSE GASES, UNITED STATES GOVERNMENT, TECHNICAL SUPPORT DOCUMENT: TECHNICAL UPDATE OF THE SOCIAL COST OF CARBON FOR REGULATORY IMPACT ANALYSIS UNDER EXECUTIVE ORDER 12,866 (2016).

337. *See, e.g.*, AZAR & VIVES, *supra* note 333, at 2 (modeling the macroeconomic employment effects that result from oligopoly and common ownership and referring to the feedback effect of diminishing consumer wealth leading to declining demand as a "Ford effect" like Henry's commitment to paying his workers enough to afford the cars they built).

simultaneously solve for all outcomes in the market, but does not exist in a perfect form.³³⁸ Indeed, federal agencies face this same challenge when attempting to determine the economy-wide costs and benefits of a proposed regulation. Regulatory impact analyses often consider only first-order effects of regulations on a given industry, and ignore secondary or tertiary spill-over effects to other markets when they are assumed to be small, or impossible to determine.³³⁹ The small staff size of some institutional investors' corporate governance teams does not imply that they cannot consider portfolio-wide impacts when voting shares, but it might mean that they are not very good at it.³⁴⁰

338. See, e.g., FRANK M. MACHOVEC, PERFECT COMPETITION AND THE TRANSFORMATION OF ECONOMICS 40 (1995) (“The idea of achieving the socially-optimal bliss point of Walrasian general equilibrium requires the analyst to abstract himself into a world of perfect information.”); Letter from the Sci. Advisory Bd. (SAB), to E. Scott Pruitt, Admin., U.S. Env’tl. Prot. Agency 1 (Sept. 29, 2017) [hereinafter Letter from SAB], [https://yosemite.epa.gov/sab/sabproduct.nsf/0/4B3BAF6C9EA6F503852581AA0057D565/\\$File/EPA-SAB-17-012.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/0/4B3BAF6C9EA6F503852581AA0057D565/$File/EPA-SAB-17-012.pdf) [<https://perma.cc/PN4E-B7A7>] (“The ideal [GE] model would include fine-grained treatment of: (1) industries and products; (2) production processes; (3) geographic regions; (4) skills and occupations of workers; and (5) other demographic characteristics. No such model currently exists, nor are adequate data available to build one.”).

339. NAT’L CTR. FOR ENVTL. ECON. OFFICE OF POLICY U.S. ENVTL. PROT. AGENCY, GUIDELINES FOR PREPARING ECONOMIC ANALYSES 8-2-8-6 (2014) (comparing the use of partial equilibrium analysis of effects in one market with general equilibrium (GE) analysis of economy-wide multi-market effects); Letter from SAB, *supra* note 338 (recommending against the use of GE modeling in the regulatory impact analyses of air regulations).

340. By this I mean to engage with objections, such as those made by Ed Rock, that institutional investors would not rationally encourage collusion in the airline industry because they also own the many companies that purchase airline tickets, who would be hurt by higher prices. See Vito J. Racanelli, *Don’t Tread on Big Investors*, BARRON’S (Sept. 7, 2018), <https://www.barrons.com/articles/dont-tread-on-big-investors-1536340556> [<https://perma.cc/VFY9-H6PS>] (summarizing Rock’s position); Lambert & Sykuta, *supra* note 245 at 31–32 (raising similar inter-industry diversification argument). While Rock is correct that portfolio-wide anti-competitive effects would generate deadweight losses that would take away from portfolio maximization, so long as those companies are able to pass some of their costs on to consumers, and the overall net result is that portfolio companies on average generate higher profits, institutional investors would still find collusion desirable. An omniscient portfolio manager desires any intervention whose net secondary, tertiary, quaternary, etc., effects result in capital’s share of income increasing over labor’s share. But the portfolio manager doesn’t need to be actually omniscient to pursue this agenda in an imprecise manner. Like federal agencies, the manager can calculate first order effects and assume (or hope) the economy-wide reverberations are net positive to capital.

The debate over the implications of the Azar et al. study has prompted some commentators to claim that index funds are one step away from socialism. Matt Bruenig writes that arguments against the Azar findings are “proof of concept” that a single institution can own the entire economy without a breakdown in the allocative efficiency of markets—a “simulated competition scheme[]” like Oskar Lange. Matt Bruenig, *Index Funds Are a Proof of Concept for Market Socialism*, PEOPLE’S POLICY PROJECT (Aug. 17, 2017), <https://www.peoplespolicyproject.org/2017/08/17/index-funds-are-a-proof-of-concept-for-market-socialism/> [<https://perma.cc/68RG-X8Z9>]; see also RUDOLF HILFERDING, FINANCE CAPITAL: A STUDY OF THE LATEST PHASE OF CAPITALIST DEVELOPMENT 367

B. Market Concentration and Investor as Regulator

By facilitating a coordinated decline in the supply of fossil fuel company products, institutional investors are encouraging a rise in the price of those products, through much the same mechanism they employ to encourage anticompetitive pricing. Zephyr Teachout and Lina Khan have analogized monopoly pricing to the levying of a tax: both generate deadweight loss, and both transfer value away from the consumer/citizen into the hands of the monopolist/regulator.³⁴¹ In addition to collecting revenue, governments use taxes in order to adjust for the deadweight loss generated by negative externalities: in this case, the tax adds the social marginal cost to the price of the good and brings the market back into efficiency.³⁴² From this view, institutional investors' imposition of emissions goals at the producer level can be analogized to a carbon tax, except the increased costs paid by consumers from the higher price are collected as corporate profits rather than revenue for the government. Producers incur their own losses in both scenarios—some portion of a carbon tax is borne by suppliers, how much depends on the elasticities of the supply and demand curves.³⁴³ Under the coordinated decrease in supply, suppliers sell fewer products, but at a higher price. The net effect on profits depends, again, on the elasticity of the demand curve. Overall, the same desired outcome may be achieved (the socially optimal production of fossil fuels), but by organizing a supply-side restriction this outcome is reached without having to lose any revenue to taxes.

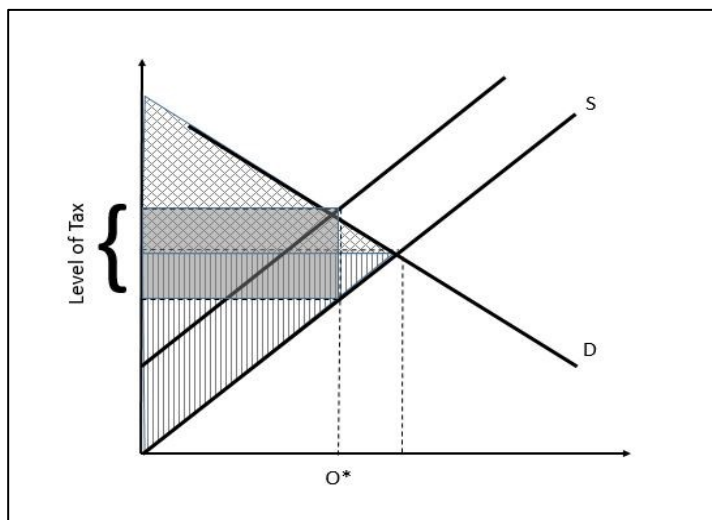
(1981 Routledge & Kegan Paul) (arguing that finance's gradual consolidation of the entire economy into the control of a few actors "facilitates enormously the task of overcoming capitalism"); Arjun Jayadev et al., *The Political Economic of Financialization in the United States, Europe and India*, 49 DEV. & CHANGE 353, 357 (2018) ("If professional managers can reliably administer corporation in the interests of shareholders in general, it is only a small step further to suggest they could administer them in the interest of society as a whole."). No less than Berle and Means, perhaps surprisingly to those who cite them in arguments in support of shareholder maximization theory, conclude *The Modern Corporation* with the prediction that "[i]t is conceivable,—indeed it seems almost essential if the corporate system is to survive,—that the 'control' of the great corporations should develop into a *purely neutral technocracy*, balancing a variety of claims by various groups in the community and assigning to each a portion of the income stream on the basis of public policy rather than private cupidity." BERLE & MEANS, *supra* note 30, at 312 (emphasis added); cf. STIGLITZ, *supra* note 328 (explaining the impossibility of functional market socialism as proposed by Lange and others).

341. Teachout & Khan, *supra* note 30, at 56 (citing Arnold Kling, *The Problem of Monopoly*, ARNOLDKLING.COM, <http://arnoldkling.com/econ/markets/monopoly.html> [<https://perma.cc/2AG2-9JAW>]).

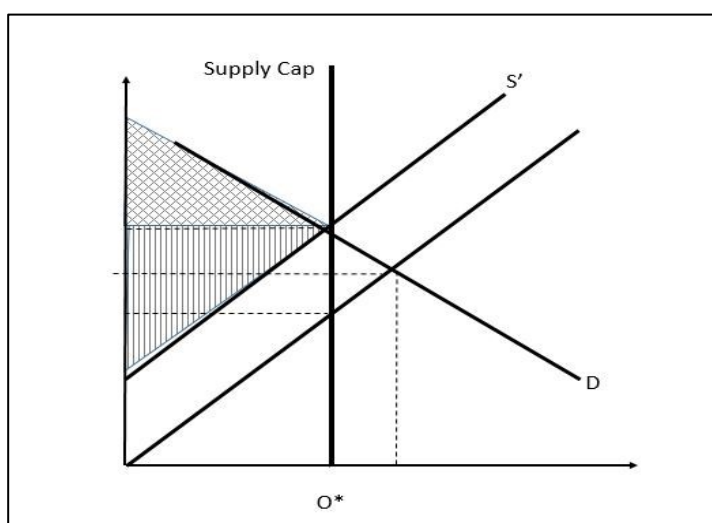
342. See, e.g., Steven Shavell, *Corrective Taxation versus Liability as a Solution to the Problem of Harmful Externalities*, 54 J.L. & ECON. S249, S249 (2011).

343. Michael Waggoner, *Why and How to Tax Carbon*, 20 COLO. J. INT'L ENVTL. L. & POL'Y 1, 5 (2008).

**Figure 1:
Government Imposed Pigouvian Tax**



**Figure 2:
Investor-Imposed Supply-Side Restriction**



The power to “self-regulate” is the power to play a government-like role without the government’s accountability to a democratic electorate.³⁴⁴ While this self-regulation may serve socially desirable ends, it necessarily implies the power to do much more. Larry Fink’s 2019 annual letter to CEOs explained that stakeholders, like BlackRock, “are pushing companies to wade into sensitive social and political issues – especially as they see governments failing to do so effectively.”³⁴⁵ However, the insight that self-regulation of externalities through market power can cost *less*, from a portfolio perspective, than implementation of a Pigouvian tax, suggests that investors may in fact have an incentive to preempt government action.

This Article makes a new contribution to the literature on voluntary corporate reduction of environmental harm, what Michael Vandenberg calls “private environmental governance.”³⁴⁶ Vandenberg has observed that “[p]rivate-private interactions now generate many of the environmental requirements that affect corporate . . . behavior, and ultimately environmental quality.”³⁴⁷ He and others have thoroughly documented the growing number of examples of private environmental governance, noting the environmental provisions in certification and labeling programs, lending standards, supply chain contracts, credit agreements, and industry association membership requirements.³⁴⁸ Several explanations have been advanced for the existence of these private

344. Teachout & Khan, *supra* note 30, at 55 (“We are saying that when you have one company or small group of dominant companies making decisions that effectively set standards for the rest of the industry, those outcomes take on the character of governance. The crucial difference, of course, is that corporations, unlike government, are not accountable to the public.”).

345. Letter from Larry Fink, Chairman and Chief Exec. Officer, BlackRock, to CEOs (2019), <https://www.blackrock.com/corporate/investor-relations/2019-larry-fink-ceo-letter> [<https://perma.cc/J6EM-TQVC>].

346. Michael P. Vandenberg, *Private Environmental Governance*, 99 CORNELL L. REV. 129, 174 (2013) (“When private parties manage common pool resources, supply environmental public goods, or reduce negative externalities by playing the standard-setting, implementing, monitoring, and enforcing functions traditionally reserved for the government, these private activities are worthy of attention by public law scholars.”).

347. *Id.* at 133.

348. Michael P. Vandenberg, *The Private Life of Public Law*, 105 COLUM. L. REV. 2029 (2005) [hereinafter Vandenberg, *The Private Life*]; Michael P. Vandenberg, *The New Wal-Mart Effect: The Role of Private Contracting in Global Governance*, 54 UCLA L. REV. 913 (2007).

governance schemes. First, many of these initiatives exist in complement to, or in the shadow of, public law.³⁴⁹ They exist, for example, in order to preemptively avoid liability imposed by an environmental statute. Or they are an appeal to consumer preference for environmentally friendly products. Or, relatedly, they are a reaction to environmental activist campaigns and motivated by the desire to avoid bad publicity. Commentators have largely neglected to consider an additional explanatory incentive for this trend: the influence of diversified investor self-interest. Under this explanation, private investors respond to the *absence* of government regulation, rather than its presence. Further, this explanation is consistent with traditional theories of utility-maximizing market actors.³⁵⁰

Externalities have typically been seen as classic example of market failure, requiring government intervention.³⁵¹ No one market actor has the authority or incentive to internalize the costs of an externality, and so the state must regulate to fix the market failure. However, in the current political climate, the present administration has signaled that it intends to take no such action to address either the systematic lack of risk accounting,³⁵² or the harms that arise from climate-related damages. Instead, the world's largest asset managers, each controlling assets equivalent to that of major developed economies, have begun to serve as "surrogate regulators."³⁵³ Their unprecedented size and breadth enables

349. Vandenbergh, *The Private Life*, *supra* note 348, at 2030 (citing Robert H. Mnookin & Lewis Kornhauser, *Bargaining the Shadow of the Law: The Case of Divorce*, 88 YALE L. J. 950, 952–56 (1979)); *see also* Eric W. Orts, *Reflexive Environmental Law*, 89 NW. U. L. REV. 1227, 1231–32 (1995).

350. As opposed to the explanations, like consumer preference for environmental protection, that are arguably more driven by social norms, like guilt or duty, and "distinct from the typical market behavior studied by private law scholars." Vandenbergh, *supra* note 346, at 181–82 (noting that while these norms could be included in a model of market behavior "doing so takes economics a long way from standard applications of models involving rational actors seeking to maximize utility").

351. RICHARD N. L. ANDREWS, *MANAGING THE ENVIRONMENT, MANAGING OURSELVES: A HISTORY OF AMERICAN ENVIRONMENTAL POLICY* 2 (1999) ("[G]overnment involvement in environmental issues is both necessary and inevitable . . .").

352. SEC Commissioner Robert Jackson recently admitted that the SEC was not adequately handling the financial risks of climate change, but that the issue was not high on the current SEC commissioner's agenda. Benjamin Hulac, *SEC commissioner wants to prioritize climate disclosure*, E&E CLIMATE WIRE (June 1, 2018), <https://www.eenews.net/climatewire/2018/06/01/stories/1060083177> (last visited Jan. 28, 2020).

353. *Cf.* Davis Hess, *Public Pensions and the Promise of Shareholder Activism for the Next Frontier of Corporate Governance: Sustainable Economic Development*, 2 VA. L. & BUS. REV. 221, 235 (2007) ("Why Harness Public Pension Funds as Surrogate Regulators?" (quoting Neil Gunningham et al., *Harnessing Third Parties as Surrogate Regulators: Achieving Environmental Outcomes by Alternative Means*, 8 BUS. STRATEGY & ENV'T 211, 212–19 (1999))). BlackRock's portfolio alone, presently larger than the GDP of Japan, is projected to grow by 2025 to \$16 trillion,

them to serve this role in a way never before observed.

While we may celebrate the ability of institutional investors to combat climate change, or hope that they might address other social ills,³⁵⁴ we should question the desirability of a democratically unaccountable financial behemoth making centralized resource allocation decisions. Several commentators have likened the growth of asset managers to the power wielded by trusts in the Gilded Age.³⁵⁵ Justice Douglas, in a 1948 dissent from the Supreme Court's decision to allow a steel industry merger, argued that the case was at heart about how much power steel executives should be permitted to wield, rather than the immediate economic impacts of the merger: "That power . . . can be benign or it can be dangerous [A]ll power tends to develop into a government in itself. Power that controls the economy should be in the hands of elected representatives of the people, not in the hands of an industrial oligarchy."³⁵⁶

It may be possible to design a legal regime that encourages the positive effects of common ownership, like the diminution of systemic risks, while simultaneously preventing harmful anti-competitive behavior. The design of such a scheme is beyond the scope of this Article. The tension in separating what is undesirable anti-competitive behavior from the desirable internalization of externalities is well illustrated in a recent example. In 2019, the state of California reached an agreement with four major auto manufacturers, in which the car companies pledged to voluntarily comply with stricter vehicle emissions standards than those required under Federal law.³⁵⁷ In response, the Department of Justice

just shy of the current GDP of the European Union. Rachel Evan et al., *BlackRock and Vanguard Are Less Than a Decade Away From Managing \$20 Trillion*, BLOOMBERG (Dec. 4, 2017), <https://www.bloomberg.com/news/features/2017-12-04/blackrock-and-vanguard-s-20-trillion-future-is-closer-than-you-think> [<https://perma.cc/5T2R-CQHZ>].

354. See, e.g., Nathan Atkinson, *If Not the Index Funds, Then Who?*, BERKELEY BUS. L. J. (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3341620&download=yes/ (last visited Jan. 28, 2020).

355. Krouse et al., *supra* note 272; Eric Posner & Glen Weyl, Opinion, *The Real Villain Behind Our New Gilded Age*, N.Y. TIMES (May 1, 2018), <https://www.nytimes.com/2018/05/01/opinion/monopoly-power-new-gilded-age.html> [<https://perma.cc/CD6B-S6QN>].

356. *United States v. Columbia Steel Co.*, 334 U.S. 495, 536 (1948) (Douglas, J., dissenting); see also Lina M. Khan, *The Ideological Roots of America's Market Power Problem*, 127 YALE L.J.F. 960 (2017–2018) (arguing that antitrust laws were formulated under classical economic theories of entrepreneurship and the competitive process rather than the neoclassical emphasis on outcomes like deadweight loss).

357. Puko & Foldy, *supra* note 242.

announced that it was opening up an antitrust investigation of the agreement, arguing that the compact limited consumer choice and was potentially anticompetitive.³⁵⁸ Many environmentalists and lawmakers denounced the investigation as politically-motivated harassment on the part of the Trump administration, which had rolled back tighter emissions standards promulgated under the previous administration. Nevertheless, it is true that several of these companies had been subject to pressure from institutional investors to voluntarily comply with the Obama-era limits.³⁵⁹ Climate Action 100+ investors had directly asked the companies “to negotiate an alternative compliance pathway with California,”³⁶⁰ and a shareholder proposal requesting this action from General Motors received nearly 30% support in the 2018 proxy season.³⁶¹ These facts, combined with recent common ownership debates, could potentially fuel accusations of unlawful collusive behavior.

C. *Shareholder Primacy and Efficiency Framing*

Much of the theory behind corporate law norms rests on the assumption that shareholders’ rational self-interest drives them to exercise their governance rights with the singular goal of maximizing corporate value.³⁶² The norm of shareholder primacy³⁶³ and the theoretical justification for shareholders alone holding voting rights³⁶⁴ are both founded on the premise that shareholders homogenously desire firm value maximization.³⁶⁵ The newfound consideration of common owner

358. *Id.*

359. *See, e.g., Report on Fleet Emissions and Regulation (F, 2018 Resolution) (2018)*, CERES, https://engagements.ceres.org/ceres_engagementdetailpage?recID=a011H00000C4DhQQAV [<https://perma.cc/H984-FKHP>].

360. CLIMATE ACTION 100+, *supra* note 111, at 70

361. *See AS YOU SOW, GENERAL MOTORS COMPANY: REQUESTS FOR REPORT ON GHG EMISSIONS AND CAFE STANDARDS (2018)*, <https://www.asyousow.org/resolutions/2018/01/31/general-motors-company-request-for-report-on-ghg-emissions-and-cafe-standards> [<https://perma.cc/KDC9-H7XE>]. In addition, investors sent public letters to GM seeking the same. CLIMATE ACTION 100+, PROGRESS REPORT, *supra* note 111, at 70.

362. *See, e.g., Romano, supra* note 6, at 961 (arguing “profit maximization is the only goal for which we can at least theoretically posit shareholder unanimity”).

363. Hansmann & Kraakman, *supra* note 6, at 439 (“There is no longer any serious competitor to the view that corporate law should principally strive to increase long-term shareholder value.”).

364. Easterbrook & Fischel, *Voting in Corporate Law, supra* note 33, at 403 (arguing that shareholders, as “the residual claimants to the firm’s income” have the best incentives to direct the firm toward maximizing profits).

365. *See, e.g., RICHARD A. BREALEY, STEWART C. MYERS & FRANKLIN ALLEN, PRINCIPLES OF CORPORATE FINANCE 7 (11th ed. 2013)* (arguing that shareholders “differ in age, tastes, wealth, time horizon, risk tolerance, and investment strategy” but agree that the firms objective should be

incentives, however, challenges these core assumptions by showing that diversified shareholder interests can diverge from both the interests of concentrated shareholders and the objective of maximizing share price.³⁶⁶

The legal norm of shareholder primacy generally holds that managers face no conflict when choosing between serving the interests of the corporation, of maximizing share price, or obeying shareholder interests—these three objectives are in fact the same.³⁶⁷ Similarly, the principle that shareholders alone hold governance rights is theoretically justified by courts with the reasoning that shareholders, as share-owners, can rationally be expected to vote with the “economic self-interest arguably common to all shareholders.”³⁶⁸ The Supreme Court of Delaware has explained that “[w]hat legitimizes the stockholder vote as a decision-making mechanism is the premise that stockholders with economic ownership are expressing their collective view as to whether a particular course of action serves the corporate goal of stockholder wealth maximization.”³⁶⁹

In questioning the assumption of homogenous shareholder interest in profit maximization, this Article compels the reassessment of a substantial body of scholarship and jurisprudence. The observation that a divergence of interest might exist between a diversified and a concentrated shareholder is not a new one,³⁷⁰ but most scholarly discussion of this split has concluded that managers should prioritize diversified shareholder interests because they are better aligned with the maximization of social welfare. This conclusion, however, neglects the inter-firm market-power distortions such a maxim would enable. The ambiguous net welfare effect of common ownership calls this duty to diversified shareholders

“[m]aximiz[ing] the current market value of [their] investment in the firm”).

366. See Elhauge, *supra* note 36; cf. Hart & Zingales, *supra* note 36 (similarly arguing that shareholder welfare is not adequately measured by share price, but based on shareholder’s altruistic desires as members of society, not due to unaccounted harms made to their investments by negative externalities).

367. See, e.g., *In re Trados Inc. Shareholder Litig.*, 73 A.3d 17, 36–37 (Del. Ch. 2013) (describing fiduciary duties to the corporation and its shareholders together as a “foundational relationship in which directors owe duties to the corporation for the ultimate benefit of the entity’s residual claimants”).

368. *Kurz v. Holbrook*, 989 A.2d 140, 178 (Del. Ch. 2010) (quoting *In re IXC Comm’s, Inc. Shareholders Litig.*, 1999 WL 1009174, at *8 (Del. Ch. Oct. 27, 1999)), *aff’d in part, rev’d in part sub nom.* *Crown EMAK Partners, LLC v. Kurz*, 992 A.2d 377 (Del. 2010).

369. *Crown EMAK Partners*, 992 A.2d at 388 (quoting *In re IXC Comm’s, Inc. S’holders Litig.*, 1999 WL 1009174, at *8 (Del. Ch. Oct. 27, 1999)).

370. See, e.g., Anabtawi, *supra* note 35, at 583–85 (describing how the interests of diversified and undiversified shareholders may diverge in two ways: they may be willing to take on different levels of firm-specific risk, and they may be willing to generate different amount of externalities).

into question.

It has long been acknowledged that the interests of diversified and concentrated shareholders diverge in their preferences for how much risk a corporate manager should take on. Concentrated stockholders prefer a smaller amount of idiosyncratic risk than diversified stockholders, who have immunized their exposure to firm-specific risk.³⁷¹ In noting this divergence, most scholars advocate that firm managers should serve the objectives of the diversified over the concentrated holder because this goal more closely conforms to the socially desired optimum—portfolio expected value is maximized by managers ignoring individual risk aversion.³⁷²

Because idiosyncratic risk does not (theoretically) affect share price, this deference to diversified shareholders over concentrated ones does not implicate a deviation from the mandate of share price maximization.³⁷³ There are other instances, however, where the literature has noted intra-shareholder conflicts that force a choice that could, or clearly does, affect share price. In these cases, though, scholars have also generally argued that managers should prioritize diversified shareholder interests because they better represent the interests of society.

Thomas Smith, for example, has focused on the divergence of interests between bondholders and shareholders in advocating for the interpretation that directors owe a fiduciary duty to the corporation itself, rather than to the objective of maximizing share price.³⁷⁴ His reasoning is that the typical rational investor is diversified, meaning, at least from the perspective of corporate law theory, a rational stockholder is also a bondholder. Therefore, Smith argues, shareholders actually desire managers to maximize the value of the corporation as a whole, rather than share price alone.³⁷⁵ Rational investors, he argues “will agree on a simple rule: managers should make the choice that will maximize the value of rational investors’ diversified portfolios.”³⁷⁶

Smith’s framework focuses on investor diversification across asset

371. Booth, *supra* note 35, at 434.

372. *Id.* (citing EASTERBROOK & FISCHER, *supra* note 6, at 25–30, 339–40; POSNER, *supra* note 35, at 370–71, 380, 407–11, 417, 420, 549; Hu, *supra* note 35).

373. Under the Capital Asset Pricing Model (CAPM), all investors are assumed to be diversified and thus idiosyncratic risk does not affect the market price of a firm’s stock. STEPHEN ROSS ET AL., CORPORATE FINANCE 363–67 (10th ed. 2013).

374. Thomas A. Smith, *The Efficient Norm for Corporate Law: A Neotraditional Interpretation of Fiduciary Duty*, 98 MICH. L. REV. 214, 242 (1999).

375. *Id.*

376. *Id.*

classes but ignores diversification across firms. In discussing the optimal amount of risk for a manager to take on, John Armour and Jeffrey Gordon extend this consideration of diversified investor preferences to inter-firm effects.³⁷⁷ They observe that while conventional wisdom holds that a diversified investor typically desires an individual firm to take on more, rather than less, risk as compared to a concentrated shareholder, this is *not* the case when it comes to firms that generate *systemic* risks, in which case the diversified shareholder desires the firm to take on *less* risk.³⁷⁸ They argue that in this situation, loyalty to diversified investors is socially desirable, but at odds with the goal of shareholder value maximization, as measured by the share price.³⁷⁹ They advocate, in the case of systemically important firms, for the imposition of director liabilities that explicitly prioritize diversified shareholder welfare over share price maximization.³⁸⁰

While “most scholars” advocate that “management should manage with the interests of diversified stockholders in mind,”³⁸¹ these arguments generally ignore the perverse inter-firm production effects this mandate would bring about. Frank Easterbrook and Daniel Fischel, advocates of a

377. John Armour & Jeffrey N. Gordon, *Systemic Harms and Shareholder Value*, 6 J. LEGAL ANALYSIS 35 (2014).

378. *Id.*

379. *Id.* at 39 (“[S]hare price maximization can in the presence of systemic externalities lead to reduced portfolio returns for investors.”).

380. *Id.*

381. Booth, *supra* note 35, at 434. This argument of the alignment of diversified investor interest with the social welfare maximizing objective also appears in discussions of the positive externalities generated by disclosure. Increased disclosure from an individual firm provides information to the firm’s industry competitors, suppliers, and customers that weakens the firm’s competitive advantage and bargaining position. Merritt Fox describes these disclosure costs as “interfirm costs.” Merritt B. Fox, *Retaining Mandatory Securities Disclosure: Why Issuer Choice Is Not Investor Empowerment*, 85 VA. L. REV. 1335, 1345 (1999). Because “interfirm costs” are imposed only on the disclosing firm, while generating benefits for other firms, the socially optimal level of disclosure, Fox argues, exceeds the level that would be chosen under private ordering. *Id.* at 1344–45. Roberta Romano argues that the solution to this problem does not require government regulation because diversified shareholders will pressure the firm into releasing the socially optimal level of disclosure, thereby internalizing the externality. Roberta Romano, *Empowering Investors: A Market Approach to Securities Regulation*, 107 YALE L.J. 2359, 2368 (1998) (“[Investors] will desire a regime requiring the information’s disclosure because, by definition of a positive externality, the expected gain on their shares in competitors will offset the loss on their shares in the issuer.”) (citing Ronald A. Dye, *Mandatory Versus Voluntary Disclosures: The Cases of Financial and Real Externalities*, 65 ACCT. REV. 1, 15–16, 18–19 (1990)); Fox argues that Romano is incorrect in this assertion because (writing in 1999) most diversified investors do not hold shares of all relevant firms. He notes, “[o]nly an investor that holds a portfolio consisting of the same percentage of all stocks available in the market—an index fund—would privately experience costs and benefits from disclosure that parallel its social costs and benefits. Yet index funds are notoriously passive concerning corporate governance.” Fox, *supra*, at 1353 n.30.

fiduciary duty to diversified shareholders, note these shareholders have “an investment in the economy as a whole and therefore want[] whatever social or private governance rules maximize the value of all firms put together[]; they are] not interested in maximizing one firm’s value if that comes out of the hide of some other corporation.”³⁸² While they describe a portfolio perspective that is consistent with the arguments of this Article, they somehow neglect to consider that this interest, combined with control over individual firm’s production pathways, would lead to inter-firm distortions at odds with the assumption of firm specific profit-maximization that forms the theoretical basis for shareholder primacy.

Economy-wide diversification means that investors become common owners of firms that compete and impose costs on one another. If the “overall objective of corporate law . . . [is] to serve the interests of society as a whole,”³⁸³ how should corporate law respond to this reassessment of diversified investor behavior? Proponents of shareholder primacy argue that requiring managerial devotion to shareholder interests is the best way to maximize aggregate social welfare.³⁸⁴ This argument assumes that while externalities exist, and impose societal costs, individual firms lack market power to internalize them directly without ceding market share to competitors willing to externalize their costs.³⁸⁵ This Article, however, provides evidence that diversified investors can, in fact, implement externality internalization. In this case, deviation from share price maximization can improve portfolio efficiency. However, diversified institutional investor market power to internalize externalities comes along with the power to influence other inter-firm behaviors, like encouraging monopoly pricing and monopsony purchasing. The net welfare effects of common ownership require further study, but intuition

382. EASTERBROOK & FISCHER, *supra* note 6, at 29.

383. John Armour et al., *What is Corporate Law?*, in *THE ANATOMY OF CORPORATE LAW: A COMPARATIVE AND FUNCTIONAL APPROACH* 22 (Reiner Kraakman et al. eds., 2009) (arguing that corporate law should be concerned with advancing the “aggregate welfare of all who are affected by a firm’s activities”).

384. Hansmann & Kraakman, *supra* note 6, at 441 (“[T]here is convergence on a consensus that the best means to this end (that is, the pursuit of aggregate social welfare) is to make corporate managers strongly accountable to shareholder interests and, at least in direct terms, only to those interests.”). While advocates for shareholder primacy acknowledge that the generation of externalities is an exception to this socially desirable outcome, the regulation of externalities lies solely in the domain of the government, and for companies to address them directly would be infeasible and inefficient. *See* Hansmann & Kraakman, *supra* note 6, at 442; Jensen, *supra* note 7, at 16; *cf.* Hart & Zingales, *supra* note 36 (arguing that because shareholder welfare and market value diverge, fiduciary duties should be re-interpreted to require allegiance to shareholder interests over share price maximization and failing to address the competitive effects such an amendment might encourage).

385. *See, e.g.*, Jensen, *supra* note 7, at 16.

suggests this behavior is not aligned with aggregate social welfare.³⁸⁶

The portfolio-maximizing objective of common owners suggests that the advocates of managerial duty to diversified shareholders have not fully considered the perverse effects such a duty could create.³⁸⁷ Beyond the market distortions that such a duty might enable, it is unclear how a manager could be expected to meet it. Richard Booth argues that diversified shareholder utility maximization would be so impractical and so challenging to determine, that diversified stockholders themselves would prefer management to manage “as if for the benefit of undiversified owners simply because such a system is the best that can be devised.”³⁸⁸ Indeed, shareholder value maximization as a theory of corporate purpose rests, in part, on the simplicity of measuring managerial success through a single metric.³⁸⁹

CONCLUSION

BlackRock CEO Larry Fink’s 2018 annual letter to CEOs, entitled “A Sense of Purpose,” cautioned that because “many governments [are] failing to prepare for the future,” it fell to the private sector to “respond to broader societal challenges.”³⁹⁰ Some responded to his letter with ridicule: “Fink’s social purpose has no grounding in economics,” argued one asset manager.³⁹¹ But there is a rational economic grounding: Fink’s interest in preventing harm to BlackRock’s economy-mirroring portfolio of assets. Global climate change is one “societal challenge” that governments are

386. See discussion of net welfare effects, *supra* section III.A.

387. See, e.g., Henry T. C. Hu, *New Financial Products, the Modern Process of Financial Innovation, and the Puzzle of Shareholder Welfare*, 69 TEX. L. REV. 1273, 1282 (1991) (noting that diversified shareholders might logically desire a firm in a dying industry to simply liquidate its assets, ceding market share to its competitors).

388. Booth, *supra* note 35, at 454; *id.* at 447 (“That is, management would need to consider the wealth effect of business decisions in terms of their fit with all other stocks in the portfolio”). This observation mirrors the discussion in section III.B. regarding the impossibility of optimal portfolio management from the perspective of the central allocator of resources.

389. See, e.g., Robert J. Rhee, *A Legal Theory of Shareholder Primacy*, 102 MINN. L. REV. 1951, 2008 n.249 (2018) (“Coordination to a single objective is consistent with agency cost theory of the firm, which says that an agent must be given a single objective, lest the agent will pursue his own interest and agency cost will in-crease.”).

390. *Larry Fink’s 2018 Letter*, *supra* note 277. He made much the same message in his 2019 letter: “Stakeholders are pushing companies to wade into sensitive social and political issues – especially as they see governments failing to do so effectively.” Larry Fink, *Larry Fink’s 2019 Letter to CEOs: Purposes and Profit*, BLACKROCK (2019), <https://www.blackrock.com/corporate/investor-relations/2019-larry-fink-ceo-letter> [<https://perma.cc/J6EM-TQVC>].

391. Vito J. Racanelli, *Did BlackRock’s Larry Fink Go Too Far?*, BARRON’S (Jan. 20, 2018), <https://www.barrons.com/articles/did-blackrocks-larry-fink-go-too-far-1516418347> [<https://perma.cc/235X-ZAJF>].

failing to meet. Institutional investors have the economic incentive to function as “surrogate regulators,” sacrificing individual firm profits for the benefit of the broader portfolio. This explanation of *why* institutional investors pressure firms to voluntarily reduce emissions has challenged the widespread assumption that shareholders uniformly seek to maximize share value. Further, investors have the ability to carry out their portfolio-maximizing agenda through their power over both the market and managers. This explanation of *how* institutional investors are able to pressure firms into deviating from a profit maximizing objective challenges the traditional view of diversified investor passivity.

Thus far, discussion of the appropriate legal response to common ownership has focused on the law of antitrust. The arguments outlined in this Article show that corporate law must also respond given its present failure to account for the behavior and influence of diversified investors.