

Will Systematic Stewardship Save the Planet?

Law Working Paper N° 739/2023

November 2023

Zohar Goshen

Columbia University and ECGI

Assaf Hamdani

Tel Aviv University and ECGI

© Zohar Goshen and Assaf Hamdani 2023. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

This paper can be downloaded without charge from:
http://ssrn.com/abstract_id=4605549

<https://ecgi.global/content/working-papers>

ECGI Working Paper Series in Law

Will Systematic Stewardship Save the Planet?

Working Paper N° 739/2023

November 2023

Zohar Goshen
Assaf Hamdani

For invaluable comments we are thankful to Michael Gerrard, Jeffrey Gordon, Sharon Hannes, Kobi Kastiel, Joshua Mitts, Elizabeth Pollman, Lisa Sachs, Roberto Tallarita, Eric Talley, and the participants at the Columbia Law School Faculty Talk, and the Winter Deals Workshop at BYU. For outstanding assistance in research we are grateful to Dana Zilberman, John V Merle II, Kyle Mary Oefelein, and Avi Weiss.

© Zohar Goshen and Assaf Hamdani 2023. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Abstract

The largest institutional investors have solidified their status as “universal owners,” holding almost eighty percent of the U.S. stock market. The growing influence of these investors over the companies they invest in has sparked optimism among scholars and activists that asset managers will use their clout to steer firms towards Environmental, Social, and Governance (ESG) objectives. But such optimism may be misplaced. Focusing on a key ESG aspect, carbon emission reduction, we argue that universal owners lack the necessary incentives and competence to pressure corporations to lower emissions through systematic stewardship. Universal owners have distorted incentives, as they market ESG funds with conflicting promises: “Doing well while doing good.” This untenable promise that ESG-fund will “do well,” or match the returns of non-ESG funds, prevents universal owners from effectively “doing good,” or meaningfully compelling corporations to reduce emissions. Furthermore, universal owners lack competence to fulfill this role because, although climate change is a systematic risk, addressing it requires firm-specific engagement, as well as economy-wide coordination, which universal owners cannot provide. Worse yet, we demonstrate that no other actors have the incentives or competence to provide the required firm-specific engagement. Ultimately, we conclude that investor stewardship is a very poor substitute for environmental regulation. While universal owners are ill-equipped to direct corporations toward efficient climate solutions, these investors still have a role to play. Universal owners have proven adept at directing politicians to protect their interests through prodigious lobbying efforts. Therefore, the most effective systematic stewardship that universal owners can provide is repurposing their political capture machine from protecting themselves to protecting the universe.

Keywords: systematic stewardship, carbon emissions, ESG, ESG funds, universal owners, hedge funds, agency costs

JEL Classifications: K22, K32

Zohar Goshen*

Jerome L. Green Professor of Transactional Law
Columbia University
435 West 116th Street
New York, NY 10027, United States
phone: +1 212 854 9760
e-mail: zohar.goshen@law.columbia.edu

Assaf Hamdani

Professor of Law
Tel Aviv University, The Buchmann Faculty of Law
Dr George Wise St
Tel Aviv 6997801, Israel
e-mail: ahamdani@tauex.tau.ac.il

*Corresponding Author

WILL SYSTEMATIC STEWARDSHIP SAVE THE PLANET?

Zohar Goshen* and Assaf Hamdani**

The largest institutional investors have solidified their status as “universal owners,” holding almost eighty percent of the U.S. stock market. The growing influence of these investors over the companies they invest in has sparked optimism among scholars and activists that asset managers will use their clout to steer firms towards Environmental, Social, and Governance (ESG) objectives. But such optimism may be misplaced. Focusing on a key ESG aspect, carbon emission reduction, we argue that universal owners lack the necessary incentives and competence to pressure corporations to lower emissions through systematic stewardship.

Universal owners have distorted incentives, as they market ESG funds with conflicting promises: “Doing well while doing good.” This untenable promise that ESG-fund will “do well,” or match the returns of non-ESG funds, prevents universal owners from effectively “doing good,” or meaningfully compelling corporations to reduce emissions. Furthermore, universal owners lack competence to fulfill this role because, although climate change is a systematic risk, addressing it requires firm-specific engagement, as well as economy-wide coordination, which universal owners cannot provide.

Worse yet, we demonstrate that no other actors have the incentives or competence to provide the required firm-specific engagement. Ultimately, we conclude that investor stewardship is a very poor substitute for environmental regulation. While universal owners are ill-equipped to direct corporations toward efficient climate solutions, these investors still have a role to play. Universal owners have proven adept at directing politicians to protect their interests through prodigious lobbying efforts. Therefore, the most effective systematic stewardship that universal owners can provide is repurposing their political capture machine from protecting themselves to protecting the universe.

* Jerome L. Greene Professor of Transactional Law, Columbia Law School

** Professor of Law, Buchman Faculty of Law and School of Management, Tel Aviv University. For invaluable comments we are thankful to Michael Gerrard, Jeffrey Gordon, Sharon Hannes, Kobi Kastiel, Joshua Mitts, Elizabeth Pollman, Lisa Sachs, Roberto Tallarita, Eric Talley, and the participants at the Columbia Law School Faculty Talk, and the Winter Deals Workshop at BYU. For outstanding assistance in research we are grateful to Dana Zilberman, John V Merle II, Kyle Mary Oefelein, and Avi Weiss.

INTRODUCTION.....	2
I. THE ESG PROMISE	17
A. THE RISE OF UNIVERSAL OWNERS	19
B. INVESTOR PREFERENCES AND ESG FUNDS.....	21
C. PORTFOLIO PRIMACY	22
D. SYSTEMATIC STEWARDSHIP	27
II. ASSET MANAGERS: INCENTIVES	29
A. THE ESG TENSION.....	29
B. TRANSITION STRATEGIES.....	33
C. MANAGEMENT	34
i. Greenwashing	35
ii. Agency Costs	37
D. ACTIVIST HEDGE FUNDS	39
E. UNIVERSAL OWNERS	42
III. COMPETENCE: SYSTEMATIC RISKS, FIRM-SPECIFIC SOLUTIONS	44
A. UNIVERSAL OWNERS AND FIRM-SPECIFIC STRATEGIES	44
B. SYSTEMATIC RISKS, FIRM-SPECIFIC SOLUTIONS.....	46
i. Setting Targets	46
ii. Disclosure	49
iii. Compensation	52
C. COORDINATION.....	52
IV. FIRM-SPECIFIC DECARBONIZATION: NEW CHAMPIONS?.....	55
A. CLIMATE ACTIVISTS	56
B. ESG DIRECTORS	57
C. INVESTOR COALITIONS	59
V. POLICY IMPLICATIONS.....	61
SUMMARY	65

INTRODUCTION

Climate change has emerged as an inescapable global crisis, posing an existential threat to our planet and requiring corporations reevaluate their strategies for sustainable growth.¹ Against this

¹ See Robert G. Eccles and Svetlana Klimenko, *The Investor Revolution*, HARV. BUS. REV. (May 2019) <https://hbr.org/2019/05/the-investor-revolution>; *Climate Change: A Threat to Human Wellbeing and Health of the Planet. Taking Action Now Can Secure Our Future*, <https://www.ipcc.ch/2022/02/28/pr-wgii-ar6/>; David Vergun, *Defense Secretary Calls Climate Change an Existential Threat*,

backdrop, the owner of the public corporation has dramatically transformed. “Dispersed ownership” of public equities—numerous individuals and other small investors each owning a tiny fraction of public corporations—has now transformed into “universal ownership”—a small number of institutional investors owning substantial stakes in virtually all publicly traded corporations.²

The convergence of environmental urgency and the rising power of universal owners has kindled the hope among academics and activists that universal owners will leverage their power to push companies in their portfolio to advance Environmental, Social, and Governance (“ESG”) goals.³

While it is arguable that some ESG goals may be achieved without sacrificing profits, often the opposite is true. Why would universal owners pursue ESG goals even when they have an adverse effect on companies’ bottom line?⁴ There are two groups of leading

<https://www.defense.gov/News/News-Stories/Article/Article/2582051/defense-secretary-calls-climate-change-an-existential-threat/>.

² See generally Matthew Backus, Christopher Conlon & Michael Sinkinson, *Common Ownership in America: 1980–2017*, 13 AM. ECON. J.: MICROECON. 273 (2021) (documenting the increase in ownership by institutional investors); Edward Rock, *Institutional Investors in Corporate Governance*, in THE OXFORD HANDBOOK OF CORPORATE LAW AND GOVERNANCE 363, 365–67 (Jeffrey N. & Wolf-Georg Ringe eds., 2018) (describing the “‘de-retailization’ of the capital markets”). As a stark demonstration of this transformation, institutional investors now own between 70% and 85.8% of the ten largest U.S. companies. *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>.

³ See Wolf-Georg Ringe, *Investor-Led Sustainability in Corporate Governance*, 7 ANN. CORP. GOVERNANCE 93, 95 (2022) [hereinafter Ringe, *Investor-Led Sustainability*] (describing the “increasingly broad global consensus that the asset management sector has a vital role to play in helping society solve existential challenges such as the current climate crisis”).

⁴ As we explain in *Part II.A. infra*, asset managers often argue that the pursuit of ESG goals will increase performance, especially in the long term. Economists have developed models showing that the commitment to ESG goals might be consistent with value maximization. See, for example, Joscha Nollert, George Filis, & Evangelos Mitrokostas, *Corporate Social Responsibility and Financial Performance: A Non-Linear and Disaggregated Approach*, 52 ECON. MODELLING 400 (2016) (corporate social responsibility pays off only above a certain threshold of investment). Several scholars have used the term ‘enlightened shareholder value’ to describe the approach that ESG would maximize long term value. See, for example, Robert Bartlett & Ryan Bubb, *Corporate Social*

explanations. The first focuses on asset managers' competition for investors, who increasingly care about ESG.⁵ Under this view, whether asset managers genuinely care about their investors' preferences or use ESG as a marketing ploy, universal owners push companies to advance ESG goals in response to their clients' demand for sustainable investments.

The second group of explanations has generated understandable enthusiasm for the possibility of a corporate-driven solution to climate change. These explanations focus on the threats posed by ESG risks to the entire economy, and the unique incentives of universal owners to solve for these threats.

Scholars have advanced two versions of these explanations. The "portfolio primacy" version argues that universal owners care about a specific firm's value only inasmuch as it affects the value of their portfolio.⁶ Therefore, if one firm inflicts negative externalities on others, universal owners will prefer to sacrifice that firm's value to the extent that preventing these externalities increases the value of their portfolio by a greater amount. For example, forcing ExxonMobil to cut emissions might decrease its value, but increase the value of other public companies adversely affected by climate risks.⁷

The second version argues that some ESG concerns are systematic risks: events that would affect the entire market. Universal owners should therefore use their power to push companies in their portfolio to adopt *uniform* measures to tackle systematic ESG risks—such as climate change. This would allow universal owners to enjoy

Responsibility through Shareholder Governance, ECGI - Law Working Paper No. 682/2023 Available at SSRN: <https://ssrn.com/abstract=4354220>; Virginia Harper Ho, *Enlightened Shareholder Value: Corporate Governance Beyond the Shareholder Stakeholder Divide*, 36 J. CORP. L. 59 (2010). For a critique of this approach, see Lucian Bebchuk, Kobi Kastiel & Roberto Tallarita, *Does Enlightened Shareholder Value Add Value*, 77 BUS. LAW. 731 (2022). Our analysis, however, focuses on ESG measures that require companies to sacrifice their profits.

⁵ See Michal Barzuza, Quinn Curtis & David H. Webber, *Shareholder Value(s): Index Fund ESG Activism and the New Millennial Corporate Governance*, 93 S. CAL. L. REV. 1243 (2020); Dorothy S. Lund, *Asset Managers as Regulators*, 171 U. PA. L. REV. 77 (2023).

⁶ See Part II.B, *infra*.

⁷ As Marcel Kahan and Ed Rock persuasively argue, such explicit tradeoffs are prohibited under Delaware corporate law and other federal laws and regulations. See Marcel Kahan and Edward B. Rock, *Systemic Stewardship with Tradeoffs*, 48 J. CORP. L. 497 (2023) [hereinafter Kahan & Rock, *Systemic Stewardship*].

economies of scale (spreading the cost of crafting and implementing these policies over their giant portfolios) and scope (applying these policies across companies and industries).⁸

The ESG concept encompasses a variety of issues, with inevitable tradeoffs among them.⁹ This has led critics to question investors' competence to effectively promote ESG goals.¹⁰ Moving beyond this critique, we will focus only on one dimension: *carbon emissions*. Emissions are an especially promising target of systematic stewardship. Global warming undoubtedly poses a systematic risk, and greenhouse gas (GHG) emissions can be measured and quantified.¹¹ Indeed, universal owners have been pushing companies to decrease their carbon footprint, which has led some politicians to blame

⁸ See John C. Coffee, Jr., *The Future of Disclosure: ESG, Common Ownership, and Systematic Risk*, COL. BUS. L. REV. 602 (2021) [hereinafter Coffee, *The Future of Disclosure*]; Jeffrey N. Gordon, *Systematic Stewardship*, 47 J. CORP. L. 627 (2022) [hereinafter Gordon, *Systematic Stewardship*].

⁹ The *Environmental* category encompasses climate change, greenhouse gas (GHG) emissions, resource depletion, waste and pollution, water and energy efficiency, deforestation, and biodiversity. The *Social* heading refers to working conditions, equal opportunities, human rights, employee diversity, health and safety, child labor and slavery, community engagement, and philanthropy. And under *Governance*: business ethics, executive pay, board diversity and structure, bribery and corruption, political lobbying and donations, tax strategy, and compliance. See also Elizabeth, *The Making and Meaning of ESG* (U of Pa, Inst for Law & Econ Research Paper No. 22-23, 2022), (European Corporate Governance Institute - Law Working Paper No. 659/2022), <https://ssrn.com/abstract=4219857>.

¹⁰ See Lucian A. Bebchuk & Robert Tallarita, *The Illusory Promise of Stakeholder Governance*, 106 CORNELL L. REV. 91, 129 (2020) (arguing that “trade-offs are inevitable and arise frequently. Companies constantly face choices that might favor one group at the expense of another and must pick winners and losers.”); Alperen A. Gözlügöl, *The Clash of ‘E’ and ‘S’ of ESG: Just Transition on the Path to Net Zero and the Implications for Sustainable Corporate Governance and Finance*, 15 J. OF WORLD ENERGY LAW & BUS. 1, 4 (2022) (discussing the tension between cutting emissions and employees’ welfare).

¹¹ As we explain below, there are currently many regimes for disclosing emissions. See Part III.B.ii *supra*. Yet, as a matter of principle, carbon emissions can be quantified and measured. See, *i.e.*, Blackrock 2022 Greenhouse Gas Emissions Report 2, <https://www.blackrock.com/corporate/literature/continuous-disclosure-and-important-information/blackrock-2022-ghg-emissions-report.pdf> (describing Blackrock’s approach to measuring its own emissions and reporting its total emissions for 2022).

universal owners for high gasoline prices.¹² Importantly, in 2022 the Securities and Exchange Commission (SEC) proposed comprehensive climate risk disclosure rules to enable universal owners and other asset managers to price climate risks and push companies to reduce emissions.¹³

This Article argues that, regrettably, the stewardship of universal owners will be ineffective in reducing emissions due to their lack of the necessary *incentives* and *competence*.¹⁴ The incentives of universal owners may lead them to push transition strategies that are not optimal for the planet. And further, these owners are incapable of driving the firm-specific decarbonization strategies required for effective emissions reduction. We show that no other champion will emerge to fill this gap, and legal reforms, such as climate-risk disclosure, will not solve the issue.

Consider universal owners' incentives. The demand for ESG investments is one of the driving forces of universal owners' pressure on companies to reduce emissions. Fund managers attract investors into ESG funds by promising to advance ESG goals, while also insisting that the funds' commitment to ESG goals will not come at the expense of investor returns.¹⁵ "Doing well while doing good," is the

¹² See Dan Mangan, *That Is Not Capitalism, That Is Abusing the Market*, *Sen. Ted Cruz Blasts Blackrock's Larry Fink's 'Woke' ESG Policies*, CNBC (October 18, 2022, 6:01 P.M.), <https://www.cnbc.com/2022/05/24/sen-ted-cruz-blasts-larry-fink-over-woke-shareholder-votes-on-climate.html>.

¹³ See Sec. Exch. Comm'n, Proposed Rule on the Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. 21334 (proposed Apr. 11, 2022).

¹⁴ To be sure, pressure by powerful institutional investors can lead companies to take steps to reduce emissions. Our claim, however, is that universal owners' stewardship cannot produce the dramatic changes required to meet the global warming challenge and is likely to produce inefficient decarbonization strategies.

¹⁵ See Kenneth P. Pucker and Andrew King, *ESG Investing Isn't Designed to Save the Planet*, HARV. BUS. REV. <https://hbr.org/2022/08/esg-investing-isnt-designed-to-save-the-planet> ("Marketing materials of ESG funds often make lofty statements about social or environmental aspirations, but the fine print reveals that the real goal is to assure shareholder profits."); Paul Brest, Ronald J. Gilson & Mark A. Wolfson, *How Investors Can (and Can't) Create Social Value*, 44 J. CORP. L. 205, 208 (2018) (the literature published by asset managers manifests 'considerable optimism' that they can create social value without sacrificing financial returns).

marketing mantra.¹⁶ Thus, to attract investors, ESG funds must produce returns on par with competing ESG funds and the benchmark, non-ESG index.

These commitments, we argue, undermine the universal owner's incentives in exercising their two main levers to control their portfolio companies: *exit* and *voice*. *Exit* refers to universal owners' investment, and more importantly, *divestment* decisions regarding their ownership of certain stock. *Voice* refers to universal owners' stewardship of their companies—including their voting and engagement decisions. Fund managers that divest from environmentally unfriendly or 'brown' companies lose the benefit of the returns these companies produce. For instance, in 2022 the oil and gas industry outperformed all other sectors of the S&P index, posting a 57% increase while the overall index declined by 19%. Moreover, these commitments might lead universal owners to support management in pursuing decarbonization strategies that are unlikely to benefit investors or the planet.¹⁷

This distortion of incentives becomes evident in the crucial challenge facing many major polluters: determining the optimal corporate structure for transitioning to net-zero emissions. Oil majors and other heavy polluters must decide whether to adopt a "pure play" strategy, where the polluting activity and the clean activity are separately owned and managed, or an "integrated play," where the revenues from the polluting activity are essentially financing the investment in clean energy. Leaving management to decide on firms' decarbonization strategies creates a fertile ground for management agency costs and greenwashing.¹⁸ Specifically, self-interest is likely to

¹⁶ See Sally Hamilton, Hoje Jo, & Meir Statman, *Doing Well While Doing Good? The Investment Performance of Socially Responsible Mutual Funds*, 49 FIN. ANALY. J. 62 (1993).

¹⁷ To be sure, passive funds tracking broad market indices (such as the S&P 500, for example) cannot divest from companies as long as they continue to be part of the index. See, *i.e.*, Jill E. Fisch, Assaf Hamdani & Steven Davidoff Solomon, *The New Titans of Wall Street: A Theoretical Framework for Passive Investors*, 168 U. PA. L. REV. 17 (2019). Yet, their incentive structure might affect their stewardship decisions.

¹⁸ Greenwashing arises when management takes steps that falsely appear to effectively reduce carbon emissions. See, *i.e.*, Leaders, *Sustainable Finance Is Rife with Greenwash. Time for More Disclosure*, ECONOMIST (May 22, 2021), <https://www.economist.com/leaders/2021/05/22/sustainable-finance-is-rife-with->

lead management to adopt integrated play strategies under which the company produces some green alternative, regardless of whether it is optimal strategy for the firm or the planet.¹⁹

Profit-driven activists might be expected to play an important role in preventing managers from adopting inefficient (and self-serving) strategies in response to investors' demand to reduce emissions. For example, activists who recognize that an integrated play is an inefficient way for an oil producer to cut emissions could lead a campaign to force it to divest its investment in clean energy. Indeed, leading hedge fund activists have launched campaigns calling on oil companies to adopt pure-play strategies.²⁰ So far, however, these campaigns seem to have failed. Why?

Activist hedge funds rely on the support of universal owners and other asset managers. We argue, however, that asset managers might support managers' refusal to divest "dirty" assets because a corporate structure that combines clean and dirty activities allows asset managers to enjoy the returns of the fossil fuel business while treating it as a clean investment. A pure play strategy would require managers of ESG funds to sell the "dirty" business. In contrast, an integrated play strategy allows asset managers to enjoy the returns of the fossil fuel business while treating it as a clean investment they can continue to hold in their funds.²¹

Thus, managers' agency costs and universal owners' distorted incentives might push polluters to increase investment in renewable energies even when both the planet and investors would benefit from pure play strategies. Moreover, the pressure to offer green alternatives might push public companies toward known alternatives such as wind

greenwash-time-for-more-disclosure. Agency costs arise when management, facing investor pressure to meet carbon emission targets, adopt policies that are bad for shareholders, but beneficial for management. Greenwashing concerns also apply to ESG funds themselves. See Huw Jones, *Regulators to Tighten Scrutiny of Asset Managers to Stop 'Greenwashing'*, REUTERS (June 30, 2021, 5:35 PM), <https://www.reuters.com/business/sustainable-business/regulators-tighten-scrutiny-asset-managers-stop-greenwashing-2021-06-30/>.

¹⁹ Moreover, management likely wants to control the growth rate of sustainable energies that cannibalize their fossil business.

²⁰ We discuss these campaigns in *Part IV.C infra*.

²¹ The text focuses on ESG funds. Our analysis, however, applies to all asset managers driven by the need to attract investors who would like to pressure companies to reduce emissions.

and solar energy and carbon capture and storage, while the not-yet-proven technologies that might be more directly related to the expertise of the legacy corporation are not explored.²²

Similarly, problems abound due to universal owners' lack of competence. An effective decarbonization strategy requires *firm-specific* emission goals, strategies to meet these goals, and effective means to monitor management. Universal owners, however, are notoriously incapable of leading firm-specific changes, including firm-specific decarbonization strategies.²³ Capital markets rely on activist hedge funds to initiate firm-specific policies designed to increase share value. But these funds are unlikely to launch firm-specific campaigns to cut emissions.

The systematic risk of climate change cannot be adequately addressed solely through systematic measures, such as climate risk

²² For instance, geothermal drilling is a technology that is based on drilling deep into the ground and exploiting the heat from the center of the earth. Drilling is the expertise of oil companies, but investing in new, as yet unproven technology might require publicly traded fossil fuel companies to incur substantial expenditures without getting short-term credit for reducing emissions. This might explain why public companies have thus far declined to invest in this technology. See Michael J. Coren, *This Is the Year Oil Companies Finally Invest in Geothermal*, QUARTZ (Jan. 19, 2021), <https://qz.com/1958041/oil-companies-may-finally-invest-in-geothermal-in-2021> (as of 2021, only one public company invested in geothermal energy); Jinjoo Lee, *Can the Oil-and-Gas Industry Crack Geothermal Energy?*, WALL ST. J. (Apr. 3, 2023), <https://www.wsj.com/articles/can-the-oil-and-gas-industry-crack-geothermal-energy-fda62abe>. Consistent with our analysis, government incentives—as part of the Inflation Reduction Act of 2022—could induce oil and gas companies to invest in geothermal energy. See Ben Lefebvre & Kelsey Tamborrino, *Meet the Renewable Energy Source Poised for Growth With the Help of the Oil Industry*, POLITICO (Jan. 1, 2023), <https://www.politico.com/news/2023/01/01/renewable-energy-source-oil-industry-00075008>.

²³ See 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, 892 (2013) (explaining that “benefit-cost calculation typically will point to de minimis governance expenditures by the diversified intermediary institutions.”) [hereinafter Gilson & Gordon, *Agency Capitalism*]; Dorothy S. Lund, *The Case Against Passive Shareholder Voting*, 43 J. CORP. L. 493, 495 (2018) (arguing that passive investors lack adequate incentives to become informed shareholders); Lucian A. Bebchuk & Scott Hirst, *Index Funds and the Future of Corporate Governance: Theory, Evidence, and Policy*, 119 COLUM. L. REV. 2029, 2039 (2019) (criticizing the Big Three for their failure to incorporate firm-specific information into their decisions) [hereinafter Bebchuk & Hirst, *Index Funds*].

disclosure, industry-specific emission targets, or climate-based compensation.²⁴ Consider a requirement by universal owners that companies disclose their emissions.²⁵ Using private ordering to impose climate disclosure faces challenges in coordination and enforcement.²⁶ But even if the SEC were to require it, disclosure alone would not be enough to drive companies to significantly reduce emissions. As we explained above, universal owners' incentives might discourage them from divesting from brown companies.²⁷ And disclosure will have a questionable effect at best on firms' cost of capital and the channeling of investments to lower-emissions corporations.²⁸

Another systematic measure is universal emission targets. Investors can require, for example, all corporations (in specific industries) to reduce emissions by 10% every year. The surface uniformity belies the wildly different—and perhaps counterproductive—effect this requirement will have on different industries and corporations.

²⁴ See also Amanda Rose, *A Hard Look at Portfolio Primacy Theory as a Financial Rationale for Sec-Mandated ESG Disclosure* (2023) (arguing that climate disclosure might fail to induce climate stewardship by universal owners that lack incentives and competence to engage in firm-specific engagement).

²⁵ This is one the principal requirements of Climate Action 100+, perhaps the largest investor coalition dedicated to fight global warming. See *The Three Asks*, <https://www.climateaction100.org/approach/the-three-asks/> (listing corporate disclosure of climate-related risks as one of the engagement priorities of asset managers).

²⁶ See Part III.B.iii *infra*.

²⁷ Disclosure can be justified by the need to ensure the accuracy of stock prices. Emissions and climate risks, however, are not fully priced by markets. Katharina Pistor, *Green Markets Won't Save Us*, PROJECT SYNDICATE (Mar. 16, 2021), <https://www.project-syndicate.org/commentary/green-markets-esg-investments-risky-bet-on-climate-change-by-katharina-pistor-2021-03>. Our analysis, therefore, focuses on the claim that disclosure should facilitate investors' pressure on polluters by using their 'voice' or the threat of 'exit.'

²⁸ Moreover, firms may respond to disclosure requirements by relying on integrated play strategies and acquiring 'green' business rather than cutting emissions. See Tong Li et. al., *ESG Considerations in Acquisitions and Divestitures: Corporate Responses to Mandatory ESG Disclosure* (May 2023), <https://ssrn.com/abstract=4376676> (finding evidence that firms increase 'green' acquisition in response to mandatory ESG disclosure). Disclosure can serve the interests of other stakeholders. See generally Ann Lipton, *Not Everything Is About Investors: The Case for Mandatory Stakeholder Disclosure*, 37 YALE J. REG. 499 (2020).

Consider a few examples. For ExxonMobil, a major oil producer, this target entails substantial effort and a meaningful reduction in output. Given that still there is a limited supply of sustainable energy to substitute for current fossil energy use, the emissions-reduction policy could end up backfiring. Privately held producers, not subject to universal owners' discipline, may increase their production to make up the difference.²⁹ Alternatively, there will be a shortfall in supply and the price of oil will go up. Apart from disproportionately harming the poor and stimulating a political backlash,³⁰ this will also increase the use of coal and make much more environmentally harmful oil production technologies—such as tar sand³¹ and fracking³²—profitable, ultimately resulting in higher net emissions.

What will this requirement mean for a company like United Airlines? Since there are yet no electric airplanes, it would presumably have to reduce the availability of flights.³³ This will increase flight prices, making them affordable only for the rich. Will the poor use

²⁹ See Roberto Tallarita, *The Limits of Portfolio Primacy*, 76 VAND. L. REV. 511, 530-533 (2023) [hereinafter Tallarita, *Portfolio Primacy*].

³⁰ See Zohar Goshen, Assaf Hamdani & Alex Raskolnikov, *Poor ESG* (on file with authors). See also Aparna Mathur & Adele C. Morris, *Distributional Effects of a Carbon Tax in Broader U.S. Fiscal Reform*, 66 ENERGY POL'Y 326, 328 (2014).

³¹ See Vipal Monga, *One of the World's Dirtiest Oil Patches Is Pumping More Than Ever*, WALL ST. J. (Jan. 13, 2022) <https://www.wsj.com/articles/oil-sands-canada-dirty-carbon-environment-11642085980>.

³² See Stacey Shackford, *Natural Gas from Fracking Could Be 'Dirtier' than Coal*, *Cornell professors find*, CORNELL CHRONICLE (October 21, 2022, 3:10 P.M) <https://news.cornell.edu/stories/2011/04/fracking-leaks-may-make-gas-dirtier-coal>

³³ To avoid this result, airlines companies have thus far been using “offsetting” methods instead of reducing emissions. The carbon offset market is rife with fraud, with companies selling offsets for “refraining” from activity they would not be able to engage in legally. See Ben Elgin, *This Timber Company Sold Millions of Dollars of Useless Carbon Offsets*, BLOOMBERG (Mar. 17, 2022), <https://www.bloomberg.com/news/articles/2022-03-17/timber-ceo-wants-to-reform-flawed-carbon-offset-market> (“‘There’s a distinct possibility that a great deal of existing carbon offsets are effectively fake,’ says Robert Mendelsohn, professor of forest policy and economics at Yale.”); Patrick Greenfield, *Revealed: More Than 90% of Rainforest Carbon Offsets by Biggest Certifier Are Worthless, Analysis Shows*, THE GUARDIAN (Jan. 18, 2023) <https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe>.

worse alternatives to the environment, like driving private combustion engine cars from New York to Miami? Higher prices will also make air-shipping of commercial freight more expensive; will it now be moved on non-electric trucks, resulting in even higher emissions?

A one-size-fits all emissions target has easily demonstrable shortcomings. The likely failure of uniform emission targets suggests that *coordination* between universal owners and other universal owners and between universal owners and firms is critical for effectively reducing emissions. Yet, although they “own the market,” universal owners cannot engage in meaningful coordination (and even firms might be limited in their ability to coordinate). On the firm level, coordinating firm-specific policies is difficult when universal owners (including different funds managed by the same sponsor) hold different concentrations of shares in specific firms or sectors and consequently have differing incentives concerning any proposed policy.³⁴ And it is even harder when regulatory constraints discourage institutional investors from coordinating firm-specific policies.³⁵

On the economy-wide level, since it will take years to transition the economy to rely on sustainable energy, the transition process must be coordinated to both increase the capacity of green energies and phase out fossil energy. Given the failure of markets to fund green energy,³⁶ creating green energy capacity might require subsidies to new technologies and investing in startup firms and other research and development projects. Universal owners are not venture capitalists, and they can neither screen technologies nor subsidize green energy at scale.³⁷ The phasing out of fossil fuels also requires coordination. In

³⁴ See, e.g., Roberto Tallarita, *Fiduciary Deadlock*, 171 U. PA. L. REV. ONLINE 1 (2023); Sean J. Griffith & Dorothy S. Lund, *Conflicted Mutual Fund Voting in Corporate Law*, 99 B.U. L. REV. 1151, 1183-1184 (2019); Ann M. Lipton, *Family Loyalty: Mutual Fund Voting and Fiduciary Obligation*, 19 TENN. J. BUS. L. 175, 176 (2017).

³⁵ See Einer Elhauge, *Horizontal Shareholding*, 129 HARV. L. REV. 1267 (2016); Edward B. Rock & Daniel L. Rubinfeld, *Antitrust for Institutional Investors*, 82 ANTITRUST L.J. 221 (2018).

³⁶ See, e.g., Naoyuki Yoshino & Farhad Taghizadeh-Hesary, *Alternatives to Private Finance: Role of Fiscal Policy Reforms and Energy Taxation in Development of Renewable Energy Projects*, in FINANCING FOR LOW-CARBON ENERGY TRANSITION 335 (Venkatachalam Anbumozhi et. al., eds., 2018)

³⁷ Some mutual funds experimented with investments in late-stage startups. See Jeff Schwartz, *Should Mutual Funds Invest in Startups? A Case Study of Fidelity Magellan Fund's Investments in Unicorns (and Other Startups) and the Regulatory*

terms of GHG emissions, the common wisdom is that oil is better than coal, gas and nuclear energy are better than oil, and sustainable energy technologies like solar and wind are better than gas and nuclear energy.³⁸ It is thus more important to help coal utility corporations to switch to gas than to switch a gas utility corporation to sustainable energy. But universal owners cannot coordinate the phasing out of fossils. On the contrary: the uniform and uninformed pressure they place on banks not to finance fossil energy projects,³⁹ such as a switch of a utility corporation from coal to gas, makes the switch from coal to gas harder to achieve when the corporation cannot afford a switch directly to sustainable energy.

Another measure arguably available for universal owners is the structure of executive compensation.⁴⁰ To incentivize management to prioritize environmental goals, universal owners can require firms to tie executive pay to environmental metrics. Recently, Allianz Global Investors, one of Europe's largest asset managers, has urged its investors to support imposing exactly this plan on its portfolio companies.⁴¹ However, this measure is unlikely to be effective,⁴² because without firm-specific knowledge universal owners will be

Implications, 95 N.C. L. REV. 1341, 1341 (2017); Sungjoun Kwon et al., *Mutual Fund Investments in Private Firms*, 136 J. FIN. ECON. 407 (2020).

³⁸ See Client Earth, *Fossil Fuels and Climate Change: The Facts*, <https://www.clientearth.org/latest/latest-updates/stories/fossil-fuels-and-climate-change-the-facts/>.

³⁹ See, for example, Paul Verney, *Big Asset Owners Pressure Banks Over Fossil Fuel Financing*, RESPONSIBLE INVESTOR (Jan. 27, 2023), <https://www.responsible-investor.com/esg-resolution-round-up-big-asset-owners-pressure-banks-over-fossil-fuel-financing/>; Camilla Hodgson, *New York State Pension Fund Urges Bank Shareholders to Back Climate Demands*, FIN. TIMES (Apr. 13, 2022), <https://www.ft.com/content/acb01465-4305-4bea-b5a2-499f93707267>.

⁴⁰ See Neuberger Berman Sustainable Equity Team, *ESG and Shareholder Value: Why Link Environmental, Social, Governance (ESG) Metrics to Executive Compensation*, Neuberger Berman Strategy Insights (October 18, 2022, 6:34 P.M.), <https://www.nb.com/en/global/insights/strategy-insights-esg-and-shareholder-value-why-link-esg-metrics-to-executive-compensation>

⁴¹ Harriet Agnew, *Allianz GI and Cevian Raise Pressure Over Linking Pay to Climate Goals*, FIN. TIMES (Feb. 28, 2022), <https://www.ft.com/content/025d0de8-4e5c-4eaa-be10-858fb2843206>

⁴² See also Lucian Bebchuk & Roberto Tallarita, *The Perils and Questionable Promise of ESG-Based Compensation*, 48 J. CORP. L. 37 (2022); David I. Walker, *The Economic (In)Significance of Executive Pay ESG Incentives*, 27 STAN. J. L. & BUS. 318 (2022).

unable to monitor whether compensation metrics are set to match the emission goals that the firms should aspire to achieve.

Given their business model and regulatory constraints, universal owners will not initiate firm-specific policies for reducing emissions.⁴³ We argue that, unfortunately, no actor has the incentive and competence to provide the firm-specific expertise required to reduce emissions.

The first potential actor, activist hedge funds, are known for devising firm-specific strategies and challenging management to implement them. But profit-driven activists are unlikely to perform this critical role concerning GHG emissions.⁴⁴ Unlike universal owners, hedge funds do not benefit from reducing systematic risks or preventing externalities. They will launch campaigns only if they expect them to increase the corporation's value (some argue only in the short term).

Second, some activists are motivated not by the desire to make profits, but by a genuine concern for the environment. Can they use the profit-driven activists' playbook and spearhead the effort to determine firm-specific carbon policies? We find this highly unlikely. Because they do not rely on value-maximizing strategies, these activists will need alternative funding sources to initiate firm-specific strategies. Moreover, profit-driven activist funds owe their success to the support of universal owners and other asset managers.⁴⁵ Given their exclusive commitment to the environment (and no regard for profits), environmental activists might fail to get support from asset managers who care also about performance (and might face distorted incentives). The lack of firm-specific knowledge makes it difficult for universal

⁴³ Universal owners are even reluctant to support shareholder proposals that are too prescriptive. *See* note 167, *infra*.

⁴⁴ *See* Coffee, *The Future of Disclosure*, *supra* note 8, at 647 (hedge funds are unlikely to play their traditional role in the context of systematic risks). Sharon Hannes, Adi Libson & Gideon Parchomovsky have also provided an insightful analysis explaining why activist hedge funds, along with other central actors in the corporate sphere, lack the competence and motivation to integrate ESG policies into their business model. *The ESG Gap*, U. PA. INST. FOR L. & ECON. Research Paper No. 23-22 (Dec. 5, 2022), available at SSRN: <https://ssrn.com/abstract=4293914>. Unlike their work, our analysis applies even if hedge fund activists, climate-driven activists, ESG directors, or investor coalitions—were to focus on the long term risks of carbon emissions.

⁴⁵ *See* Gilson & Gordon, *Agency Capitalism*, *supra* note 23, at 897.

owners in “regular” activist campaigns to determine whether to support management or the activist.⁴⁶ Yet, they can rely on imperfect signals such as the underperformance of the company’s stock price.⁴⁷ Market prices, however, do not serve as a signal in the context of not-for-profit activism. Finally, engaging in activities that would sacrifice firm value to reduce emissions will get these activists to trip over legal and regulatory constraints.⁴⁸

Third, is the possibility of universal owners appointing designated ESG directors to company boards. Regulatory constraints essentially prevent universal owners and other asset managers from actively nominating directors.⁴⁹ Moreover, activist directors rely on the support of the fund that nominated them to provide high-quality information and analysis.⁵⁰ Universal owners cannot offer similar support to directors even if they represent their interests.⁵¹ Finally, to the extent that they care only about carbon emissions, these directors will run into the same legal difficulties as the environmental activists.⁵²

Finally, investor coalitions like Climate Action 100+ (“Climate Action”) pull together the resources of many universal owners to push for measures to reduce carbon emissions.⁵³ In theory, pooling investor resources can provide Climate Action with the funding necessary to invest in firm-specific research. Yet, even well-funded investor coalitions cannot fill the role of activist hedge funds. They cannot nominate directors (they rely on their members to submit proposals).⁵⁴

⁴⁶ See, for example, Zohar Goshen & Riley Steel, *Barbarians Inside the Gates: Raiders, Activists, and the Risk of Mistargeting* 132 YALE L. J. 411 (2022).

⁴⁷ See Zohar Goshen & Gideon Parchomovsky, *The Essential Role of Securities Regulation*, 55 DUKE L.J. 711 (2006).

⁴⁸ See Kahan & Rock, *Systemic Stewardship*, *supra* note 7.

⁴⁹ See Bebchuk & Hirst, *Index Funds*, *supra* note 23.

⁵⁰ See Kobi Kastiel & Yaron Nili, “Captured Boards”: *The Rise of “Super Directors” and the Case for a Board Suite*, 2017 WIS. L. REV. 19, 36 (2017).

⁵¹ See Assaf Hamdani & Sharon Hannes, *The Future of Shareholder Activism*, 99 B.U. L. REV. 971 (2020).

⁵² See text accompanying note 48, *supra*.

⁵³ See Part IV.C, *infra*. For a review of investor coalitions and other forms of collective engagement on sustainability, see Ringe, *Investor-Led Sustainability*, *supra* note 3, at 127-131.

⁵⁴ Asset managers, and especially universal owners, face regulatory constraints that essentially prevent them from nominating directors to public company boards. See John Morley, *Too Big to Be Activist*, 92 S. CAL. L. REV. 1407 (2019).

And they will encounter the same difficulties as not-for-profits activists in getting asset managers—including their own members—to vote for its proposals. Indeed, the world's largest universal owner, BlackRock, has recently stated that it will not support shareholder proposals that “in our assessment, implicitly are intended to micromanage companies,” acknowledging their inability to gain idiosyncratic knowledge.⁵⁵

The sad prediction of this analysis is that despite the ever-growing activism to reduce carbon emissions and the mounting pressure exerted on public corporations in the last 10 years, carbon emission is constantly rising.⁵⁶

What are the implications of our analysis? Pushing companies to take meaningful steps to cut emissions requires investors to devise firm-specific strategies. Without an actor that could drive firm-specific changes, universal owners' stewardship will have, at best, a limited effect on emissions. And universal owners' incentives could lead to large-scale distortions in the much-needed development of green energy. Moreover, legal reforms, such as requiring extensive disclosure from public companies on climate risks or requiring ESG funds to be more transparent about their investment policies,⁵⁷ will not address the concerns that we have identified. Activists and academics should therefore recognize the significant limitations of universal owners as a driving force in the fight against carbon emissions. Investors' stewardship is a very poor substitute for environmental regulation. Universal owners might as well direct their efforts to lobbying governments—who do have the resources for policymaking

⁵⁵ Catherine Clifford, *Blackrock to vote for fewer climate shareholder provisions in 2022 than 2021*, CNBC (October 18, 2022, 7:51 P.M.),

<https://www.cnbc.com/2022/05/11/blackrock-to-vote-for-fewer-climate-provisions-in-2022-than-2021.html#:~:text=Blackrock%20to%20vote%20for%20fewer%20climate%20shareholder%20provisions%20in%202022%20than%202021,-Published%20Wed%2C%20May&text=BlackRock%2C%20the%20largest%20asset%20manager,than%20it%20did%20in%202021.>

⁵⁶ See *Global CO₂ Emissions from Fossil Fuel*, <https://ourworldindata.org/co2-emissions#global-co2-emissions-from-fossil-fuels>.

⁵⁷ See Allison Herren Lee, *Statement by Commissioner Lee on ESG Disclosures Proposal*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (May 26, 2022), <https://corpgov.law.harvard.edu/2022/05/26/statement-by-commissioner-lee-on-esg-disclosures-proposal/>.

as well as the scale for economy-wide coordination—for comprehensive climate regulation. Today, universal owners employ a powerful machine of political donations and lobbying aimed at preventing regulation of universal owners,⁵⁸ they should use this machine for a better purpose: pushing regulations to reduce carbon emissions.

This Article proceeds as follows: Part I first describes the rise of universal ownership in the public markets. It then details the first proposal to leverage universal owners’ “portfolio primacy” to advance ESG goals, its insurmountable legal obstacles, and the second proposal focusing on “systematic stewardship” which seems to avoid those legal obstacles. We argue that the second proposal is also flawed because, as we show in Part II, universal owners do not have the necessary incentives to reduce emissions, and as we show in Part III, they also do not have the necessary competence to engage with idiosyncratic factors around emissions policies and with coordination across the economy. Part IV further explains why new potential champions—like ESG activist funds, designated directors, and investor coalitions—are unlikely to solve universal owners’ distorted incentives and lack of competence. Part V draws policy conclusions, and a short conclusion ensues.

I. THE ESG PROMISE

For decades, investors have pushed their portfolio companies to maximize shareholder returns.⁵⁹ Recently, however, institutional investors appear to have been converted to the cause of climate

⁵⁸ See, for example, Andrew Ackerman & Ryan Tracy, *Asset Managers Notch an 'Important' Win*, WALL ST. J. (Jul. 31, 2014), <https://www.wsj.com/articles/asset-managers-may-avoid-more-oversight-by-fsoc-1406828103> (reporting on successful lobbying by asset managers to present their designation as systematically important financial institutions); Dawn Lin, *Investment Giants Lobby to Avoid Antitrust Scrutiny*, WALL ST. J. (Apr. 8, 2021), <https://www.wsj.com/articles/investment-giants-lobby-to-avoid-antitrust-scrutiny-11617883203> (lobbying by large asset managers against a proposed FTC rule).

⁵⁹ See Dorothy S. Lund & Elizabeth Pollman, *The Corporate Governance Machine*, 121 COLUM. L. REV. 2563, 2566-2567 (2021) [hereinafter Lund & Pollman, *Corporate Governance Machine*] (“[A] vast array of institutional players—proxy advisors, stock exchanges, ratings agencies, institutional investors, and associations—enshrine shareholder primacy in public markets.”).

activism.⁶⁰ Large asset managers have been stridently sounding the alarm on the climate crisis. BlackRock, the largest institutional investor with assets under management of over \$10 trillion, has ramped up public pressure on CEOs to disclose their plans for transitioning to a net-zero economy.⁶¹ Both BlackRock and Vanguard supported activist group Engine No. 1 in a landmark campaign that unseated three ExxonMobil directors for lagging in reducing emissions and investing in renewable energy.⁶²

In this Part, we review the explanations offered by scholars for the apparent change in institutional investors' approach to climate change and other ESG goals. Section I.A summarizes the structural shift in market ownership from dispersed ownership to universal ownership largely controlled by a few institutional investors. Section I.B outlines the view that universal owners' change in attitude is driven by their need to attract clients with preferences for reducing emissions or advancing other ESG goals. Section I.C reviews the portfolio primacy approach, which argues that institutions should pressure heavy-emissions firms to drastically reduce their emissions, sacrificing a chunk of the value of these firms for the good of the portfolio. We join other scholars' arguments that the portfolio primacy approach is legally infeasible and likely ineffective. Section I.D then reviews the systematic stewardship approach under which universal owners don't single out individual companies to impose value-reducing changes but shift the focus of their engagement to the systematic risks faced by the entire market and support broadly applicable policies that are beneficial for the entire portfolio.

⁶⁰ See, for example, Rodolfo Araujo, Marie Clara Buellingen, and Garrett Muzikowski, *Investors Expect Climate Action in 2022*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Mar. 21, 2022), <https://corpgov.law.harvard.edu/2022/03/21/investors-expect-climate-action-in-2022/>.

⁶¹ Andrew Ross Sorkin, *BlackRock Chief Pushes a Big New Climate Goal for the Corporate World*, N.Y. TIMES (Jan. 26, 2021), <https://www.nytimes.com/2021/01/26/business/dealbook/larry-fink-letter-blackrock-climate.html>.

⁶² Thomas Ball, James Miller, and Shirley Westcott, *Was the Exxon Fight a Bellwether?*, HARV. L. SCH. F. ON CORP. GOVERNANCE (July 24, 2021), <https://corpgov.law.harvard.edu/2021/07/24/was-the-exxon-fight-a-bellwether/>.

A. *The Rise of Universal Owners*

During the past half-century, one of the most significant trends in the U.S. securities market has been the rise of institutional investors.⁶³ While public company shares were once predominantly owned by individuals, institutional investors have gradually increased their holdings in public corporations to the point where they have collectively become the dominant market players.⁶⁴

To illustrate, as of 1965, three groups of institutional investors—mutual funds, pension funds, and insurance companies—collectively controlled approximately 14% of the U.S. stock market.⁶⁵ Their ownership, however, has grown to about 25% by 1980⁶⁶ and over 50% by 2016.⁶⁷ Fifty years ago, the so-called “Big Three” institutional investors—BlackRock, Vanguard, and State Street Global Advisors—

⁶³ Luis A. Aguilar, Commissioner, Sec. & Exch. Comm’n, Institutional Investors: Powers and Responsibilities, Speech at the Center for the Economic Analysis of Risk Workshop (Apr. 19, 2013), <https://www.sec.gov/news/speech/2013-spch041913laahtm> (“Simply stated, institutional investors are dominant market players . . .”).

⁶⁴ Jay Clayton, Chairman, SEC Rulemaking over the Past Year, the Road Ahead and Challenges Posed by Brexit, LIBOR Transition and Cybersecurity Risk, Sec. & Exch. Comm’n (Dec. 6, 2018), <https://www.sec.gov/news/speech/speech-clayton-120618> (“Institutional investors, including the funds that hold retail investments, own approximately 72 percent of the domestic stock market value.”)

⁶⁵ See BD. GOVERNORS FED. RSRV. SYS., FINANCIAL ACCOUNTS OF THE UNITED STATES: HISTORICAL ANNUAL TABLES 1965–1974 at 95 tbl.L.213 (2014) [hereinafter Federal Reserve Tables 1965–1974], <http://www.federalreserve.gov/releases/z1/20140306/annuals/a1965-1974.pdf> (presenting the U.S. stock ownership of different types of investors). Shares of U.S. corporations not held by institutional investors were held directly by the public or by large shareholders, including controlling shareholders. See John C. Coates IV, *Measuring the Domain of Mediating Hierarchy: How Contestable Are U.S. Public Corporations?*, 24 J. CORP. L. 837, 848 (1999) (discussing ownership patterns of U.S. corporations and noting the presence of controlling shareholders in an appreciable segment of the economy).

⁶⁶ See James M. Poterba & Andrew A. Samwick, *Stock Ownership Patterns, Stock Market Fluctuations, and Consumption*, in 2 BROOK. PAPERS ON ECON. ACTIVITY 295, 313 tbl.5 (William C. Brainard & George L. Perry eds., 1995) (describing the changing pattern of stock ownership during the previous three decades).

⁶⁷ See BD. GOVERNORS FED. RSRV. SYS., FINANCIAL ACCOUNTS OF THE UNITED STATES: HISTORICAL ANNUAL TABLES 2005–2015 at 123 tbl.L.223 (2016), <https://www.federalreserve.gov/releases/z1/current/annuals/a2005-2015.pdf>.

did not exist.⁶⁸ Today, they have assets under management of over \$24 trillion in total,⁶⁹ equivalent to approximately a quarter of the global GDP.⁷⁰

One of the primary factors driving the growth of institutional investors has been the meteoric rise of passively managed funds. Passive funds are mutual funds and exchange-traded funds that hold all the companies in an index.⁷¹ Torrents of capital have flowed from active strategies—which seek to own the few companies that will outperform the index—to passive funds that hold the entire index. The passively managed share of the market has exploded from 3% of the market in 1995 to 14% in 2005,⁷² to 42.9% in March 2021.⁷³

The index fund industry itself is concentrated, with the Big Three managing 80% of index fund assets. The result is that the Big Three alone now hold upwards of 20% of every company in the S&P

⁶⁸ See *A Remarkable History*, VANGUARD, <https://about.vanguard.com/who-we-are/a-remarkable-history/> (last visited Apr. 6, 2020) (noting that Vanguard was founded in 1975); *History*, BLACKROCK, <https://www.blackrock.com/corporate/about-us/blackrock-history> (last visited Apr. 6, 2020) (noting that Blackrock was founded in 1988); *Our History*, STATE STREET GLOBAL ADVISORS, <https://www.ssga.com/us/en/individual/etfs/about-us/our-history> (last visited Apr. 6, 2020) (noting that State Street Global Advisors, the asset management arm of State Street, was founded in 1978).

⁶⁹ See *Leading Mutual Fund Groups Globally as of June 2021*, by Assets Under Management, STATISTA, <https://www.statista.com/statistics/255864/top-global-fund-groups-worldwide-by-assets/>

⁷⁰ See *Global Gross Domestic Product (GDP) at Current Prices from 1985 to 2026*, STATISTA, <https://www.statista.com/statistics/268750/global-gross-domestic-product-gdp/>

⁷¹ Investors have become devotees of Modern Portfolio Theory, which posits that to maximize risk-adjusted returns, investors must diversify their portfolio. In other words, in a market as efficient as the public equity markets, it is difficult to consistently outperform the broader index while taking the same amount of risk.

⁷² See Kenechukwu Anadu et al., *The Shift from Active to Passive Investion; Potential Risks to Financial Stability*, FIN. AND ECON. DISCUSSION SERIES, FEDERAL RESERVE BOARD (May 15, 2020) <https://www.federalreserve.gov/econres/feds/files/2018060r1pap.pdf>.

⁷³ See James Seyffart, *Passive Likely Overtakes Active By 2026, Earlier if Bear Market*, BLOOMBERG INTELLIGENCE (Mar. 11, 2021), <https://www.bloomberg.com/professional/blog/passive-likely-overtakes-active-by-2026-earlier-if-bear-market/>.

500,⁷⁴ and are projected to hold over 40% in 2039.⁷⁵ These investors are sometimes referred to as “universal owners” due to their holdings of a significant stake in nearly all public companies.

Universal owners’ holdings translate into significant voting power. As of year-end 2015, the Big Three, considered collectively, were the “single” largest shareholder of almost half of all publicly listed U.S. companies (1,662 out of approximately 3,900 firms) and 88% of S&P 500 companies (438 out of 500 firms).⁷⁶ As of year-end 2017, the Big Three controlled 25% of voting shares of S&P 500 companies.⁷⁷ Institutional investors thus control an increasingly significant proportion of public stocks, which leads to their dominant voting power in virtually all issues of corporate governance.

B. Investor Preferences and ESG Funds

What explains the change in universal owners’ approach to climate risks and other ESG goals? One group of explanations focuses on universal owners’ need to attract clients with strong preferences for sustainable investments and cater to their preferences. One version focuses on the investment preferences of millennials. Knowing that the millennial generation—on average—is more concerned than their parents’ generation about social issues, institutional investors signal their virtuous stewardship philosophies in the hopes that this will draw

⁷⁴ David McLaughlin & Annie Massa, *The Hidden Dangers of the Great Index Fund Takeover*, BLOOMBERG (Jan. 9, 2020), <https://www.bloomberg.com/news/features/2020-01-09/the-hidden-dangers-of-the-great-index-fund-takeover> (finding that the Big Three own 22% of the shares of the typical S&P 500 company).

⁷⁵ See Lucian Bebchuk & Scott Hirst, *The Specter of the Giant Three*, 99 B.U. L. REV. 721, 724 (2019).

⁷⁶ See 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, 311–13 (2017).

⁷⁷ See Lucian Bebchuk & Scott Hirst, *The Specter of the Giant Three*, 99 B.U. L. REV. 721, 737–40 (2019). See also Renaud de Planta, *The Hidden Dangers of Passive Investing*, FIN. TIMES (May 30, 2017), <https://www.ft.com/content/15dd3552-3fad-11e7-82b6-896b95f30f58> (indicating that passive funds now control more than 30% of all U.S. assets, and if they “were to continue their present growth trajectory, they would own all listed stocks by 2030”).

more assets under their management.⁷⁸ On a more cynical note, one might argue that universal owners' change in attitude is no more than a marketing ploy.

Another version focuses on the rise of a new form of an asset class: ESG funds, which consider ESG factors when choosing firms to invest in.⁷⁹ Passive ESG funds often start with a general index such as S&P 500 and then eliminate from the list companies that fail certain ESG metrics.⁸⁰ In return for providing clients with a socially conscious portfolio, institutions charge significantly higher fees for ESG funds relative to other index funds.

ESG investments have become increasingly popular, to the point that some predict that by 2025 a third of global assets under management will be classified as ESG assets.⁸¹ Under this view, pushing companies to reduce emissions signals commitment to sustainable investing that could attract more investors to the ESG funds offered by asset managers. Moreover, pressuring companies to reduce emissions or pursue other stakeholder goals might be required by the funds' commitment to ESG principles.

C. Portfolio Primacy

As the science of climate change—and its source in human industrial activity—has become more certain, the gravity of the risk it

⁷⁸ See Michal Barzuza, Quinn Curtis & David H. Webber, *Shareholder Value(s): Index Fund ESG Activism and the New Millennial Corporate Governance*, 93 S. CAL. L. REV. 1243 (2020).

⁷⁹ See, e.g., ESG, VANGUARD, <https://investor.vanguard.com/investment-products/esg>. ESG funds can include a wide range of investment strategies. See Quinn Curtis, Jill Fisch & Adriana Z. Robertson, *Do ESG Funds Deliver on Their Promises?*, 120 MICH. L. REV. 393, 399 (2021) (“ESG funds range from single-issue funds that address water conservation or religious values to those that incorporate screening criteria into the construction of a broad-based index.”).

⁸⁰ See Dana Brakman Reiser & Anne Tucker, *Buyer Beware: Variation and Opacity in ESG and ESG Index Funds*, 41 CARDOZO L. REV. 1921, 1935-1938 (2020).

⁸¹ See, Adeine Diab & Gina Martin, *ESG Assets May Hit \$53 Trillion by 2025, a Third of Global AUM*, BLOOMBERG INTELLIGENCE (Oct. 18, 2022), <https://www.bloomberg.com/professional/blog/esg-assets-may-hit-53-trillion-by-2025-a-third-of-global-aum/>; James J. Tucker III & Scott Jones, *Environmental, Social, and Governance Investing: Investor Demand, the Great Wealth Transfer, and Strategies for ESG Investing*, 74 J. FIN. SERV. PROF. 56 (2020) (reporting increasing demand for sustainable investment products).

poses to the global economy has also become increasingly clear. The precise future path of climate change is uncertain, but baseline predictions for future warming range between 2.9°C and 4.8°C.⁸² This warming will impact the economy through a myriad of second-order effects, such as the rise in sea levels, higher frequency of extreme weather events, disruption in food production, biodiversity loss, increased rates of disease, and decreased efficiency of electric power grids. These climate-induced events will also have severe economic effects. While the ultimate cost of climate change reflected in the loss of global GDP is contingent on various factors, the effect is likely to be acute, comparable to a severe global recession. One recent study estimated that the global GDP loss could be between 4% (if the Paris Agreement targets are met, and temperatures increase by less than 2°C) and 18% (if no mitigating actions are taken, and temperatures rise by 3.2°C).⁸³

Firms currently lack sufficient incentives to cut emissions. Each individual firm gains substantially more profits from imposing its emissions externalities on the rest of the market than it would lose due to the long-term effects of climate change. A firm focused on maximizing value for shareholders will not volunteer to put itself at a competitive disadvantage by reigning in its emissions while its competitors do not. GHG emissions have therefore famously been characterized as “the biggest market failure the world has ever seen.”⁸⁴ Given the persistent failure of the government to impose rules that would reduce carbon emissions, scholars are understandably enthusiastic over the prospect that a paradigm shift in market ownership structure may lead investors to be rationally concerned with social and economic externalities.

To demonstrate how the rise of universal ownership might change investors’ position on externalities, consider a firm like

⁸² See Press Release, World Meteorological Organization, Global Temperatures Set To Reach New Records In Next Five Years (May 17, 2023), <https://public.wmo.int/en/media/press-release/global-temperatures-set-reach-new-records-next-five-years>.

⁸³ See Press Release, Swiss Re Group, World Economy Set to Lose Up to 18% GDP from Climate Change If No Action Taken, Reveals Swiss Re Institute’s Stress-Test Analysis (Apr. 22, 2021), <https://www.swissre.com/media/news-releases/nr-20210422-economics-of-climate-change-risks.html>.

⁸⁴ See Nicholas Stern, *The Economics of Climate Change*, 98 AM. ECON. REV. 1 (2008).

ExxonMobil, single-handedly responsible for 1.4% of global GHG emissions.⁸⁵ ExxonMobil continues to emit large amounts of GHG into the atmosphere because it is a net-positive action: The company is making more profit from producing and selling fossil fuels than the relatively small amount of economic harm it is likely to suffer from climate change. In theory, ExxonMobil's shareholders' incentives are aligned with the company's—everyone will rationally wish to maintain ExxonMobil's current level of emissions. Climate change may, of course, have severe implications for other firms, such as the food-production conglomerate Nestle. ExxonMobil shareholders, however, have no financial incentive to care about the climate change externalities imposed on Nestle—they own ExxonMobil, not Nestle.

Enter universal owners, who own the entire market, usually in proportion to the market capitalization of each company. From their perspective, the argument goes, Exxon's emissions are a net-negative: All companies in their portfolio will lose more from climate change costs caused by these emissions than the profits Exxon makes from selling fossil fuels. Since they internalize the externalities of heavy emitters, universal owners are therefore rationally motivated to work on minimizing those externalities to avoid future losses to their portfolio.⁸⁶

This change from a single-firm focus to a portfolio focus may be a (more generous) descriptive explanation for investors' recent concern about ESG more broadly and climate change in particular. But this shift arguably has normative implications for where investors, activists, and scholars should focus their energy in attempting to avert climate catastrophe. According to this theory, universal owners' incentives are largely aligned with society's on climate change, and they have the clout and expertise to coerce corporations to scale back

⁸⁵ See Paul Griffin, *The Carbon Majors Database CDP Carbon Majors Report 2017* at 15, CDP <https://cdn.cdp.net/cdp-production/cms/reports/documents/000/002/327/original/Carbon-Majors-Report-2017.pdf?1501833772>

⁸⁶ See Madison Condon, *Externalities and the Common Owner*, 95 WASH. L. REV. 1 (2020) [hereinafter Condon, *Externalities*]; Luca Enriques & Alessandro Romano, *Rewiring Corporate Law in an Interconnected World*, 64 ARIZ. L. REV. 51 (2022). For an older model showing that diversified investors would like to minimize externalities, see Robert G. Hansen & John R. Lott, Jr., *Externalities and Corporate Objectives in a World with Diversified Shareholder/Consumers*, 31 J. FIN. QUANTITATIVE ANALYSIS 43 (1996).

their emissions and prepare for a carbon-zero future. If this is true, we should place considerable trust in investors as a substitute for government action, and perhaps even enhance their power over corporations as the ideal leverage point in the push to net zero.

The “portfolio primacy” approach assumes that universal owners are focused on maximizing the value of their diversified portfolio rather than the value of individual firms in their portfolio.⁸⁷ Consequently, they are willing to inflict losses on individual firms, provided they result in a larger increase in the share price of the rest of the portfolio. To mitigate the threat of climate change to their entire portfolio, universal owners should prevail upon heavy emitters to reduce their emissions, sacrificing the value of these firms for the benefit of the broader portfolio.⁸⁸

Others, however, have pointed out the legal and practical flaws underlying this approach. To begin, it is impossible to implement without significant legal risk under both state corporate law and federal laws and regulations.⁸⁹ It is black letter Delaware law that directors owe fiduciary duties to the company and its shareholders, rather than shareholders of the broader market.⁹⁰ Delaware courts do not take kindly to directors at one firm having divided loyalties to other

⁸⁷ See Condon, *Externalities*, *supra* note 86.

⁸⁸ Madison Condon, for example, proposes the following model of institutional investor campaign. Just two oil companies—ExxonMobil and Chevron—are responsible for over 2% of global carbon emissions. More than a quarter of the equity in both companies is controlled by six institutional investors. Under the “portfolio primacy” framework, institutional investors should force ExxonMobil and Chevron to drastically cut emissions, perhaps by curtailing new exploration and committing to keeping some of their reserves in the ground. This would be worthwhile from the universal owner perspective, notwithstanding the hit to ExxonMobil and Chevron’s share price, because of the climate change costs they are averting for the other firms in their portfolio. Using a simplified model incorporating the forecasted climate change costs and the size of BlackRock’s stakes in publicly traded firms, Condon estimates that ExxonMobil and Chevron lowering their emissions by 40% would result in BlackRock saving \$9.7 billion in averted climate costs. Even if the costs associated with lowering emissions would result in a 20% plunge in the share prices of ExxonMobil and Chevron, that price decline would only cost BlackRock \$6.3 billion. BlackRock would thus end up earning an estimated \$3.4 billion in portfolio value by forcing heavy carbon emitters to internalize their carbon externalities. *See id.* at 45–48.

⁸⁹ See Kahan & Rock, *Systematic Stewardship*, *supra* note 7; Roberto Tallarita, *Portfolio Primacy*, *supra* note 29.

⁹⁰ See Kahan & Rock, *Systematic Stewardship*, *supra* note 7.

corporations. Moreover, a corporation must be managed for the benefit of all its shareholders, to the extent that controlling majority shareholders owe fiduciary duties to minority shareholders.

Institutional investors openly using their influence to impose drastic emissions reductions on some companies to increase the profits of the broader portfolio would be openly prioritizing the benefit of diversified shareholders at the expense of their corporation's other shareholders. Both the directors and the universal owners would face significant legal risks. The directors could be liable for violating their fiduciary duties, while universal owners themselves might be sued for aiding and abetting the directors' breach of fiduciary duties.⁹¹

Moreover, asset managers owe their investors fiduciary duties that require fund managers to maximize the value of each of their funds. These duties present the asset managers with significant complexities when different funds, with different investment strategies, hold shares in the same corporation.⁹²

Finally, such a campaign might also run afoul of federal antitrust law. Under Section 1 of the Sherman Act, an agreement to restrict output is a per se violation of federal law. Institutional investors using their influence over corporations to limit the supply of fossil fuels could thus subject the fund managers and corporate management to the risk of antitrust liability, notwithstanding their prosocial motivations.⁹³

We have discussed only the doctrines that seem to present an insurmountable obstacle to the portfolio primacy approach. But, as others have pointed out, its overall effect on emissions would be questionable, even if the legal issues were to be resolved, because

⁹¹ Institutions may attempt to get around this issue by dressing up their portfolio-motivated campaigns in the guise of single firm focus, but this subterfuge is unlikely to succeed. Active investors with concentrated positions will recognize that significant reductions in emissions or drastic changes in strategy are only worthwhile from the perspective of index investors who will reap the gains across their portfolio, and that their interests are being sacrificed in favor of diversified investors.

⁹² See sources cited *supra* note 34.

⁹³ See Damian G. Didden, *Antitrust and ESG*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Jan 31, 2023), <https://corpgov.law.harvard.edu/2023/01/31/antitrust-and-esg/>.

private corporations and other entities not subject to the universal owners' control will increase their fossil fuel output.⁹⁴

D. Systematic Stewardship

"Systematic stewardship" takes a subtler approach to focusing on the portfolio rather than the individual firm, thereby avoiding the glaring legal issues of portfolio primacy. Under this approach, universal owners should not inflict damage on one company for the sake of the portfolio. Instead, universal owners should treat climate change like a systematic risk and address it with uniform policies across their portfolios.⁹⁵

First, some background on the difference between idiosyncratic and systematic risk. Idiosyncratic risk is a risk that is particular to one firm or industry, while a systematic risk is a risk that affects all or most of the market. A star CEO departing to join a competitor, or the work-from-home revolution negatively impacting occupancy rates in the commercial real estate sector are idiosyncratic risks. Inflation, on the other hand, is a systematic risk affecting all firms. Universal owners are not very concerned about idiosyncratic risk because they hold a diversified portfolio (one firm might lose as another one might win), but they are more likely to be affected by systematic risks. Thus, as Professor Jeff Gordon argues,⁹⁶ these funds should focus on mitigating systematic risks that cannot be diversified away.

Some systematic risks are beyond the control of investors. Universal owners, for example, do not have the resources to analyze how each firm in their portfolio should conduct its business to avoid the negative effects of inflation. Indeed, reducing the systematic risk of inflation is best left to the Federal Reserve—by the policy of raising interest rates. However, there are other systematic risks that universal owners can address on their own. For instance, the risk of management agency costs (i.e., the risk of lost firm value due to disloyal managers). Institutional investors deal with this systematic risk by crafting uniform policies that they apply to all firms. In the case of management agency costs, institutional investors uniformly favor strong

⁹⁴ See Roberto Tallarita, *Portfolio Primacy*, *supra* note 29.

⁹⁵ See Gordon, *Systematic Stewardship*, *supra* note 8.

⁹⁶ *Id.*

governance arrangements that empower shareholders to hold managers accountable. Institutional investors have developed a list of “good governance traits” that academic research suggests would increase the value of the portfolio on average. They have then used their immense clout to institute these governance policies on a market-wide basis.⁹⁷

One prominent example is institutional investors’ aversion to the staggered board, a governance structure in which only a third of the board members stands for reelection at each annual shareholder meeting, as opposed to all the directors. A staggered board tends to protect managers from being removed by disapproving shareholders, as they cannot completely wrest control away from management in one election. Although the effects of a staggered board on a firm’s share price are different in each firm, institutional investors are focused on the effect on average, across the entire portfolio. Relying on research that suggests that having non-staggered boards would increase the value of their portfolio on average, institutional investors have largely eradicated staggered boards from public companies.

Institutional investors enjoy economies of scale in favoring uniform policies—a single policy will be applied across their multi-trillion-dollar portfolio—and economies of scope—they accumulate transferrable expertise through researching various issues related to systematic risk.

In the climate change context as well—argue systematic stewardship proponents—universal owners should prioritize the systematic risks of climate change’s effects on their entire portfolio over the profits of specific industries (such as the fossil fuel industry). Universal owners can, for instance, adopt a policy requiring firms across their portfolios to adopt emissions targets to reduce the risk to the portfolio on average, notwithstanding that this may also negatively affect some firms that depend on emissions for most of their profits. In this way, universal owners are not targeting a single company and forcing it to overturn its business model for the good of the market. Rather they are indiscriminately applying a policy that is calculated to reduce risk on average across their portfolio.

According to this view, there is no reason to think systematic stewardship cannot have the same positive effects—on average—in the fight against climate change. Universal owners could use their power, through voting and direct engagement, to craft and institute a

⁹⁷ *Id.* at 645.

policy that maximizes the average value of the entire portfolio by reducing greenhouse gas emissions, notwithstanding that the effect on individual companies may be mixed.

Exploring whether universal owners can cope with greenhouse gas emissions through uniform policies and systematic stewardship is the focus of this Article. As we will show, unfortunately, universal owners lack the necessary incentives and competence to be able to reduce carbon emissions. Next, in Part II, we discuss incentives, and in Part III, we will discuss competence.

II. ASSET MANAGERS: INCENTIVES

The previous Part discussed the prevailing explanations for universal owners' interest in pushing companies to reduce emissions. In this Part, we take a closer look at universal owners' incentives. We start by identifying the fundamental tension underlying ESG investments and describing its implications for universal owners' incentives. We then focus on a specific crucial challenge currently facing many large polluters: determining the best corporate structure for making the transition to net zero. We show that managers might engage in greenwashing or adopt inefficient policies for reducing emissions to serve their interests (agency costs). Although activist hedge funds launch costly campaigns to oppose management's effort to adopt inefficient strategies, universal owners are, nonetheless, incentivized to support managers' inefficient strategies.

A. *The ESG Tension*

One explanation for universal owners' growing interest in reducing emissions is their need to cater to their investors' demand for sustainable investments.⁹⁸ Indeed, an increasingly large fraction of universal owners' assets under management are held in ESG funds. These funds charge higher fees on their assets under management and are therefore more profitable for fund managers.⁹⁹ Sponsors of ESG funds, we argue, face a complex set of incentives that are likely to distort both investment and stewardship decisions. Thus, universal

⁹⁸ See Part II.B, *supra*.

⁹⁹ See Ringe, *Investor-Led Sustainability*, *supra* note 3, at 135 ("specialized ESG indices ... allow fund managers to charge higher fees that drive up revenues").

owners might favor policies that do not align with maximizing the efficiency of sustainable energy innovation.

Fund managers' business model is based on collecting fees for managing investors' assets. Fund managers' fees are normally a fraction of assets under management.¹⁰⁰ To increase the size of their assets under management and the corresponding fees, fund managers need to attract investors. In the case of ESG funds, this leads fund managers to pursue two goals that are in tension. First, in order to appeal to investors interested in sustainable investments, fund managers commit to pursue ESG goals. Indeed, evidence suggests that mutual funds investors are attracted to funds with higher sustainability ratings.¹⁰¹ Second, fund managers seek to produce competitive returns. Maximizing fund performance is important even when attracting investors to their ESG offerings.¹⁰² Fund managers insist that their commitment to sustainable investments will not sacrifice returns,¹⁰³ and might even increase them.¹⁰⁴ Fund managers, therefore, strive to generate returns that would favorably compare with competing ESG funds and perhaps even the benchmark, non-ESG index. To increase the value of their portfolios, fund managers must either use their influence to increase the value of the companies they hold in their portfolio or invest in companies that will appreciate independently.¹⁰⁵

¹⁰⁰ See Jonathan Lewellen & Katharina Lewellen, *Institutional Investors and Corporate Governance: The Incentive to Be Engaged*, 77 J. FIN. 213 (2021).

¹⁰¹ See Samuel M. Hartzmark & Abigail B. Sussman, *Do Investors Value Sustainability? A Natural Experiment Examining Ranking and Fund Flows*, 74 J. FIN. 2789 (2019).

¹⁰² See, for example, Paulo Trevisani, *ESG ETFs Lose Flows as Turbulent Markets Focus on Returns*, WALL ST. J. (Apr. 3, 2023) <https://www.wsj.com/articles/esg-etfs-lose-flows-as-turbulent-markets-focus-on-returns-726339dc>.

¹⁰³ See, for example, Lund & Pollman, *The Corporate Governance Machine*, *supra* note 59, at 2566 ("many investors favor ESG funds, not for moral reasons or a prosocial willingness to sacrifice profits, but because ESG is thought to provide sustainable long-term value or higher risk-adjusted returns for shareholders").

¹⁰⁴ See, for example, Larry Fink's 2021 Letter to CEOs, <https://www.blackrock.com/corporate/investor-relations/2021-larry-fink-ceo-letter> ("During 2020, 81% of a globally-representative selection of sustainable indexes outperformed their parent benchmarks.").

¹⁰⁵ See Marcel Kahan & Edward B. Rock, *Index Funds and Corporate Governance: Let Shareholders Be Shareholders*, 100 B.U. L. REV. 1771 (2020).

These twin commitments are obviously in tension to the extent that reducing emissions requires firms to sacrifice profits.¹⁰⁶ This tension, we argue, is likely to affect universal owners' policies on both *exit* (divesting shares) and *voice* (voting and engagement).

Let us focus on fund managers' decision to limit their investments to green companies only, adjusting their policy to *exit* from all 'brown' companies. This decision might be consistent with fund managers' 'green' commitment. However, categorically excluding certain investments from their funds' portfolio challenges fund managers' ability to produce competitive returns in the long run.¹⁰⁷ To be sure, green investments can sometime produce superior returns.¹⁰⁸ Yet, because it is hard to predict winners and losers, asset managers have an incentive to expand the universe of companies that can be considered "green." Moreover, to avoid negative comparisons with their benchmark (say the S&P 500), ESG fund managers will seek to replicate the sector representation as closely as possible. In 2022, for example, the energy sector returned 57%, compared with negative 19% for the S&P 500.¹⁰⁹ Excluding oil and gas companies wholesale

¹⁰⁶ See James Mackintosh, *ESG Investing Can Do Good or Do Well, but Don't Expect Both*, WALL ST. J. (Jan. 24, 2022), <https://www.wsj.com/articles/esg-investing-can-do-good-or-do-well-but-dont-expect-both-11643033321>.

¹⁰⁷ See Bradford Cornell & Aswath Damodaran, *Valuing ESG: Doing Good or Sounding Good?*, 1 J. IMPACT & ESG INVEST. 76 (2020) [hereinafter Cornell and Damodaran, *Valuing ESG*] ("[I]f investors have a preference for highly rated ESG stocks then those stocks will offer lower average excess returns" and "the notion that adding an ESG constraint to investing increases expected returns is counter intuitive."); Ľuboš Pástor, Robert F. Stambaugh, Lucian A. Taylor, *Sustainable Investing in Equilibrium*, 142 J. FIN. ECON. 550 (2021) [hereinafter Pástor, Stambaugh & Taylor, *Sustainable Investing*] (developing a model showing that "agents with stronger ESG preferences, whose portfolios tilt more toward green assets and away from brown assets, earn lower expected returns."); Yigit Atilgan, K. Ozgur Demirtas, Alex Edmans & A. Doruk Gunaydin, *Does the Carbon Premium Reflect Risk or Mispricing* (Sep. 16, 2023), available at SSRN: <https://ssrn.com/abstract=4573622> (showing through statistical analysis a positive correlation between surprise earnings and increased emissions, suggesting a carbon premium for "brown" firms that is not being properly priced in the market).

¹⁰⁸ See Ľubos Pástor, Robert F. Stambaugh, and Lucian A. Taylor, *Dissecting Green Returns*, 146 J. FIN. ECON 403 (2022).

¹⁰⁹ See <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/s-p-500-logs-its-worst-annual-performance-since-2008-73687583>; <https://www.cnn.com/2022/12/29/stock-market-futures-open-to-close-news.html>.

would result in ESG funds lagging behind an ESG-blind index fund. Instead of accepting these reduced returns, it is an open secret that most ESG funds invest in fossil fuel companies.¹¹⁰

But there is another, more subtle reason why avoiding investment in ‘dirty’ companies is expected to adversely affect returns. The rationale behind asset managers’ divestment from brown companies is that this strategy will put pressure on companies to cut emissions by raising polluters’ cost of capital. In other words, managers of green companies are promised access to larger pools of capital at a lower cost. This promise, though, also suggests that polluters’ cost of capital will increase, which in turn will increase expected returns for other, ‘regular’ investors who are willing to invest in these firms.¹¹¹

Fund managers often claim that *voice* is more effective than *exit* in pushing companies to decarbonize.¹¹² Yet, the incentive problem we have identified is not limited to funds’ investment decisions. It might also affect universal owners’ stewardship. Specifically, it might make them support their portfolio companies in adopting strategies that are ineffective in reducing emissions but allow universal owners to reap the gains associated with brown assets. In other words, the tensions underlying ESG investment affect fund managers’ incentives with respect to *exit* and *voice*.

We have focused on ESG funds, but our account applies to all asset managers to the extent that the need to attract climate-conscious investors is what drives them to pursue ESG goals. These asset managers’ need to satisfy investors’ demand for green investments while maximizing returns (either to attract investors or increase fees

¹¹⁰ See Akane Otani, *ESG Funds Enjoy Record Inflows, Still Back Big Oil and Gas*, WALL ST. J. (Nov. 11, 2019), (October 21, 2022, 3:10 P.M.) <https://www.wsj.com/articles/top-esg-funds-are-all-still-invested-in-oil-and-gas-companies-11573468200>; Philp Inman, *Green Investment Funds Pushing Money Into Fossil Fuel Firms, Research Finds*, THE GUARDIAN (May 2, 2023), <https://www.theguardian.com/business/2023/may/02/green-investment-funds-pushing-money-into-fossil-fuel-firms-research-finds>.

¹¹¹ See Cornell & Damodaran, *Valuing ESG*, *supra* note 107; Pástor, Stambaugh & Taylor, *Sustainable Investing*, *supra* note 107; Alon Brav & J.B. Heaton, *Brown Assets for the Prudent Investor*, 12 HARV. BUS. REV. L. ONLINE 1 (2021).

¹¹² See also Eleonora Broccardo, Oliver Hart & Luigi Zingales, *Exit versus Voice*, 130 J. POL. ECON. 3101 (2022).

on assets under management) might distort their stewardship and investment policies.

B. Transition Strategies

A timely dilemma for many companies and their investors is the corporate structure of the transition to renewable energy.¹¹³ For simplicity, we will focus on firms' choice between two stylized paths for reducing emissions: the 'pure play' and 'integrated play' strategies. For example, compare Tesla and Volkswagen. Tesla specializes only in electric vehicles. This is a pure-play strategy of focusing only on renewable-energy vehicles. Volkswagen, on the other hand, has adopted an "integrated play" approach: a combination of a legacy business that manufactures internal combustion engine cars and a unit that develops electric vehicles.

As a matter of theory, there is no clear rule about which strategy will maximize profits or prove most effective in reducing emissions; each has costs and benefits. In some instances, it may be more efficient for a company to be integrated, so that the cash flow from the legacy, carbon-intensive business can support the R&D and other capital expenditures of the innovative, clean one as it builds up to scale and develops product-market fit. In other cases, a pure-play strategy might be better, as it has the advantages of 1) concentrating the focus of the organization around a core mission of innovation, which requires a radically different orientation than managing a century-old legacy business, 2) enabling the company to react nimbly to political and regulatory changes common in emerging industries, 3) allowing the company to benefit from its innovative brand in attracting talent, and 4) allowing investors to choose their exposure, avoiding vehement tugs-of-war between shareholders on the future trajectory of the company, which can result in a lower share price. However, when it comes to sustainability innovation, some anecdotal evidence indicates that the pure play approach might prove to be superior.¹¹⁴

¹¹³ See, for example, Matthias J. Pickl, *The renewable energy strategies of oil majors – from oil to energy?*, 26 ENERGY ST. REV. 100370 (2019); Hongfang Lu et. al., *Oil and gas companies' low-carbon emission transition to integrated energy companies*, 686 SCI. OF THE TOTAL ENVIRONMENT 1202 (2019).

¹¹⁴ See, for example, Vaska Atta-Darkua et al., *Decarbonizing Institutional Investor Portfolios: Helping to Green the Planet or Just Greening Your Portfolio?*, (2023), <https://papers.ssrn.com/abstract=4212568> (last visited Sep 6, 2023) (finding

Another consideration that is of concern for climate is the effect of ownership structure on carbon emissions. There are claims that public companies' divestment of carbon-intensive activities might lead to more emissions.¹¹⁵ While selling their most polluting activities allows companies to satisfy investor demands for cleaning up their operations, the new owners of 'brown' activities might increase emissions, because they might be private companies or governments that are not subject to pressure by universal owners to reduce emissions.¹¹⁶

Ideally, for investors that care about performance and climate, each company should choose a strategy that is most effective for reducing emissions and most efficient. As we explain below, however, this is unlikely to happen.

C. Management

Universal owners and other asset managers increasingly require public companies to reduce carbon emissions. Management of each public company then has the task of devising firm-specific strategies for reducing emissions. Management will decide, for example, whether to meet emission targets by increasing investment in clean energy ventures, selling dirty assets, or using carbon offsets. Ideally, companies will meet carbon emission targets set by their investors while relying on management to provide expertise to tailor

evidence suggesting that climate-conscious investors do not lead companies to make green innovations).

¹¹⁵ See, Environmental Defense Fund, *Transferred Emissions: How Risks in Oil and Gas M&A Could Hamper the Energy Transition*, <https://business.edf.org/files/Transferred-Emissions-How-Oil-Gas-MA-Hamper-Energy-Transition.pdf>; John C. Coffee Jr., *Climate-Risk Disclosures and "Dirty Energy" Transfers: "Progress" Through Evasion*, THE CLS BLUE SKY BLOG (Jan. 25, 2022) (suggesting that institutional investors demand public companies "not sell significant emissions-creating assets unless the buyer agrees to observe a "net zero" emissions pledge roughly comparable to its seller's."); John Armour, Luca Enriques and Thom Wetzer, *Dark and Dirty Assets: Greening Climate-Driven Asset Partitioning*, Oxford Bus. Law Blog (Jun. 14, 2022) (calling on investors to insist on imposing restrictions on buyers of dirty assets or new entities formed to own them).

¹¹⁶ See, for example, Anjali Raval, *A \$140bn asset sale: the investors cashing in on Big Oil's push to net zero*, FIN. TIMES (Jul. 6, 2021) <https://www.ft.com/content/4dee7080-3a1b-479f-a50c-c3641c82c142> (reporting on a private company eager to buy fossil fuel assets sold by oil and gas companies).

the path to zero emissions to firms' business environment and specific needs.

Unfortunately, managers might use their discretion to advance their interests rather than those of investors by adopting measures that will not sufficiently reduce carbon emissions, lead to inefficient corporate structures or both. We focus on two concerns that arise in the climate context: *greenwashing* and *agency costs*.

i. Greenwashing

The premise underlying the new optimism about the role of universal owners in reducing emissions is that universal owners, who are concerned about attracting green investors, systemic risks, and externalities impacting their portfolios, will push firms to lower emissions even if effective decarbonization measures do not maximize shareholder value. However, managers may possess differing interests. Their compensation, for instance, is often tied to stock or stock options awards.¹¹⁷ Alternatively, they may perceive considerable investment in emission reduction as a long-term strategy that could negatively affect stock prices in the short term. As a result, managers might be more likely to prioritize profits over reducing emissions.

Managers might respond to investor pressure to reduce emissions by adopting measures that *appear* to reduce carbon emissions without significantly affecting profits. This could involve “Net Zero” pledges with no credible commitment to meet this ambitious goal,¹¹⁸ carbon offsets, or other contentious strategies, instead of implementing more effective (but costlier) emission reduction methods. Broadly speaking, companies may introduce policies that enhance their reputation as sustainable businesses in order to appease institutional investors, while their total emissions remain unchanged or even increase.¹¹⁹

¹¹⁷ See John Armour, Luca Enriques, & Thom Wetzer, *Green Pills: Making Corporate Climate Commitments Credible*, 65 ARIZ. L. REV. 283 (2023); Bebchuk & Tallarita, *The Illusory Promise of Stakeholder Governance*, 106 CORNELL L. REV. 91, 148-153 (2020).

¹¹⁸ See Armour, et al., *id.*

¹¹⁹ For instance, ESG scoring reflects a company's level of disclosure relative to peers. “In other words, companies that are willing to report ESG performance, and do so more thoroughly than others, tend to score higher,” regardless of the company's actual environmental impact. Riley Clubb, Yoshi

The greenwashing phenomenon has been extensively documented. Recent empirical research indicates that while fossil fuel companies have amplified their sustainability rhetoric over the past decade through disclosures, pledges, and highlighting clean energy investments, their actions reveal a lack of genuine commitment to sustainability. Major oil companies continue to lobby governments to undermine carbon pricing policies and environmental regulations, with no tangible moves toward abandoning their fossil fuel production focus in favor of more sustainable business models.¹²⁰ For example, these companies may publish disclosures or launch costly marketing campaigns that emphasize their relatively minor sustainable activities, while obscuring the detrimental effects of their core business.¹²¹

The responsibility of establishing firm-specific sustainability policies cannot be entrusted solely to management. Universal owners attempting to impose climate discipline without appropriate understanding of individual firms and their firm-specific needs are likely to be fooled by firms that talk sustainability with no intention to walk sustainability.¹²² Managers might react—and already have reacted—by offering investors the “fig leaf” of a new division dedicated to sustainable energy under the same corporate umbrella as

Takahashi & Pete Tiburzio, EVALUATING THE RELATIONSHIP BETWEEN ESG AND CORPORATE FIXED INCOME, at 15 (2016), https://mitsloan.mit.edu/sites/default/files/2018-10/Breckinridge_Capital-Report-2016.pdf.

¹²⁰ See Mei Li, Gregory Trencher & Jusen Asuka, *The Clean Energy Claims of BP, Chevron, ExxonMobil and Shell: A Mismatch Between Discourse, Actions and Investments*, PLOS ONE (Feb. 26, 2022).

¹²¹ See, e.g., Myles McCormick, *Chevron Accused of ‘Greenwashing’ in Complaint Lodged with the FTC*, FIN. TIMES (Mar. 16, 2021), <https://www.ft.com/content/2985e18a-fdcb-4cd2-ae3-d5a0fe4cdab2> (“The activists groups want the FTC — the government agency tasked with protecting consumer interests — to take action against Chevron for ‘egregiously misleading consumers’ by exaggerating its investments in clean energy.”)

¹²² Mandating climate risk disclosure is unlikely to eliminate greenwashing. An effective disclosure regime will make it difficult to hide the magnitude of the company’s existing carbon emissions. But it will not assist investors in assessing plans for reducing emissions, firm-specific reasons for failing to meet targets or coping with strategies such as carbon offsets. For the problem of too optimistic net zero pledges and a proposal to address it, see generally John Armour, Luca Enriques, & Thom Wetzer, *Green Pills: Making Corporate Climate Commitments Credible*, 65 ARIZ. L. REV. 283 (2023).

the legacy business. This approach essentially converts the greenwashing issue into a problem of agency costs.

ii. Agency Costs

Managers might use their discretion in managing the corporation to promote their own interests over those of the company's true owners, the investors. The costs associated with such disloyal behavior are known as agency costs.¹²³ The risk of agency costs is present even when the primary objective of management is to maximize profits. However, this risk intensifies when management is expected to balance between profits and addressing climate risks or other ESG objectives.¹²⁴ In this context, we define agency costs as those that arise when management, in response to investor pressure to achieve carbon emission targets, implements inefficient policies that impose substantial costs on shareholders while benefiting management. This is distinguished from greenwashing, where management promotes ineffective policies at little to no cost to the shareholders.

The climate transition decision presents a significant risk of agency costs. For instance, managers may be driven by self-serving considerations to expand the size of their corporations by making inefficient acquisitions.¹²⁵ Consequently, managers are likely to favor integrated play strategies—acquiring clean energy sources and retaining dirty assets—even when a pure-play strategy is more efficient or more effective in reducing emissions.¹²⁶

¹²³ For an analysis of the different sources of managerial agency costs, see Zohar Goshen & Richard Squire, *Principal Costs: A New Theory for Corporate Law and Governance*, 117 COLUM. L. REV. 767 (2017).

¹²⁴ See also Lucian A. Bebchuk & Roberto Tallarita, *The Illusory Promise of Stakeholder Governance*, 106 CORNELL L. REV. 91 (2020).

¹²⁵ See Afra Afsharipour & J. Travis Laster, *Enhanced Scrutiny on the Buy-Side*, 53 GA. L. REV. 443 (2019).

¹²⁶ Indeed, there is growing demand by oil and gas companies to acquire renewable energy companies. See Seth Kerschner, Dongho Lee, and Clare Connellan, *ESG Pressures Fuel Dealmaking*, HARV. L. SCH. F. ON CORP. GOVERNANCE BLOG (Apr. 19, 2022) (global energy players are using mergers and acquisitions to meet their ESG goals) <https://corpgov.law.harvard.edu/2022/04/19/esg-pressures-fuel-dealmaking/>; McKinsey & Company, *Ready, Set, Grow: Winning the M&A Race for Renewables Developers* (Dec. 9, 2022), <https://www.mckinsey.com/industries/electric-power-and-natural-gas/our-insights/ready-set-grow-winning-the-m-and-a-race-for-renewables-developers>.

Furthermore, management might be motivated to protect their profitable legacy dirty activity. Given that the clean activity will cannibalize its dirty legacy business, adopting an integrated play strategy enables management to control the growth rate of the clean activity by slowing down clean innovation. In fact, for some companies, the clean part of the business essentially competes with the legacy dirty business for funds, human resources, management attention, and clients. Managers' self-interest may lead them to disfavor the more innovative, clean business, particularly if this activity falls outside their legacy expertise (as solar and wind do for managers of oil and gas corporations).

Agency costs can also hinder efforts to reduce emissions in other ways. For instance, agency costs might lead to short-term thinking that prompts management to divert resources from more efficient long-term sustainable energy production methods to less efficient but more immediately promising methods. The most prominent fossil fuel alternatives today are wind and solar, both of which have significant drawbacks. Solar energy can only be collected during the day, and current battery technology is insufficient to make solar an efficient and affordable energy source at night. Wind energy is only collected when it is windy, and the recent prolonged period of still weather in Europe contributed to a sharp rise in energy prices.¹²⁷

In contrast, geothermal energy, which captures the heat energy inside the earth by drilling deep down and circulating fluid beneath the surface, does not suffer from the drawbacks of solar and wind. The earth's core heat is present regardless of the time of day or weather conditions. More importantly, advanced geothermal energy is significantly more abundant and affordable. Estimates are as low as one cent per kilowatt-hour, compared with over six cents for solar or

¹²⁷ Friderike Kuik, Jakob feveile Adolfsen, Eliza M. Lis & Aidan Meyler, *Energy price developments in and out of the COVID-19 pandemic – from commodity prices to consumer prices*, ECB ECONOMIC BULLETIN (2022), https://www.ecb.europa.eu/pub/economic-bulletin/articles/2022/html/ecb.ebart202204_01~7b32d31b29.en.html; Matthias Williams and Kate Abnett, *'Feels like summer': Warm winter breaks temperature records in Europe*, REUTERS (Jan. 4, 2023), <https://www.reuters.com/business/environment/feels-like-summer-warm-winter-breaks-temperature-records-europe-2023-01-04/>

five cents for wind.¹²⁸ Fossil fuel companies might also have a competitive advantage in the drilling innovation required to make advanced geothermal a reality. However, even if developing advanced geothermal is the most effective long-term approach to producing clean energy, management concerned about retaining their position in the face of investor pressure to cut emissions might prefer a safe, expedient way to satisfy investor demands.¹²⁹

D. Activist Hedge Funds

Activist hedge funds specialize in initiating firm-specific changes to company strategy and taking actions, including confronting management and launching proxy fights, to change the company's direction. Such activism could help hold accountable managers racking up "agency costs" at the expense of investors. Profit-motivated hedge funds, like Third Point, build concentrated stakes in specific companies when they detect underperformance that they believe can be corrected within a relatively short timeframe. They are rewarded with substantial gains if they persuade the company to adopt their proposed business changes and if their thesis proves accurate. They do not hold enough votes to force their will on companies (they typically own less than 10% of the shares). Instead, they rely on support from institutional investors and, most importantly, universal owners. The question arises: Will activist hedge funds play a similar role in pushing companies to reduce carbon emissions?

Activist hedge funds do not hold a diversified portfolio. Their business model relies on their ability to increase share value of specifically targeted firms. Thus, they will not initiate campaigns aimed at reducing emissions (or any other ESG goal) unless it results

¹²⁸ See Mark Davis, *Geothermal Energy Costs – Breaking Down its True Price*, UNDERSTANDSOLAR (Sep. 7, 2017) <https://understandsolar.com/geothermal-energy-costs/>.

¹²⁹ "Geothermal power has been left behind wind and solar in terms of both growth rate and installed capacity" in large part due to "high initial investment [and] long payback time and construction time." These barriers to short-term profits dissuade profit-focused institutional investors from lending serious financial backing to the risky technology. Kewen Li, *Comparison of Geothermal With Solar and Wind Power Generation Systems*, 38 PROC. WORKSHOP GEOTHERMAL RESERVOIR ENG'G (2013).

in a positive short-term impact on the *target's* share price.¹³⁰ Recall that one explanation for universal owners' willingness to push companies to reduce emissions is the portfolio perspective that incentivizes them to push one company to act against its self-interest as long as such action will increase the value of other companies in the portfolio.¹³¹ Activist hedge funds, in contrast, have a single-firm focus.¹³²

More generally, the assumption underlying this Article—and much of the literature on investor-led ESG—is that institutional investors' interest in pushing companies to reduce emissions is driven by the desire to have companies sacrifice at least some profits to save the planet. It is commonly believed that a firm's actions to reduce emissions are not fully priced by the market.¹³³ However, the business model of hedge fund activists requires that they concentrate solely on firm-specific campaigns that will improve firms' bottom line and cause a significant and immediate effect on their share price.

Nevertheless, while they are unlikely to invest costly resources to push companies to sacrifice profits to reduce emissions, activist hedge funds could be relied upon to contain managerial agency costs, such as when self-interest drives management to pursue an inefficient path to reduce emissions. For example, an activist hedge fund may

¹³⁰ See also Patrick Bolton & Marcin T. Kacperczyk, *Firm Commitments* (Colum. Bus. Sch. Research Paper, 2022), <https://papers.ssrn.com/abstract=3840813> (finding that “protection against short-term activist actions matters to induce companies to focus more on their long-term climate impact.”). Scholars disagree whether a short-term increase in share value can take place even when an activist campaign destroys value in the long term. See Goshen & Steel, *Mistargeting*, *supra* note 46; Lucian A. Bebchuk, *The Myth That Insulating Boards Serve Long Term Value*, 113 COLUM. L. REV. 1637 (2013).

¹³¹ See *Part II.B*, *supra*.

¹³² An activist investor, TCI Fund Management, was one of the leading proponents of an initiative that called on companies to adopt ‘say-on-climate’ vote. Note, however, that this is not a typical firm-specific activist campaign. See Attracta Mooney & Billy Nauman, ‘Say on Climate’ Campaign Faces First Big Test at Investor Meeting, FIN. TIMES (May 18, 2021), <https://www.ft.com/content/cc409667-e048-4246-808c-9cdf8e41ac77>.

¹³³ Some argue that this is because climate risks are too long term. See, e.g., John Armour, Luca Enriques, & Thom Wetzer, *Green Pills: Making Corporate Climate Commitments Credible*, 65 ARIZ. L. REV. 283, 289 (2023). Activists, however, rely on short term increase in share value to get their return on their investment.

launch a campaign when management adopts an integrated play strategy although a pure-play structure is the most efficient way to reduce emissions. Indeed, if a pure-play strategy can increase share value, activist hedge funds can be expected to initiate a campaign for breaking up the company.

The belief that managers create significant inefficiencies by adopting integrated play strategies might be why activist hedge funds have launched campaigns to push companies to separate dirty from green assets. Consider, for example, the recent well-publicized spat at Royal Dutch Shell. This company was the first major oil company to respond positively to ESG pressures to transition its business from fossil fuels toward green energy. Some observers argue that its plans are the closest to compliance with the Paris Agreement.¹³⁴ Like other major oil companies, Royal Dutch Shell has generally structured its business as an integrated play: It uses the earnings from its fossil fuel arm to fund its green activities.¹³⁵

The market has responded with a yawn: Shell's stock has not benefited from any premium for its reduced transition risk and ostensibly more promising green business. Third Point, an activist hedge fund led by Dan Loeb, purchased a significant stake and argued that Shell should be split into two companies, a "Green Shell" that will focus on developing a competitive edge in green technology and a "Dirty Shell" that will pay its investors large dividends in the waning years of its legacy business.¹³⁶ Third Point clearly believes managers have adopted an inefficient strategy (with a negative effect on stock prices). Moreover, Third Point is backing its belief with a concentrated financial bet.

Similar concerns might explain attempts by other activist funds to challenge fossil fuel energy companies' integrated play strategies.

¹³⁴ See James Mackintosh, *Shell is the Greenest Oil Company. Look What That Got It.*, WALL ST. J. (Oct. 31, 2021), <https://www.wsj.com/articles/shell-is-the-greenest-big-oil-company-look-what-that-got-it-11635698403>.

¹³⁵ Shell did exist some of its oil assets. See Colleen Eaton, *ConocoPhillips Bets Big on American Oil Production With \$9.5 Billion Deal*, WALL ST. J. (Oct. 31, 2021) (reporting the sale of Shell's Permian Basin's oil assets) <https://www.wsj.com/articles/conocophillips-bets-big-on-american-oil-production-with-9-5-billion-deal-11632248517>.

¹³⁶ See Sarah McFarlane, *Shell Argues Against Activist Investor's Call to Split*, WALL ST. J. (Oct. 28, 2021), <https://www.wsj.com/articles/shell-aims-to-halve-carbon-emissions-by-2030-as-activist-calls-for-breakup-11635409750>.

Elliott Management tried to pressure Scottish generator and network operator SSE to spin off its renewables business into a separate entity, claiming that the move could unlock “£5bn of value.”¹³⁷ London’s Bluebell Capital Partners campaigned for Glencore, an Anglo-Swiss commodity trading conglomerate, to spin off its thermal coal business.¹³⁸

If the activists urging pure-play spinoffs in heavy-emissions industries are correct (and the financial bets made by these funds suggest they might be), universal owners’ pressure on companies to reduce emissions could ultimately result in large-scale agency costs. As discussed earlier, management has numerous incentives to maintain integrated structures, including expanding the size of the corporation, controlling the growth rate of the competing clean energy sector, and enveloping the entire company in the ESG mantle to comply with ESG funds’ requirements. However, activist hedge funds may rightly perceive that integrated play leads to confused objectives, challenges in attracting and retaining talent, and a lower share price as the company cannot benefit from the sustainability premium. This cannot, then, be the optimal approach for managing the economy-wide transition to a net zero future.

E. Universal Owners

Interestingly, all activist hedge fund campaigns discussed above have failed. As we previously discussed,¹³⁹ universal owners’ incentives might lead them to favor policies that do not align with maximizing the efficiency of sustainable energy innovation. Specifically, sponsors of ESG funds might be inclined to support integrated strategies, regardless of uncertainty regarding the

¹³⁷ See Andrew Dykes, *Breaking Up is Hard to Do: Energy Majors and Activist Investors*, ENERGY VOICE (Dec. 28, 2021), <https://www.energyvoice.com/renewables-energy-transition/376077/breaking-up-is-hard-to-do-energy-majors-and-activist-investors/>; *SSE Rejects Activist Investors Elliott’s Call to Break Up*, IRISH TIMES (Nov. 17, 2021), <https://www.irishtimes.com/business/energy-and-resources/sse-rejects-activist-investor-elliott-s-call-to-break-up-1.4731124>.

¹³⁸ See Tom Wilson, *Oil Majors Under Pressure as Activist Investors Circle*, FIN. POST (Dec. 23, 2021), <https://financialpost.com/commodities/energy/oil-gas/oil-majors-under-pressure-as-activist-investors-circle>.

¹³⁹ See Part II.A, *supra*.

effectiveness of such strategies in mitigating climate change. If oil and gas companies decide to adopt a pure-play strategy under which all dirty assets will be owned by separate corporate entities, ESG funds will be forced to divest from the companies that own the dirty assets (and give up on their potential higher returns). However, this might undermine funds' twin commitments: sustainability and competitive returns. An integrated strategy, in contrast, allows ESG funds to continue ownership of large polluters while complying with their ESG mandate.

In other words, universal owners are incentivized to defend corporate policies that “purify” legacy energy companies and render them ESG compatible, even if they end up not serving the best interests of shareholders and the environment.¹⁴⁰ Universal owners might be willing to be “fooled” into going along with firms' environmental plans so they can include as many successful firms in their funds as possible to closely replicate the returns of the index.

One might suggest an alternative benign explanation for universal owners' support for management over hedge fund activists: that the strategies advocated by hedge funds are perhaps good for share price but not for the environment. The argument being that while selling dirty assets might enable the *selling company* to *reduce* its emissions, the *buyer* of these assets might *increase* emissions.¹⁴¹ For instance, if ExxonMobil were to sell oil reserves, the buyer might be a private corporation or a foreign sovereign fund that is not subject to universal owners' discipline, and the buyer would not care about emissions. Thus, the argument goes, it is better to allow ExxonMobil to keep the reserves and remain under universal owners' influence.

This argument is coherent but largely irrelevant. Hedge fund activists often are asking oil and gas companies to separate the clean energy division from the dirty energy division, by making them two independent public corporations. For instance, incorporating the clean energy division as a wholly owned subsidiary and then issuing its shares to the public. At the end of the process, there will be two public corporations: one that owns the dirty energy and one that owns the clean energy. While ESG funds could only hold the clean energy corporation, universal owners' regular-index-funds could hold both,

¹⁴⁰ For simplicity, we treat universal owners as having the same incentive structure across all of funds within the same fund complex. In some cases, however, different funds within the same fund family might have different considerations shaping their voting. See sources cited *supra*, note 34.

¹⁴¹ See sources cited in notes 115-116, *supra*.

and thus could continue to exert influence on the dirty energy corporation. In short, this explanation does not justify universal owners' suboptimal choices between pure-play and integrated strategies.

To be sure, as we explained earlier, there is no clear consensus on which strategy—integrated or pure-play—is generally superior. Yet, we find it odd that universal owners have thus far not supported any activist campaigns to adopt a pure-play strategy. Recall that activists make significant financial bets and launch campaigns only if they expect them to increase corporate performance. The universal failure to garner universal owners' support for pure-play campaigns raises significant doubts about these investors' incentives.

III. COMPETENCE: SYSTEMATIC RISKS, FIRM-SPECIFIC SOLUTIONS

In this Part, we assume that universal owners have the incentives to address the systemic risks associated with carbon emissions. However, we contend that systematic carbon stewardship is, never-the-less unlikely to be effective. Although climate change can be considered a systematic risk, it cannot be addressed by only systematic solutions. And universal owners lack the competence to “systematically steward” the entire economy towards net zero. In this vein, Section III.A argues that effectively limiting carbon emissions is an intense industry- and firm-specific process that cannot be carried out through across-the-board measures. Section III.B then demonstrates that effectively transitioning to net zero also requires significant coordination across the economy to increasing the supply of sustainable energy and wind down the use of dirty energy. Universal owners have neither the skill nor the reach necessary to coordinate the transition to net zero.

A. *Universal Owners and Firm-Specific Strategies*

As Professors Ronald Gilson and Jeff Gordon explained, large asset managers cannot be expected to invest the resources necessary to devise firm-specific measures.¹⁴² This is the case concerning firm-

¹⁴² See Gilson & Gordon, *Agency Capitalism*, *supra* note 23, at 892 (explaining that “benefit-cost calculation typically will point to de minimis governance expenditures by the diversified intermediary institutions”). Dorothy Lund argues that, because they lack the competence to make firm-specific decisions, passive investors should not vote their shares. See Dorothy S. Lund, *The Case Against Passive Shareholder Voting*, 43 J. CORP. L. 493, 495 (2018).

specific measures required to maximize shareholder returns, and it is the case concerning measures required to transition to net zero. Universal owners' inability to initiate firm-specific measures stems from their business model, incentive structure, and regulatory constraints.

First, universal owners' business model does not incentivize them to invest considerable resources in firm-specific research. Universal owners manage very large passive funds that own essentially the entire market. These funds compete against other passive funds that track the same index, not based on the performance of their portfolio (since the funds hold the same index), but primarily on how low their fees are. Given these slim margins, universal owners have very limited incentives to incur high costs through investment in firm-specific stewardship.

To understand how thinly institutional investors' resources are spread, consider the scale of their participation in corporate governance in comparison to their fees. Based on a widespread interpretation of DOL and SEC rules, institutional investors consider themselves obligated to vote on all issues at every shareholder meeting of their portfolio companies. For example, BlackRock voted on 165,738 separate issues at 17,055 shareholder meetings in 2021,¹⁴³ but its average expense ratio in that year was a mere 0.25%.¹⁴⁴ The disparity is even starker at Vanguard: its funds voted on 137,826 separate issues at 10,796 shareholder meetings in the first half of 2021,¹⁴⁵ but their average expense ratio is a measly 0.08%.¹⁴⁶ These fractional fees, and the miniscule incremental gains investor might reap, cannot justify the human capital required for Vanguard and BlackRock to tailor their voting record at each company to effect firm-specific ESG policies.

¹⁴³See BlackRock, *Pursuing Long-Term Value for Our Clients*, BLACKROCK INVESTMENT STEWARDSHIP (October 19, 2022, 4:49 P.M.) <https://www.blackrock.com/corporate/literature/publication/2021-voting-spotlight-full-report.pdf>.

¹⁴⁴ See Morningstar, Inc., U.S. Fund Fee Study 14 (July 2022).

¹⁴⁵ Vanguard, *Investment Stewardship, 2021 Semiannual Report* (October 19, 2022) https://corporate.vanguard.com/content/dam/corp/advocate/investment-stewardship/pdf/policies-and-reports/inv_stew_2021_semiannual_report.pdf.

¹⁴⁶ See Morningstar, Inc., U.S. Fund Fee Study 14 (July 2022). For a detailed analysis, see Lucian Bebchuk & Scott Hirst, *Index Funds and the Future of Corporate Governance: Theory, Evidence, and Policy*, 119 COLUM. L. REV. 2029 (2019).

Second, universal owners and other institutional investors face a variety of legal constraints that prevent them from adopting some measures required to engage in firm-specific stewardship or strongly discourage them from doing so. Securities laws discourage institutional investors from gaining access to nonpublic information about specific companies and from nominating directors. Additionally, antitrust and securities laws might prevent them from coordinating with other investors or attempting to take an active role in directing management.

In response to these financial, practical, and legal impediments to firm-specific stewardship, universal owners tend to support market-wide measures. However, as the remainder of this Part explains, there is no conceivable one-size fits all policy that is likely to result in lower emissions across their entire portfolio.

B. Systematic Risks, Firm-Specific Solutions

Although the risks of climate change are indeed systematic, the solutions are highly idiosyncratic and context dependent. Pushing firms to reduce carbon emissions is an immense firm-specific task. Whether we care about share value, the most effective way to reduce emissions, or the best way to balance profits and emissions, the optimal path for each firm must be suited to its competitive environment and business strategy. What is the most effective way for each firm to reduce emissions? How should the firm balance profits and carbon risks? Once a path is chosen for each firm, how should it be monitored to ensure that management works according to plan?

To demonstrate the likely failure of uniform policies, this Article examines three central systematic measures currently endorsed by commentators and some universal owners: emission targets, climate risk disclosure, and tying executive compensation to meeting emission targets.

i. Setting Targets

At first sight, the best systematic strategy is setting targets for firms. For example, universal owners could pressure all portfolio companies to reduce emissions to an extent that makes a 1.5° future possible—say, a reduction of 10% per year. Facially, this seems like a promising policy. Universal owners can use their scarce voting research resources to find an accurate answer to one question: How fast do public companies need to reduce emissions to limit warming to

1.5°? The tough decisions on implementation are left to management, who have greater expertise in their businesses.

As we discussed in the earlier Part, providing management with excessive discretion in meeting emission targets may result in agency costs and greenwashing.¹⁴⁷ However, even if management were to comply, implementing a single emissions-reduction policy across diverse companies—without the ability to assess the impact of emission reductions in each industry and for each company—sets the stage for an ineffective policy. To demonstrate the potential second and third-order negative consequences of a uniform emissions reduction policy that can overshadow the initial positive effects, we will explore the likely outcomes in two industries.

Fossil Fuels. The most obvious way for fossil fuel companies to reduce their emissions would be to cut back on fossil fuel production and exploration. Limiting production would constrain the oil supply, leading to increased prices. Some might argue that this is the desired outcome because higher prices discourage consumption.¹⁴⁸ However, given that sustainable energy generation and storage technology are currently inadequate to meet global energy needs, this strategy could ultimately prove counterproductive.

First, the rise in prices would make oil production more profitable. Private entities, such as private equity firms or closely held corporations, are not subject to universal owners' demands.¹⁴⁹ They would quickly seize the opportunity to either purchase oil reserves from existing public firms or establish their own exploration and production ventures, capitalizing on the potential for higher returns.¹⁵⁰

¹⁴⁷ See also Albert C. Lin, *Making Net Zero Matter*, 79 WASH. & LEE L. REV. 679, 698-702 (2022) (discussing difficulties associated with companies' net zero pledges).

¹⁴⁸ See, e.g., Peter Erickson, *Oil Companies Say Reducing Their Production Won't Reduce CO2 Emissions. Here's the Reality.*, SEI (May 26, 2021), <https://www.sei.org/perspectives/oil-companies-reducing-production-co2-emissions/>.

¹⁴⁹ See Kahan & Rock, *Systematic Stewardship*, *supra* note 7; Roberto Tallarita, *Portfolio Primacy*, *supra* note 29.

¹⁵⁰ There is evidence that hedge funds, for example, buy energy stock sold by large asset managers. See Laurence Fletcher & Derek Brower, *Hedge Funds Cash in as Green Investors Dump Energy Stocks*, FIN. TIMES (Oct. 7, 2021), <https://www.ft.com/content/ed11c971-be02-47dc-875b-90762b35080e>. These private actors have very little regulatory disclosure obligations relative to public

Second, and relatedly, increased prices would ensure that more capital-intensive fuel production methods like fracking or tar sands remain profitable. These methods are also more environmentally harmful. Research shows that natural gas obtained through fracking yields 20% more global warming per unit than coal.¹⁵¹ And tar sand extraction is also considerably more deleterious to the environment than traditional production, emitting between five and fifteen percent more GHG emissions and threatening the world's largest boreal forest and the habitat of dozens of endangered species. Ultimately, limiting supply causes higher prices, which leads to higher net GHG emissions.

Third, higher prices will also prompt increased domestic political pressure and backlash. Energy price inflation disproportionately impacts low-income individuals. People who have been living hand to mouth and can no longer make ends meet due to climate change activism by universal owners are likely to take their political revenge at the ballot box and vote for whichever party will promise to outlaw institutional influence on the oil industry. Prematurely raising energy prices without the necessary coordination on sustainable energy infrastructure and innovation will engender a backlash that impedes a successful transition to net zero.

Transportation. Any reduction in emissions in the transportation industries could have economy-wide second-order effects that might overshadow the emissions reduction. Consider an airline attempting to comply with emissions reduction requirements. Given the limitations of current battery technology, aircraft large enough to replace commercial aircraft are likely at least a decade away.¹⁵² Thus, any significant reduction in emissions would require drastically reducing the frequency of flights.

Limiting the supply of flights will drive up the price of flying. This would undoubtedly impact consumers' travel decisions: Less affluent travelers may no longer be able to afford short-range flights and would be forced to drive instead. Thousands of people driving their ICE vehicles down the East Coast to Miami each winter will emit more GHG than their flights would. Limited flights will also increase

companies, so their activities will be less transparent and likely entail more GHG emissions per barrel of oil.

¹⁵¹ http://www.eeb.cornell.edu/howarth/summaries_CH4.php

¹⁵² See Jennifer Korn, *Alice, The First All-Electric Passenger Plane, Prepares to Fly*, CNNBUSINESS (Jan. 31, 2022), <https://www.cnn.com/2022/01/31/tech/alice-eviation-test-flight/index.html>.

the cost of air freight, which would then be shipped on ICE trucks, again resulting in higher net emissions.

In short, every corporate reduction in GHG emissions to comply with a uniform mandate will affect the economy in complex ways that increase emissions elsewhere as consumers substitute other sources due to output limitations. These negative secondary and tertiary effects might outweigh the positive effects of the original emissions reduction policy. The solution is to have firm-specific knowledge and create a tailored emissions reduction plan that considers the intricacies of the industry and the firm's position within it, the state of sustainable replacements for the firm's energy usage, and how the emissions from consumer reactions to GHG reduction will compare to current emissions. As we have explained, universal owners cannot be expected to conduct research at this level of granularity.

ii. Disclosure

The next uniform measure that universal owners could impose is requiring public companies to disclose their emissions and the risks and opportunities that climate change poses to its business. Climate-related disclosure, the argument goes, will enable (active) investors to incorporate these risks and opportunities into their capital allocation strategies. Investors could better price climate risks, and green investors, for example, could make better decisions about avoiding companies that refuse to cut emissions. This will incorporate climate-related risks into equity prices, thereby incentivizing management to reduce climate risks.

Unfortunately, investor-driven climate disclosure is unlikely to work effectively. Current “Sustainability disclosures” made by corporations tend to be more an exercise in puffery and image management than one of sober evaluation of financial risks.¹⁵³ It is also unclear what corporations should disclose, and what metrics they should use. There are over 600 sustainability disclosure standards on

¹⁵³ See Eitan Arom, *Hidden Value Injury*, 121 COLUM. L. REV. 937 (2020). See also Virginia Harper Ho, *Nonfinancial Risk Disclosure and the Costs of Private Ordering*, 55 AM. BUS. L.J. 407 (2018) (discussing the difficulties associated with the private ordering approach to sustainability disclosure); Jill E. Fisch, *Making Sustainability Disclosure Sustainable*, 107 GEO. L.J. 923 (2019).

offer from different organizations.¹⁵⁴ Five prominent NGOs each have their own standards: the CDP, CDSB, GRI, IIRC, and SASB. Each of these standards measures different variables in different ways, making it impossible for investors to compare climate risks and opportunities from one company to another.¹⁵⁵

In recent years, progress has been made in coordinating climate risk disclosure standards among institutional investors.¹⁵⁶ However, even if investors and public companies agree on a uniform disclosure standard, enforcement remains a challenge. How would universal owners ensure that firms fully and accurately report the information required under this disclosure regime?

A solution to the standardization and enforcement problems is having the SEC promulgate mandatory disclosure standards and use its enforcement powers to ensure compliance. Indeed, the SEC has proposed new (and controversial) climate risk disclosure rules.¹⁵⁷ However, setting aside the debate over the SEC's authority to promulgate these disclosure requirements,¹⁵⁸ significant issues would remain.

By itself, disclosure about emissions and climate risks is unlikely to push firms to reduce emissions to the socially optimal level. Disclosure might serve two groups of investors. The first group is primarily concerned with profits and, accordingly, accurate pricing of climate risks. Given that these risks are expected to materialize far into the future, their present expected value is likely to be low, with a

¹⁵⁴ See Elizabeth Meager, *A Guide to Sustainable Reporting Standards*, CAPITOL MONITOR (Apr. 12, 2021), <https://capitalmonitor.ai/institution/a-guide-to-sustainable-reporting-standards/>; Javier El-Hage, *Fixing ESG: Are Mandatory ESG Disclosures the Solution to Misleading ESG Ratings?*, 26 FORDHAM J. CORP. & FIN. L. 359, 365-368 (2021).

¹⁵⁵ See Virginia Harper Ho, *Nonfinancial Risk Disclosure*, *supra* note 153.

¹⁵⁶ See Khalid Azizuddin, *IFRS Launches Project on Climate-related Disclosure*, RESPONSIBLE INVESTOR (Mar. 24, 2023), <https://www.responsible-investor.com/ifrs-launches-project-on-climate-related-disclosures/> (reporting that the International Accounting Standards Board has undertaken responsibility for setting climate disclosure standards).

¹⁵⁷ See *supra* note 13.

¹⁵⁸ See, for example, Bernard S. Sharfman, *The Ascertainable Standards that Define the Boundaries of the SEC's Rulemaking Authority* (July 9, 2023), available at SSRN: <https://ssrn.com/abstract=4504913> (arguing that the SEC has exceeded its authority in promulgating its proposed rule on climate-related disclosures).

marginal effect on price. Consequently, this group of investors is not expected to have a significant impact on management behavior.

The second group would like to rely on better disclosure to pressure firms to reduce emissions. These investors rely on climate risk disclosure to shape firms' behavior using two strategies: exit (divestment) or voice (engagement). The divestment strategy aims to create a negative price by *selling* shares, overriding the true discounted value of the actual disclosed climate risk. By driving the price of green companies up and that of brown companies down through supply and demand of investment capital, investors hope to encourage managers to change their behavior to obtain lower cost of capital. However, research has shown that divesting from polluters into green companies might fall short of inducing firms to reduce emissions. To begin, reducing the cost of capital for green companies might not lead them to further reduce emissions.¹⁵⁹ When climate-concerned investors sell shares of properly priced brown firms, it makes these firms' shares cheaper and thus more attractive for investors that care only about financial returns.¹⁶⁰ This problem, in turn, further exacerbates fund managers' difficulty in pursuing their conflicting goals of sustainability and competitive returns, as we discussed earlier. Indeed, recent empirical analyses suggest that channeling capital to green companies through ESG-focused funds does not meaningfully affect corporate behavior.¹⁶¹ The correlation between ESG fund holdings and more socially responsible corporate behavior is attributable to selection effects rather than changes induced by socially conscious investing.

¹⁵⁹ See Samuel M. Hartzmark & Kelly Shue, *Counterproductive Sustainable Investing: The Impact Elasticity of Brown and Green Firms* (2022), <https://papers.ssrn.com/abstract=4359282> (last visited Sep 6, 2023).

¹⁶⁰ See Eleonora Broccardo, Oliver Hart & Luigi Zingales, *Exit versus Voice*, 130 J. POL. ECON. 3101 (2022).

¹⁶¹ See Davidson Heath, Daniele Macciocchi, Roni Michaely & Matthew C. Ringgenberg, *Does Socially Responsible Investing Change Firm Behavior?*, (European Cor. Governance Inst., Working Paper No. 762, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3837706; Jonathan Berk & Jules H. van Binsbergen, *The Impact of Impact Investing*, STAN. UNIVERSITY GRADUATE SCH. BUS. RESEARCH PAPER (Jun. 10, 2022), https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID4132764_code38880.pdf?abstr=3909166&mirid=1.

The second strategy that disclosure could facilitate is "voice," which refers to engagement by universal owners or other investors. However, as we explain in this Article, there are unfortunately no investors with the necessary incentives and competence to initiate firm-specific engagement on decarbonization.

iii. Compensation

The structure of executive compensation is another measure available to universal owners to incentivize management to prioritize environmental goals. Universal owners can require firms to tie executive pay to environmental metrics. Recently, Allianz Global Investors, one of Europe's largest asset managers, has urged its investors to support imposing exactly this plan on its portfolio companies.¹⁶²

However, this measure, by itself, is unlikely to be effective.¹⁶³ For this measure to work, compensation metrics should match the emission goals that the firms should aspire to achieve. The risk is that management will find ways to set self-serving performance goals and manipulate the metrics to increase their pay.¹⁶⁴ Making climate-based compensation work requires considerable firm-specific knowledge for both setting performance goals (emission targets) and ensuring that management does not manipulate the metrics set for measuring progress. Without effective firm-specific knowledge, climate-based compensation might lead to higher-paid management teams, but very little in the way of actual emissions reduction progress.

C. Coordination

Apart from the mismatch between universal owners' thinly spread resources and the firm-specific information required to steward the entire market's transition to net zero, a universal owner-led emissions reduction program is fundamentally lacking in another crucial respect: Universal owners are missing the ability to coordinate.

¹⁶² See Harriet Agnew, *AllianzGI and Cevian Raise Pressure Over Linking Pay to Climate Goals*, FIN. TIMES (Feb. 28, 2022), <https://www.ft.com/content/025d0de8-4e5c-4eaa-be10-858fb2843206>.

¹⁶³ See also Bebchuk & Tallarita, *The Perils and Questionable Promise of ESG-Based Compensation*, *supra* note 42.

¹⁶⁴ With conventional performance metrics, managers have been known to accelerate revenue recognition or postpone discretionary expenses to maximize earnings per share metrics.

Scholars have already identified the problem of coordinating firm-specific actions among universal owners. However, a larger issue not yet addressed in the literature is the inability of universal owners to coordinate across the entire economy. We start with the inability to coordinate over firm-specific actions.

Coordination Over Firm-Specific Actions. Crafting an effective policy to reduce emissions requires coordination among large institutional investors owning the shares of a polluting corporation. As Professors Marcel Kahan and Edward Rock, and Professor Roberto Tallarita have shown, “universal” owners use hundreds of different indices as benchmarks, many of which focus on companies in particular industries or with particular characteristics. Therefore, while universal owners may agree on systemic measures to reduce emissions risks, their differing and sometimes conflicting interests may hinder consistent coordination on decarbonization plans for specific firms. Furthermore, universal owners' fiduciary duties and self-interests may motivate each asset manager (or different fund manager within a single fund family) to prefer a different policy based on their holdings in a given industry or firm. Additionally, regulatory constraints and current antitrust law may impede coordination efforts to limit output, making such coordination difficult or even illegal. Any solution relying solely on universal owners would thus lack the crucial element of reliable coordination around firm-specific measures.

Coordination Across the Economy. Managing an effective transition from fossil fuel to sustainable energy requires coordination around essential sustainability activities across the economy. First, there must be coordination on funding emerging technology ventures. Achieving an efficient transition to net-zero emissions calls for monumental feats of innovation in fields like geothermal energy, energy storage, carbon capture, and nuclear fusion—and probably fields we do not yet recognize—to transform the global economy. Key to the transition will be channeling capital to the most promising sources of sustainable energy innovation, which requires either government subsidies or the venture-capital expertise in evaluating technologies and teams. Universal owners cannot subsidize innovation at scale and they lack the venture-capital skill-set.

Second, coordination is essential when it comes to financing the gradual transition from polluting to greener energy sources. From an emissions standpoint, we know that oil is preferable to coal, natural gas and nuclear energy are superior to oil, and sustainable energy technologies like solar and wind outperform gas and nuclear energy.

As a result, it is more urgent to support energy producers transitioning from coal to natural gas than, for instance, a shift from nuclear to solar. However, orchestrating this transition is bound to fail when, due to universal owners' pressure, banks compete to fund the cleanest projects and shy away from financing initiatives that are not entirely sustainable.

Third, coordination is necessary for devising tailored and accommodating policies specific to each sustainable industry. The success and affordability of various aspects of sustainable energy production rely on governments creating regulatory conditions that enable them to thrive. For example, electric vehicles (EVs) depend heavily on minerals like nickel, cobalt, and lithium, which are largely controlled by China. Competing effectively with China for these vital resources will necessitate a formal, systematic industrial policy. Another example is geothermal energy: optimal locations for geothermal drilling often coincide with federal land, meaning drilling attempts could become entangled in the National Environmental Policy Act (NEPA) environmental review process. Granting the geothermal industry the same exclusions from NEPA environmental review requirements that oil and gas exploration companies currently enjoy would significantly accelerate innovation.¹⁶⁵ Subsidies for geothermal energy production are also significantly lower than those for wind and solar.¹⁶⁶

Fourth, coordination between regulation and innovation is essential. As previously mentioned, imposing excessively burdensome regulations on fossil fuels before sustainable alternatives are sufficiently available is likely to backfire. Instead, regulators must remain aware of advances in sustainable energy for specific applications and gradually phase out polluting energy sources in proportion to the availability of sustainable alternatives. This approach ensures a smooth transition without causing unintended disruptions to the economy or energy supply. Importantly, the phasing out of fossil energy should apply to all types of actors, whether publicly traded or privately owned, in order to prevent a shift from public polluters to private polluters. By ensuring that all actors are held accountable and

¹⁶⁵ Geothermal Development and the Use of Categorical Exclusions Under the National Environmental Policy Act of 1969 <https://www.osti.gov/biblio/1305956>, Geothermal Development and the Use of Categorical Exclusions <https://www.nrel.gov/docs/fy14osti/62625.pdf>

¹⁶⁶ See Eli Dourado, *The State of Next-Generation Geothermal Energy* (July 6, 2021), <https://elidourado.com/blog/geothermal/>.

subject to the same regulations, an efficient and comprehensive transition towards sustainable energy can be achieved.

The coordination required for the economy-wide transition does not involve the systematic coordination of overarching governance policies, an area where universal owners might excel. Instead, it demands highly specific, idiosyncratic coordination on an industry-by-industry and perhaps even firm-by-firm basis. Unfortunately, universal owners lack the necessary expertise and incentives to engage effectively in this form of coordination.

IV. FIRM-SPECIFIC DECARBONIZATION: NEW CHAMPIONS?

Given their business model and regulatory constraints, universal owners will not initiate firm-specific policies for effectively reducing emissions.¹⁶⁷ At best, they can push firms to adopt uniform climate policies. However, managers' agency costs and differences across firms in optimal decarbonization strategies make uniform, market-wide solutions insufficient for effectively cutting emissions. We have shown earlier that profit-driven hedge funds will supply the monitoring required to make companies adopt the best strategy for reducing emissions.

In this part, we argue that, unfortunately, no other actor can provide the firm-specific guidance that is crucial for reducing carbon emissions. Specifically, we show that ideology-driven activist funds, ESG directors, or investor coalitions lack the necessary competence and incentives to fill the role traditionally played by activist hedge funds. Ultimately, the only actor well positioned to fulfill this role is the predictable choice: environmental regulators.

¹⁶⁷ Indeed, they are even reluctant to support shareholder proposals that are too prescriptive when it comes specific steps that firm should take to reduce emissions. *See, for example*, Blackrock, *2022 Climate-Related Shareholder Proposals More Prescriptive than 2021*, <https://www.blackrock.com/corporate/literature/publication/commentary-bis-approach-shareholder-proposals.pdf> (noting that Blackrock is not likely to support shareholder proposals that are “intended to micromanage companies. This includes those that are unduly prescriptive and constraining on the decision-making of the board or management, [or] call for changes to a company’s strategy or business model.”)

A. *Climate Activists*

The successful campaign led by the Engine No.1 fund against ExxonMobil has led many commentators to believe that a new type of activism has emerged.¹⁶⁸ Motivated primarily by concerns about climate rather than financial gain, these climate-driven activists are expected to borrow the profit-driven activists' playbook to compel companies to reduce emissions, even when doing so might sacrifice profits.

We find it highly unlikely that climate-driven activists will emerge to fill this role. To begin, these funds will need to obtain the resources needed for firm-specific research and launching costly campaigns. Unlike profit-driven funds, however, climate activists cannot rely on an increase in stock price as a reward for their costly efforts. Consequently, they would need to rely on donors or investors willing to provide financial support for the cause without expecting the traditional returns associated with profit-driven investments.¹⁶⁹ This funding model will present challenges in attracting sufficient resources. In the absence of adequate funding for devising firm-specific strategies for effectively reducing emissions, climate activists risk resorting to one-size-fits-all proposals, which may not yield the desired results.

Second, climate activists' strong commitment to environmental causes may lead them to advocate for policies that expressly require firms to sacrifice shareholder value to reduce emissions. Even universal owners and other institutional investors who claim to care about both climate *and* profits might hesitate to support these policies, especially if climate activists lack firm-specific knowledge. Furthermore, if activist-backed candidates succeed in getting appointed to the board, implementing such policies would put these directors in conflict with prevailing corporate law rules. This situation

¹⁶⁸ See, for example, See Michal Barzuza, Quinn Curtis & David H. Webber, *The Millennial Corporation: Strong Stakeholders, Weak Managers*, (European Corporate Governance Institute - Law Working Paper No. 687, 2023) Available at SSRN: <https://ssrn.com/abstract=3918443>.

¹⁶⁹ For instance, in September 2022, Bloomberg launched \$85 million campaign against the petrochemical industry. See <https://www.bloomberg.org/press/michael-r-bloomberg-launches-new-85-million-campaign-to-stop-rapid-rise-of-pollution-from-the-petrochemical-industry-in-the-united-states/>

would create additional legal challenges for both the directors and the activist funds that appointed them in their efforts to achieve meaningful change.

Indeed, two years after the celebrated appointment of three directors to the board of ExxonMobil by Engine No. 1, it remains unclear what significant changes to strategy these directors have initiated to facilitate ExxonMobil's decarbonization plans.¹⁷⁰ This highlights the challenges and limitations faced by climate activists in achieving substantial progress within the complex landscape of corporate governance and emissions reduction.

B. ESG Directors

Other candidates for spearheading firm-specific initiatives to reduce emissions are *ESG Directors*. In theory, universal owners and other institutional investors can use their voting power to nominate directors with industry expertise and a commitment to climate to the board. Under this view, all the universal owners need to do is vet candidates for director positions, which presumably would be less resource-intensive than determining the optimal emissions reduction policy for each company. By appointing knowledgeable and dedicated ESG Directors, these investors would hope to drive meaningful change in emissions reduction strategies within individual firms while maintaining a focus on both environmental goals and shareholder value.

Certainly, institutional investors can use their voting power to push companies to include climate experts on their boards. However, expertise alone is not enough. What we envision is directors who will act like those appointed by activist hedge funds—using their seat on the board and their access to non-public information to drive change. Unfortunately, several reasons prevent ESG directors from performing the same function as directors appointed by hedge fund activists.

Activist directors do not operate in a vacuum. Rather, they rely on continuous interaction with the hedge fund that nominated them. It

¹⁷⁰ See Justin Jacobs, *What Is Really Driving Exxonmobil's Clean Energy Commitments?*, FIN. TIMES (May 8, 2023) (quoting one of the backers of Engine No. 1's campaign as saying: that is unclear whether the company's strategy "is just an exercise in messaging and PR or whether there's real commitment to a new strategy.").

is the hedge fund that nominates directors and runs a proxy contest if necessary. After their appointment, activist directors continuously rely on the fund's resources and expertise to collect information and analyze it independently of management.¹⁷¹ To utilize the fund's resources, activist directors share with it the nonpublic information they receive from the company. This information sharing allows the fund to refine its firm-specific vision for the company. It also significantly improves its ability to monitor the directors it appointed to the board (to the extent that they are not employees of the fund). This symbiotic relationship between activist directors and the nominating hedge fund is crucial for driving change and ensuring effective oversight of the company's strategic direction.

Understanding the nature of the interaction between activist directors and activist funds highlights the difficulties of any attempt to replicate activist directors by universal owners and ESG directors. Regulatory constraints and other reasons discourage universal owners from nominating directors (and from coordinating on identifying the candidates to be nominated).¹⁷² Even if ESG directors are appointed, regulatory constraints and lack of incentives would discourage institutional investors from investing in the infrastructure to support these directors.¹⁷³ This would hinder the ESG directors' ability to access the same level of resources and expertise that activist directors enjoy and impede their ability to influence company strategy effectively.

In the early 1990s, when institutional investors started to become more powerful, Professors Ronald Gilson and Reinier Kraakman envisioned a regime in which institutional investors would use their clout to appoint professional outside directors to company boards, thereby significantly improving the market for directors.¹⁷⁴ These directors, so their argument goes, would develop a reputation for leading change at companies and would therefore be appointed by fund sponsors whenever the need arises. Their vision, however, has

¹⁷¹ See Kastiel & Nili, *Captured Boards*, *supra* note 50; Assaf Hamdani & Sharon Hannes, *The Future of Shareholder Activism*, 99 B.U. L. REV. 971 (2020).

¹⁷² See John Morley, *Too Big to Be Activist*, 92 S. CAL. L. REV. 1407 (2019).

¹⁷³ See Ronald J. Gilson & Jeffrey N. Gordon, *Board 3.0: An Introduction*, 74 BUS. LAW. 351 (2019); Assaf Hamdani & Sharon Hannes, *The Future of Shareholder Activism*, 99 B.U. L. REV. 971 (2020).

¹⁷⁴ See generally Ronald J. Gilson & Reinier Kraakman, *Reinventing the Outside Director: An Agenda for Institutional Investors*, 43 STAN. L. REV. 863 (1991).

only been partially realized. The rise of institutional investors' influence has led to activist directors' appointments to public company boards. These directors, however, have been nominated by activist hedge funds, and not by mutual funds and other institutional investors. For the reasons discussed above, universal owners still will not appoint ESG directors.

ESG directors would face other challenges. Directors who are driven only by climate concerns might advocate for policies that sacrifice their firms' value to protect the planet, thereby raising legal questions about the nature of fiduciary duties,¹⁷⁵ and their ability to influence corporate strategy may be limited as long as a majority of board members prioritize profits over environmental goals. In contrast, 'professional' directors might become subject to agency costs. Since they are appointed to "solve" the emission problem, they will push for non-optimal strategies such as integrated play.

C. Investor Coalitions

Investor coalitions may have the resources and perhaps the incentives to craft firm-specific climate policies. Climate Action 100+, for example, is a global investor initiative that was launched in 2015 and brings together more than 700 investors with combined assets under management (AUM) of over \$68 trillion.¹⁷⁶ It describes its aim as ensuring "that the world's largest corporate greenhouse gas emitters take necessary action on climate change." Climate Action 100+ uses different engagement strategies to seek commitments from management at portfolio companies to climate policies like reducing greenhouse gas emissions, terminating efforts to influence greenhouse gas regulations, and disclosing climate-related risks.¹⁷⁷ Its efforts seem to have met with some notable successes. So far, the organization has

¹⁷⁵ See, for example, Cynthia A. Williams, *Fiduciary Duties and Corporate Climate Responsibility*, 74 VAND. L. REV. 1875 (2021).

¹⁷⁶ About Climate Action 100+, CLIMATE ACTION 100+ <https://www.climateaction100.org/about/>.

¹⁷⁷ *Id.* Another framework for cooperation is the Collaboration Platform provided by the Principles for Responsible Investment (PRI). See Elroy Dimson, Oguzhan Karakas & Xi Li, *Coordinated Engagements*, (European Cor. Governance Inst. Working Paper No. 721, 2021), available at http://ssrn.com/abstract_id=3209072 (studying the structure of collaborative engagements that relied on this platform).

facilitated votes on climate-related shareholder proposals at over 100 multinational companies, including oil producers such as British Petroleum, Royal Dutch Shell, and ConocoPhillips, as well as other multinational corporations such as food conglomerate Nestlé and shipping giant Maersk.

Climate Action 100+ states that its principal asks from companies are to establish ambitious targets for reducing emissions, enhance their climate-related disclosure, and strengthen their climate governance.¹⁷⁸ But while investor coalitions are a promising vehicle for advocating systemic measures, these measures are unlikely to be effective in reducing emissions. Most important, investor coalitions cannot initiate and campaign for firm-specific climate measures.

Investor coalitions could pool the resources needed for crafting firm-specific policies, but they cannot overcome the regulatory barriers to climate activism by their members. Assume that Climate Action 100+ comes up with a well-researched proposal requiring a specific firm to follow a certain course of action. Such a plan, however, will have to be backed by the threat of a proxy fight to appoint directors to the board. After all, shareholders cannot simply instruct boards how to act, and many institutional investors have a policy against supporting proposals that dictate to the board what to do.

Climate Action 100+ will need to rely on one of its members to nominate directors.¹⁷⁹ As we explained earlier, however, regulatory constraints essentially prevent institutional investors from nominating directors. Moreover, institutional investors' fiduciary duties prevent them from blindly supporting Climate Action 100+ proposals (even if they provide it with funding). Universal owners will need to invest their own resources to evaluate the proposal initiated by Climate Action 100+ and assess it against the vision offered by management.

Finally, joining a coordinated vote over firm-specific policies (especially if they reduce the supply of fossil energy and thus affects prices) might pose a risk of an antitrust violation.¹⁸⁰ These issues

¹⁷⁸ <https://www.climateaction100.org/approach/the-three-asks/>.

¹⁷⁹ See CLIMATE ACTION 100+, *How We Work*, <https://www.climateaction100.org/approach/how-we-work/> (“[C]limate Action 100+ as an initiative will not act or speak directly on behalf of the participating investors.”)

¹⁸⁰ Indeed, a group of state attorneys general inquired whether the Climate Action 100+ alliance implicates antitrust laws for institutional investors. See Damian

explain why Climate Action proposes only systemic solutions and why it expressly states that it does not make vote recommendations.¹⁸¹

V. POLICY IMPLICATIONS

What policy conclusions can we derive from our analysis? Our findings demonstrate that universal owners lack the required incentives and competence to effectively reduce carbon emissions. Regrettably, climate risks cannot be mitigated solely through systematic stewardship measures. Therefore, instead of applauding the ultimately futile or counterproductive attempts of universal owners to directly address climate change, scholars and investors should encourage these entities to advocate for federal government regulation. Such regulation can facilitate a comprehensive economic transformation and promote a transition to net-zero emissions.

At present, institutions annually allocate tens of millions of dollars towards campaign contributions and lobbying efforts, attempting to “capture” politicians and thwart regulations not aligned with their interests. As the unprecedented scale and influence of institutions have become more controversial in the wake of the 2008 financial crisis, they have steadily increased their political expenditures to ensure this controversy does not translate into congressional action. After all, the current size and influence of institutional investors was only made possible by regulatory changes to allowing and privatizing the investment of pension funds, creating a huge source of funds under institutional investors’ control.¹⁸² Ensuring such regulations and other restrictions are kept off the table should thus be a top priority. And based on their actions, it is. In the 2006 election cycle, institutional investors spent approximately \$50.5

G. Didden, *Antitrust and ESG*, HARV. L. SCH. F. ON CORP. GOVERNANCE BLOG (Jan. 31, 2023), <https://corpgov.law.harvard.edu/2023/01/31/antitrust-and-esg/>.

¹⁸¹ See *How We Work*, *supra* note 179 (“Climate Action 100+ does not facilitate or require collective decision-making regarding an investment decision. The initiative will not provide recommendations to investors to divest, vote in a particular way or make any other investment decision.”).

¹⁸² See 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, 878-81 (2013).

million in campaign contributions.¹⁸³ This figure more than doubled during the 2012 election cycle, with institutional investors contributing approximately \$103.7 million.¹⁸⁴ By the 2020 election cycle, these donations surged to around \$152.6 million for congressional campaigns.¹⁸⁵ This trend is also evident among individual institutional investors. For instance, BlackRock contributed a mere \$265,500 during the 2006 election cycle but donated over five times that amount in the 2012 cycle¹⁸⁶ and six times as much in the 2020 cycle.¹⁸⁷

Institutional investors have not only escalated their political spending, but they have also strategically targeted their contributions towards members of Congress who sit on committees with jurisdiction over their operations. For example, since the 2008 election cycle, BlackRock has contributed more than \$720,000 to members of the House Financial Services Committee, and more than \$525,000 to members of the Senate Finance Committee.¹⁸⁸ Similarly, since the

¹⁸³ Center for Responsive Politics, <https://www.opensecrets.org/industries/summary.php?cycle=2006&ind=F07> [https://perma.cc/R3J2-3PKL].

¹⁸⁴ Center for Responsive Politics, <https://www.opensecrets.org/industries/summary.php?ind=F07&recipdetail=A&sortorder=U&mem=Y&cycle=2012> [https://perma.cc/6BCK-QARV].

¹⁸⁵ Center for Responsive Politics, <https://www.opensecrets.org/industries/summary.php?ind=F07&recipdetail=A&sortorder=U&mem=Y&cycle=2020> [https://perma.cc/3F3E-787R].

¹⁸⁶ Center for Responsive Politics, <https://www.opensecrets.org/orgs/blackrock-inc/summary?toprecipcycle=2020&contribcycle=2020&lobcycle=2020&outspendcycle=2020&id=D000021872&topnumcycle=2012> [https://perma.cc/35VV-6SRQ]. In fact, in the 2004 election cycle, BlackRock contributed just \$9,200 in campaign contributions. Contrast this with the 2018 election cycle in which BlackRock contributed over \$1.5 million.

¹⁸⁷ Center for Responsive Politics, <https://www.opensecrets.org/orgs/blackrock-inc/summary?toprecipcycle=2020&contribcycle=2020&lobcycle=2020&outspendcycle=2020&id=D000021872&topnumcycle=2020> [https://perma.cc/BC4C-DU46].

¹⁸⁸ See *BlackRock's Washington Playbook*, CAMPAIGN FOR ACCOUNTABILITY at 5 (2019), <https://campaignforaccountability.org/work/blackrocks-washington-playbook/>. Compare BlackRock's post-2008 donations to the House Financial Services Committee with its donation to that same committee in the 2008 election cycle, in which it donated just \$2,250. By the 2010 election cycle that number would increase to \$73,500 and by the 2012 election cycle, to \$126,250. Similarly, BlackRock's contributions to the Senate Finance Committee increased from \$2,300 in the 2008

2008 election cycle, Vanguard has contributed over \$515,000 to members of the House Financial Services Committee and over \$230,000 to members of the Senate Finance Committee.¹⁸⁹

Institutional investors have also sharply increased their lobbying expenditures since the 2008 financial crisis. In 2006, institutional investors spent roughly \$64 million on lobbying efforts.¹⁹⁰ By 2009, that amount jumped to approximately \$95 million, and by 2010, institutional investors spent nearly \$104 million on lobbying efforts.¹⁹¹ Every year since 2010, institutional investors have spent at least \$96 million in lobbying.¹⁹² This trend mirrors that of individual institutional investors. Before 2009, BlackRock's highest lobbying expenditure was \$180,000.¹⁹³ However, in 2009, this amount surged to \$545,000, and by 2011, BlackRock was spending around \$2.5 million on lobbying efforts.¹⁹⁴ Since 2011, BlackRock has allocated at least \$2.2 million towards lobbying each year.¹⁹⁵ Similarly, Vanguard has spent at least \$2 million on lobbying each year since 2013.¹⁹⁶ Compare that with its lobbying efforts pre-2008, in which Vanguard failed to spend \$1 million on lobbying efforts in any year.¹⁹⁷

election cycle to \$163,000 during the 2014 election cycle. *Id.* Also note that BlackRock has concentrated its donations to high-ranking members within these committees. For example, in the 2014 election cycle, BlackRock contributed over \$49,000 to Sen. Mark Warner and over \$70,000 to Sen. Chuck Schumer, both of whom are on the Senate Finance Committee.

¹⁸⁹ Center for Responsive Politics, <https://www.opensecrets.org/orgs/congcmtes.php?id=D000022305&cycle=2010>. In the 2008 election cycle, Vanguard contributed \$36,700 to the House Financial Services Committee. This number jumped to \$123,250 in the 2016 election cycle, and to \$171,540 in the 2018 election cycle. Likewise, Vanguard contributed just \$21,000 to the Senate Finance Committee in the 2008 election cycle, but would triple that amount in the 2016 election cycle, donating \$65,400.

¹⁹⁰ Center for Responsive Politics, <https://www.opensecrets.org/industries/lobbying.php?cycle=2006&ind=F07>.

¹⁹¹ *Id.*

¹⁹² *Id.*

¹⁹³ Center for Responsive Politics, <https://www.opensecrets.org/orgs/lobby.php?id=D000021872>.

¹⁹⁴ *Id.*

¹⁹⁵ *Id.*

¹⁹⁶ Center for Responsive Politics, <https://www.opensecrets.org/orgs/lobby.php?id=D000022305>.

¹⁹⁷ *Id.*

As a result of these efforts, institutional investors' policy concerns have not fallen on deaf ears, and congressional decision-makers have been quick to ameliorate them. For instance, the Office of Financial Research (OFR) at the Treasury Department issued a 2013 report evaluating whether asset managers like BlackRock posed any financial risks.¹⁹⁸ BlackRock and other institutional investors criticized the report, and during the months surrounding its release, BlackRock contributed more than \$46,000 to Sen. Mark Warner's campaign.¹⁹⁹ Shortly after the OFR report was released, Sen. Warner, who was then a member of the Senate Finance Committee, came to BlackRock's defense, questioning Treasury Department officials about the report.²⁰⁰

Institutional investors have demonstrated their ability to influence political action through significant, and increasing, outlays of cash. These universal owners have been able to use their significant lobbying power effectively, but nevertheless are not competent to solve the climate crisis. As explicated in *supra* Part III, government agencies are the only entities capable of consolidating the necessary components for averting a climate crisis. The government can adopt measures that would force polluters to internalize the cost of their emissions, thereby allowing markets to price climate risks and facilitating firm-specific activism by hedge funds. Government agencies also possess the scale and expertise needed to coordinate funding and subsidies for sustainable energy R&D, finance the orderly phase-out of polluting energy sources, and implement accommodating regulatory policies for each emerging technology. Importantly, economists suggest that the most straightforward way for the government to enact effective policy and coordination is by adopting a carbon tax. Universal owners are unable to achieve anything similar.

A carbon tax would levy a fee on corporations for every ton of carbon they emit.²⁰¹ Other forms of carbon pricing involve carbon-

¹⁹⁸ See *BlackRock's Washington Playbook* at 6, <https://campaignforaccountability.org/work/blackrocks-washington-playbook/>; see also *Asset Management and Financial Stability*, Office of Financial Research, September 2013, <https://www.financialresearch.gov/press-releases/2013/09/30/ofr-delivers-report-on-asset-management-industry/>.

¹⁹⁹ See *BlackRock's Washington Playbook* at 7, <https://campaignforaccountability.org/work/blackrocks-washington-playbook/>.

²⁰⁰ *Id.*

²⁰¹ See Govinda R. Timilsina, *Carbon Taxes*, 60 J. ECON. LIT. 1456, 1472 (2022).

trading schemes, where corporations who emit carbon below a certain threshold can “sell” their remaining carbon allotment to corporations who emit more.²⁰² A government-implemented carbon pricing scheme would solve many of the problems currently plaguing universal owners. A carbon tax would give power back to corporations to make firm specific decisions about how to best regulate their carbon emissions. Importantly, a carbon tax program would allow corporations to approach climate issues from a “profit-oriented” approach, instead of forcing corporations to choose between climate and profit goals. This would avoid the potentially thorny legal and ethical issues that directors now face when deciding whether to implement costly ESG programs.

If institutional owners are genuinely committed to averting the systemic risk of climate change, rather than merely engaging in virtue signaling to attract investors, they should acknowledge that the government is better suited for systematic stewardship. All stakeholders ought to concentrate on encouraging institutional investors to redirect the hundreds of millions of dollars they allocate to political donations and lobbying towards advocating for comprehensive and effective energy policies from the government. The political capture machinery of universal owners should be repurposed to advance government policies that further climate objectives.

SUMMARY

Climate change has become an undeniable global crisis, posing a serious challenge to our planet's survival and prompting businesses to reevaluate their strategies for sustainable growth. The emergence of universal owners has sparked optimism that they could spearhead market-wide initiatives to reduce carbon emissions. Several reasons have been proposed as to why universal owners might assume this role. First, universal owners must respond to the demands of their investors who are concerned about climate change. Second, since universal owners hold the entire market, they may want to avoid the negative externalities that one corporation could have on another within their portfolio. One version of the latter justification, known as portfolio primacy, suggests that universal owners might sacrifice the value of a

²⁰² For a review of seven major emissions trading regimes, see Richard Schmalensee & Robert N. Stavins, *Lessons Learned from Three Decades of Experience with Cap and Trade*, 11 REV. ENVTL. ECON. & POL'Y 59 (2017).

polluting corporation to increase the value of the other corporations in their portfolio. However, the portfolio primacy justification has been criticized by scholars for its illegality and impracticability. The other version suggests that universal owners care about climate change as a systematic risk and can engage in systematic stewardship to mitigate this risk.

This article explains why systematic stewardship may not achieve the desired outcome of reducing carbon emissions. Universal owners lack the necessary incentives and competence to effectively reduce carbon emissions. They have distorted incentives, as they market ESG-funds with conflicting promises: "You can do good as you do well." This untenable promise that ESG-fund returns will not be lower than non-ESG funds prevents universal owners from effectively compelling corporations to reduce emissions.

Universal owners also lack competence because, although climate change is a systematic risk, addressing it requires firm-specific knowledge and engagement, as well as economy-wide coordination, which, regrettably, they cannot provide. Worse yet, no other actors can provide the required firm-specific engagement. For-profit hedge fund activists won't launch campaigns without expecting short-term profits, while ideology-driven hedge fund activists and designated ESG-directors likely lack resources and face legal and regulatory constraints. Additionally, investor coalitions cannot effectively engage in firm-specific activities and will likely resort to one-size-fits-all measures.

about ECGI

The European Corporate Governance Institute has been established to improve *corporate governance through fostering independent scientific research and related activities*.

The ECGI will produce and disseminate high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It will draw on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

The views expressed in this working paper are those of the authors, not those of the ECGI or its members.

ECGI Working Paper Series in Law

Editorial Board

Editor	Amir Licht, Professor of Law, Radzyner Law School, Interdisciplinary Center Herzliya
Consulting Editors	Hse-Yu Iris Chiu, Professor of Corporate Law and Financial Regulation, University College London Martin Gelter, Professor of Law, Fordham University School of Law Geneviève Helleringer, Professor of Law, ESSEC Business School and Oxford Law Faculty Kathryn Judge, Professor of Law, Columbia Law School Wolf-Georg Ringe, Professor of Law & Finance, University of Hamburg
Editorial Assistant	Asif Malik, ECGI Working Paper Series Manager

<https://ecgi.global/content/working-papers>

Electronic Access to the Working Paper Series

The full set of ECGI working papers can be accessed through the Institute's Web-site (<https://ecgi.global/content/working-papers>) or SSRN:

Finance Paper Series	http://www.ssrn.com/link/ECGI-Fin.html
Law Paper Series	http://www.ssrn.com/link/ECGI-Law.html

<https://ecgi.global/content/working-papers>