

# Big Three (Dis)Engagements

Dhruv Aggarwal  
Northwestern Pritzker School of Law  
[dhruv.aggarwal@law.northwestern.edu](mailto:dhruv.aggarwal@law.northwestern.edu)

Lubomir Litov  
University of Oklahoma  
[litov@ou.edu](mailto:litov@ou.edu)

Shivaram Rajgopal\*  
Columbia Business School  
[sr3269@gsb.columbia.edu](mailto:sr3269@gsb.columbia.edu)

September 2023

**Abstract:** This paper uses newly available data to empirically analyze how the three largest asset managers (BlackRock, Vanguard, and State Street) engage with portfolio companies. Event study analysis finds that targeted firms exhibit transitory negative but tiny abnormal returns when engagements are reported. We find that asset managers' choice of engagement targets is virtually unrelated to firm financial performance. Asset managers are not more likely to vote against management at firms selected for engagement. Combined with qualitative evidence regarding the limited resources available to engagement personnel, these results cast doubt on the Big Three asset managers' ability to be active owners.

**JEL classification:** G32, G38, K42

**Keywords:** Corporate Governance, Institutional Investors, Engagement, Executive Compensation.

\* We thank David Moffett, Felix Meschke, Mu-Jeung Yang, and Wayne Thomas for comments.

## 1. Introduction

“As a fiduciary, BlackRock engages with companies to drive the sustainable, long-term growth that our clients need to meet their goals.”

- Larry Fink, CEO, BlackRock<sup>1</sup>

“While couched in language about long-term value, BlackRock’s alignment of engagement priorities with environmental and social goals. . . is not consistent with fiduciary and legal obligations. Nor are blanket commitments to vote for directors based upon protected characteristics, such as gender. . . If BlackRock were focused solely on financial returns, its conduct would likely be different.”

- Letter from Republican Attorneys General to Larry Fink<sup>2</sup>

Large asset managers play an increasingly important role in corporate governance, shaping the extent of shareholder engagement and pressing for “long-term” value creation. The Big Three asset managers (BlackRock, Vanguard, and State Street) collectively manage trillions of dollars of assets under management, and own about a fifth of the average S&P 500 firm (Backus et al. 2021, Lund and Robertson 2023). A key manifestation of this common ownership has been the Big Three’s engagement with portfolio companies on issues such as board diversity, executive compensation, and sustainability. Each of the Big Three asset managers has publicized examples of “successful” engagements where they allegedly achieved greater value for their clients by reaching out to management at portfolio company and making them change operational, financial or governance practices or policies. While such examples could be seen as an important measure of the Big Three’s influence (Bebchuk and Hirst 2021), we know surprisingly little about how the three biggest asset managers in the US select engagement targets and what economic impact these engagements have.

In this paper, we address three research questions. First, we use an event study approach to measure market reactions to the Big Three’s disclosure of engagement targets. If investors perceive

---

<sup>1</sup> See <https://corpgov.law.harvard.edu/2018/01/17/a-sense-of-purpose/>.

<sup>2</sup> See <https://www.texasattorneygeneral.gov/sites/default/files/images/executive-management/BlackRock%20Letter.pdf>.

engagement as a signal of weak corporate governance, one would expect targeted portfolio firms to exhibit negative abnormal returns. Conversely, if engagement is an important corrective that spurs better governance in the future, one may anticipate positive abnormal returns for engaged companies. Second, we examine whether Big Three engagements are plausibly related to creating value for their clients. Asset managers have fiduciary obligations to their clients under federal securities regulations: if they force portfolio companies to adopt strategies that reduce their clients' portfolio value, they violate their legal duties (Hemphill and Kahan 2020). Each of the Big Three therefore justifies their engagement efforts as being *exclusively* focused on creating client value, because this is a strict legal requirement. We empirically assess whether the Big Three actually select targets that are underperformers. If engagement is a corrective mechanism, one would expect asset managers to target financial laggards for governance outreach. Third, we examine if Big Three managers “walk the walk” by voting against management at portfolio companies after engagements. To the extent engagements are focused on financial laggards, one should expect asset managers to become more likely to vote against management after announcing that they disapprove of the company's governance. We also analyze whether firms change key corporate governance practices after being engaged by Big Three asset managers.

We use recently available data disclosed by the Big Three revealing which companies they targeted for engagements. Each of the largest asset managers periodically publishes stewardship reports containing lists of engaged firms: State Street was the first to begin this practice, for 2014 engagements, followed by BlackRock from 2018 and Vanguard from 2019. A key contribution of this paper is to use this new information from the Big Three to systematically analyze the determinants and consequences of portfolio company engagement. To the best of our knowledge, our study is the first academic analysis using the entirety of the Big Three engagement data, as opposed to selected anecdotes.

The event study findings suggest that Big Three engagements do not have an economically significant effect on the value of targeted firms on the date asset managers publish the list of engaged companies. Engaged firms exhibit negative abnormal returns on these dates, but these are tiny (10-50 basis points) in magnitude, transitory, and only significant for two of the Big Three. This finding is not consistent with the notion that engagements are a credible signal of governance quality, and instead suggest that investors do not treat these interactions as revealing significant new information about the firm's operations.

Next, assessing the Big Three's selection of engagement targets, we find little support for asset managers' claim that they focus on financial value for their clients. There is virtually no significant correlation between a portfolio firm's financial performance and the likelihood that it is targeted for engagement by BlackRock, Vanguard, or State Street. Instead, engagement seems to largely be a function of the asset manager's influence over and exposure to the portfolio firm, as proxied by the percentage of firm equity owned by the manager and the percentage of the manager's portfolio represented by the firm, respectively. The non-salience of firm financial returns in predicting the likelihood of engagement persists when we additionally control for firm financials and a variety of corporate governance indicia mentioned in the Big Three's investment stewardship policies. Therefore, Big Three engagements seem detached from the financial performance of portfolio companies, rather than focused on it as required by fiduciary law and claimed in these managers' stated policies.

Based on our reading of Big Three investment stewardship policies and extensive informal interactions with personnel, we propose an organizational reason for the Big Three being unable to pursue a value-based approach to engagements: their stewardship teams are understaffed. BlackRock—the largest of the Big Three—has reportedly only employed about a dozen individuals

to monitor portfolio companies and select engagement targets in the US. This headcount number is striking, given that BlackRock engages with thousands of portfolio firms every year. Our conversations with informed parties indicate that the engagement teams at Vanguard and State Street are similarly small. It is implausible that a team of this size could form a sophisticated understanding of the corporate governance intricacies at each of the Big Three's portfolio firms and then select the worst performers in a systematic fashion. Moreover, the investment teams at these asset managers are reportedly siloed from the engagement teams. Communication related to improving the investment performance of say laggards in an index between the investment teams and engagement managers could arguably be improved. Further, we were told that "success" for the engagement team was not necessarily measured as improvement in firm performance.

Finally, our third research finding is that the Big Three do not become more likely to vote against management at portfolio companies after engaging with them. Therefore, we find no evidence that the Big Three punish engagement targets using their voting power. We interpret this finding to suggest that Big Three personnel follow a "checklist" approach and classify an engagement as successful after perfunctory communications with management. This could explain why the Big Three do not "walk the walk" and vote against management after an engagement. Beyond voting by the Big Three, we also do not find any effect of engagement on subsequent corporate governance outcomes at portfolio companies, including CEO compensation, dual-class stock, and the presence of female directors. Therefore, engagement does not seem to change either the voting behavior of asset managers or the corporate governance practices of portfolio firms.

Our findings make three contributions to the literature. First, we add to the literature on the determinants and consequences of shareholder engagement. Using actual engagement data from the Big Three, we supplement survey-based analyses such as [Krueger et al. \(2020\)](#), and are able to

discern whether institutional investors' actual engagement practices align with their stated policies. Moreover, by using the newly publicized data from the Big Three, we find strikingly different results from the existing literature on engagement. For instance, [Dimson et al. \(2015\)](#) use a proprietary dataset from a smaller institutional investor to find that engagements are more likely for financially underperforming portfolio firms and that successful engagements are associated with positive abnormal returns. However, the institutional investor in their study ranked between 80<sup>th</sup> and 100<sup>th</sup> globally in terms of assets under management, paling in comparison to the vast holdings of the Big Three. The considerably more complex operations of BlackRock, Vanguard, and State Street and their unique position in the financial markets make it unsurprising that these prior results do not hold in our study of Big Three engagements.<sup>3</sup>

[Heath et al. \(2021\)](#) study the efficacy of engagement efforts by index funds including, but not restricted to, the Big Three. However, they use 13-D filings and the passage of contentious management or shareholder proposals as proxies for public and private engagement, respectively. These proxies are imperfect measures of Big Three engagement. 13-D filings are only legally required by the Securities and Exchange Commission (SEC) if a holder of over 5% stock has “the purpose or the effect of influencing the control of the firm.” Many engagements we study, such as those pertaining to environmental practices or board diversity, would not logically implicate “control of the firm,” and would thus be missed by focusing on 13-D filings. Similarly, contentious management or shareholder proposals may pass or fail for reasons completely unrelated to institutional ownership. The advantage of our study is that we have comprehensive engagement data disclosed by the Big Three themselves, and do not need to rely on 13-D filings or the passage of

---

<sup>3</sup> Moreover, the institutional investor studied by [Dimson et al. \(2015\)](#) had a unique history of backing ethical investing. Given the higher influence and visibility of the Big Three, they face greater pressure from market participants, regulators, and politicians to run their operations focused on financial returns.

contentious proposals. Finally, as we discuss in greater detail later in section 3, [Azar et al. \(2021\)](#) do use actual engagement information for Big Three asset managers. However, their data pertains to a much shorter time period (from a few months to a year, depending on the asset manager), is focused exclusively to corporate greenhouse emissions and does not focus on whether engagements are driven by shareholder wealth concerns.<sup>4</sup>

Second, we contribute to scholarship on the effect of institutional ownership on corporate governance. Several papers have documented both positive and negative aspects of increased levels of institutional ownership. [Appel et al. \(2016\)](#) find that institutional investors use their large ownership stakes to pressure management to adopt policies such as appointing independent directors and removing antitakeover devices. [Fisch et al. \(2019\)](#) argue that passive investors are incentivized to effectively engage with portfolio firms because they must compete for investor dollars. On the other hand, [Bebchuk and Hirst \(2021\)](#) argue that institutional investors lack appropriate incentives to spend on value-increasing stewardship: since all index funds own the same stocks, any asset manager engaging with a portfolio company does so at considerable personal cost, only to see the added value shared by funds controlled by competing managers. Our results, showing the non-correlation between portfolio firm value and Big Three engagement, provide evidence for this latter view in the literature.

Finally, we add to the scholarship on the relation between institutional ownership and managerial incentives. Common owners such as the Big Three maximize portfolio value, which can diminish their willingness to monitor or exit any particular portfolio firm in response to managerial shirking ([Edmans et al. 2019](#)). Moreover, compensation for managers at companies with greater

---

<sup>4</sup> Furthermore, using our more comprehensive engagement data, we find evidence at odds with [Azar et al. \(2021\)](#)'s central claim that the Big Three engage with portfolio firms with high levels of pollution. The results in section 5 find no statistically significant correlation between Big Three engagement and portfolio company emissions.

institutional ownership is less sensitive to firm performance, since institutional investors place weight on competitor profits (Anton et al. 2023). Our findings align with Anton et al. 2023, suggesting that the Big Three overlook underperforming firms, and therefore forego the opportunity to credibly signal managerial slack through engagements and to highlight managerial inefficiencies.

Section 2 provides an overview of the basic institutional features of Big Three asset managers' engagements with portfolio companies. Weighing arguments both for and against the efficacy of engagement, we argue that Big Three asset managers are currently institutionally ill-equipped to monitor or improve corporate governance at portfolio firms by engaging management. Section 3 describes our hand-collected engagement dataset and other variables, and provides summary statistics. Section 4 uses a standard event-study methodology and finds that portfolio companies exhibit short-lived negative abnormal returns when Big Three asset managers report engagement with their management. Section 5 examines the correlates of the Big Three's selection of engagement targets and analyzes whether these asset managers target financially underperforming companies. Sections 6 and 7 investigate whether engagement changes the voting behavior of the Big Three and corporate governance arrangements at portfolio firms, respectively. Section 8 concludes the paper.

## **2. The Uncertain Case for Big Three Engagements**

The paradigmatic method for shareholders to participate in corporate governance and influence firm policies is by voting. Holders of common stock can express their disapproval of firm performance by defeating management proposals or even withholding votes from the (re)election of a director (Easterbrook and Fischel 1983). Voting is an especially salient way to impact corporate governance for the Big Three. Bebchuk and Hirst (2021) point to the fact that the Big Three hold

over twenty percent of stock at S&P 500 companies, allowing them to influence the results at annual meetings. Even if closely contested proposals are rare at shareholder meetings, [Bebchuk and Hirst \(2021\)](#) argue that directors and officers modify their ex-ante behavior on dimensions such as compensation to conform with Big Three preferences and avoid having these asset managers vote against their reelection.

Big Three influence on portfolio firms manifests itself in an important way beyond the corporate voting process, through the process of asset managers *engaging* with firm management. Vanguard's 2017 Investment Stewardship Annual Report, using language like that in documents for all three managers across years, defined engagement as a way for it to "share our corporate governance principles and learn about portfolio companies' corporate governance practices."<sup>5</sup> Vanguard described engagement as "quiet diplomacy focused on results." In other words, unlike voting against a say-on-pay proposal at a meeting, the Big Three asset manager's disagreement with firm governance is not publicly broadcasted when it engages with management. Instead, the Big Three asset manager privately communicates its concern to firm management. The 2017 Vanguard report is typical of the claims made by asset managers in several public reports we manually inspected: they argue that these private communications tangibly change governance practices at firms.

Crucially for this paper's motivation and empirical analysis, Big Three asset managers justify engagement as increasing shareholder value. Vanguard's 2017 report claims that its engagement efforts "better position companies to deliver sustainable value over the long term for all investors." Reading investment stewardship reports for the Big Three during the 2014-2022 period, we find that asset managers ground their engagement efforts in shareholder wealth maximization in *every single*

---

<sup>5</sup> See <https://www.wlrk.com/docs/VanguardInvestmentStewardshipReport2017.pdf>.

document. We present illustrative examples from both BlackRock and State Street’s public policy documents. BlackRock’s 2018 investment stewardship report asserts that it engages with a company if there “has been an event at the company that has impacted its performance or may impact long-term company value;” if the firm belongs to a sector where “there is a thematic governance issue material to shareholder value;” or if there are “environmental, social or governance matters that may impact long-term value.”<sup>6</sup> In all cases, including when citing environmental, social or governance (ESG) concerns, BlackRock justifies engagement solely on the grounds of safeguarding shareholder value. Finally, State Street’s 2014 report states that its status as “near perpetual holder[] of the constituents of the world’s primary indices” meant that its engagement efforts would be “targeted and value-driven.”<sup>7</sup> Indeed, as fiduciaries, the Big Three are mandated by law to maximize their clients’ portfolio values (Hemphill and Kahan 2020).

At first glance, Big Three engagements can be seen as effective ways to monitor and change corporate governance for broadly the same reasons articulated in Bebchuk and Hirst (2021): the large voting power of these asset managers and the in terrorem effect they exert on firm directors. Moreover, institutional investors are widely perceived to represent “smart money,” and able to distinguish firms with strong and weak corporate governance (Akbas et al. 2015, Keswani and Stolin 2008). Therefore, when a portfolio firm is revealed to have been the subject of private engagement efforts by BlackRock, Vanguard, or State Street, investors may take the engagement to signal weak corporate governance at the company. Section 4 validates this intuition, with event-study analysis

---

<sup>6</sup> See <https://www.blackrock.com/corporate/literature/publication/blk-voting-and-engagment-statistics-annual-report-2018.pdf>.

<sup>7</sup> See <https://www.ssga.com/investment-topics/environmental-social-governance/2016/Annual-Stewardship-Report-2014.pdf>. State Street seems to have subsequently removed this report from public access on the Internet, but a previously downloaded copy is available from the authors.

showing that portfolio firms exhibit small negative (albeit short-lived) abnormal returns when publicly revealed to be engagement targets.

However, collective action problems, overbroad scope of engagement, and institutional limitations at Big Three asset managers limit the possibility of a tight connection between the selection of engagement targets and consideration of shareholder value. If there is indeed value to be created by engaging with portfolio companies, an asset manager would be internalizing the cost of thoroughly investigating corporate governance issues and communicating possible solutions to firm management. On the other hand, the increase in value from improving governance would be shared by rival asset managers, who also likely own stakes in the engaged firm, given the extensive shareholdings of the Big Three. Therefore, this collective action logic would incentivize the Big Three to skip costly (albeit thoughtful) governance research when selecting engagement targets, and pick companies for engagement quasi-randomly and relatively costlessly.

The overbroad list of criteria the Big Three set for choosing engagement targets also increases the slippage between the selection of firms for engagement and the creation of shareholder value. Examining the factors that led asset managers to engage with portfolio companies in 2021, according to the Big Three's own reports, shows the functionally limitless discretion their stewardship staff has in deciding a firm deserves to be engaged. BlackRock claimed to have picked engagement targets based on eleven categories: board composition and effectiveness, business oversight/risk management, executive management, corporate strategy, governance structure, remuneration, climate risk management, environmental impact management, operational sustainability, human capital management, and social risks and opportunities.<sup>8</sup> Vanguard cited four factors for engaging with firms: board composition, executive compensation, oversight of strategy

---

<sup>8</sup> See <https://www.blackrock.com/corporate/literature/press-release/blk-engagement-summary-report-2021.pdf>.

and risk, and shareholder rights.<sup>9</sup> Finally, State Street lists fourteen factors: effective board leadership, executive compensation, shareholder rights, climate change, land use and biodiversity, circular economy and natural resources, human capital management, diversity, equity and inclusion, political participation, human rights, board oversight of climate change, board oversight of human capital management and diversity, and even the “R-Factor” (a proprietary ESG measure developed by State Street).

Many of these factors, such as “corporate strategy” or “shareholder rights,” are vague and ill-defined. Several categories used to pick engagement targets appear to overlap substantially (such as “political participation” and “human rights” or “climate risk management” and “environmental impact management”). The kitchen sink of factors each of the Big Three claims to use in picking engagement targets is reminiscent of earlier “corporate governance indices” that were used to measure firms’ governance, but have been criticized by recent scholarship for arbitrarily adding up the presence or absence of potentially irrelevant institutional features such as antitakeover defenses (Klausner 2013). It raises questions about the Big Three’s ability to accurately pinpoint which firms are financial laggards, and to use engagement to deliver value for the asset managers’ clients.

A final and crucial limitation on the Big Three’s ability to structure engagement efforts around shareholder value is the meager levels of staffing and resources asset managers dedicate to stewardship. BlackRock, which is the largest and best-resourced of the Big Three, disclosed in its 2021 report that it employs just 13 individuals responsible for engagements with U.S. companies.<sup>10</sup> At the same time, BlackRock reported that it had carried out 905 engagements with U.S. companies in 2021. This implies that each of the U.S.-based Blackrock engagement personnel handled ~70

---

<sup>9</sup> See [https://corporate.vanguard.com/content/dam/corp/advocate/investment-stewardship/pdf/policies-and-reports/inv\\_stew\\_2021\\_annual\\_report.pdf](https://corporate.vanguard.com/content/dam/corp/advocate/investment-stewardship/pdf/policies-and-reports/inv_stew_2021_annual_report.pdf).

<sup>10</sup> See <https://www.blackrock.com/corporate/literature/publication/annual-stewardship-report-2021.pdf> (p. 36).

engagements a year, or more than one a week. It is implausible that these employees were able to compare Blackrock's many portfolio companies across the eleven engagement criteria described above, scientifically select one or two companies a week for which engagement would boost shareholder value, and communicate the governance concern to portfolio firm management. Even if the Big Three employee did select engagement targets keeping shareholder value in mind, it is unlikely they would have time to follow through with portfolio firm management and ensure that the necessary corporate governance reforms were enacted, since they had at least one more new engagement to pursue every subsequent week. On top of that, informal conversations reveal that the investment team, tasked with earning returns on portfolios, is not well coordinated with the engagement team focused on proxy voting and engagement.

The collective action dilemma, overbroad and ambiguous categories used to select engagement targets, and limited resources and personnel dedicated to engagement all cast doubt on the Big Three's ability to ground their engagement activities in client wealth maximization. As explained earlier, it is not merely optional for asset managers to structure their activities to maximize the value of their clients' portfolios—it is their legal duty as investment fiduciaries. Moreover, the Big Three's stated policies describe engagement as a means to delivering maximum value for clients. It is therefore a worthwhile empirical question to test whether, in the presence of institutional constraints on asset managers, their engagement activities are aligned with shareholder value and portfolio firm financial performance.

### **3. Dataset and Summary Statistics**

A significant contribution of this paper is to compile the first comprehensive dataset on Big Three engagements with portfolio firm management. BlackRock, Vanguard, and State Street began publicly disclosing these engagements starting 2018, 2017, and 2014, respectively. We manually code

each of these engagements for U.S. companies. Our dataset has a total of 4,021 engagements for BlackRock, 2,544 engagements for Vanguard, and 3,011 engagements for State Street. The total number of engagements for State Street is roughly comparable to the average of engagements by Blackrock and Vanguard despite State Street disclosing more years of engagements. This is because State Street is a significantly smaller asset manager, with \$3.3 trillion in assets under management in 2022, compared to \$8 trillion and \$7.1 trillion for BlackRock and Vanguard, respectively.

The only paper to similarly study engagement data directly from the Big Three is [Azar et al. \(2021\)](#). However, there are crucial differences in the breadth of our data and the questions we study. First and most importantly, they do not study whether Big Three engagements are grounded in shareholder wealth maximization, which is the main research question in this paper. They focus only on greenhouse gas emissions. Second, our study covers engagements over a significantly longer time period. [Azar et al. \(2021\)](#)'s data covers engagements over a short period of time: 7/1/2018 to 6/30/2019 for BlackRock, 7/1/2018 to 12/31/2018 for Vanguard, and 1/1/2018 to 12/31/2018 for State Street. Therefore, their data covers a year for BlackRock and State Street, and six months for Vanguard. In contrast, our dataset compiles engagements for BlackRock, Vanguard, and State Street over 5 years, 4 years, and 9 years, respectively. Finally, [Azar et al. \(2021\)](#) study a cross-country sample, while we focus on U.S. engagements. Our results are thus less likely to be influenced by country-specific institutional or policy differences. Perhaps because of the longer scope of our data, section 5 finds no support for [Azar et al. \(2021\)](#)'s central claim that Big Three engagements are targeted at polluting companies. Instead, we find no statistically significant correlation between Big Three engagement and portfolio company emissions.

We name-match each engagement target with corporate governance, firm financial, and stock price data. Table 1 contains the definitions of variables used in the paper and Table 2 presents

summary statistics. Stock return data comes from the Center for Research in Stock Prices (CRSP). From the Compustat database, we extract information for variables used in the existing literature on institutional investors in corporate governance: book-to-market ratio, asset tangibility (net property, plant & equipment divided by total assets), firm size, debt ratio, cash ratio, return on assets, and sales per employee (Azar et al. 2021, Calluzzo and Kedia 2021).

The Big Three frame their engagement activities as interventions to improve corporate governance at portfolio firms. Therefore, we collect information from Institutional Shareholder Services (ISS) on indicator variables for whether the firm had a staggered board of directors, the firm had a visible poison pill, the chief executive officer (CEO) had a golden parachute contract, or the firm had a dual class stock structure. Each of these institutional arrangements has been characterized by some scholars as a correlate of poor corporate governance or weak shareholder protection (Bebchuk et al. 2009). Since inclusion in a broad index is associated with higher index ownership (Appel et al. 2016), we also include a dummy variable from ISS for membership in the S&P 500 index.

We then collect additional data to proxy for other topics extensively described in Big Three policies as grounds for engagement. Because asset managers state that they are concerned about firm policies regarding sustainability and climate change, we obtain information about greenhouse gas emissions. Based on Ilhan et al. (2021) and Sautner et al. (2023), we define this variable as the natural logarithm of the sum of Scope 1 and Scope 2 emissions from the Trucost database. Since asset managers frequently cite excessive executive compensation as a core concern driving engagements, we collect data for CEO compensation (proxied by the natural logarithm of total compensation, i.e., the *TDC1* variable) from Execucomp. We could instead use industry-adjusted excessive compensation as a measure for CEO pay as a driver of engagement. However,

conversations with institutional investor personnel reveal that asset managers focus on the CEO's actual compensation figure, rather than the "excess" over industry peers. Moreover, our specifications include industry-year fixed effects, therefore accounting for within-industry trends in the dependent variable.

Big Three stewardship reports consistently stress the importance of human capital management, especially diversity in the top ranks of portfolio firms. An important aspect of diversity described in the reports is female representation on corporate boards. Consistent with these formal policies, [Gormley et al. \(2023\)](#) claim that Big Three campaigns such as State Street's "Fearless Girl" initiative increased the share of women directors. Similarly, the *Wall Street Journal* noted that California's legislation imposing gender quotas on corporate boards had not received investor pushback primarily due to Big Three support for diversifying corporate leadership.<sup>11</sup> We code a dummy variable, based on BoardEx data, equaling one if the portfolio firm had at least one-woman director.

Finally, we collect information about firm violations of federal and state regulations as a proxy for risk management and pro-social behavior. A firm that has been fined by a regulatory agency for wage theft or investor fraud is less likely to have adequate risk management systems or a socially responsible business model, implicating many of the engagement priorities in Big Three policies. We use the Violation Tracker database maintained by the Good Jobs First project. Violation Tracker has information on more than 300,000 penalties issued by federal and state authorities. We focus on financially material penalties, defined as enforcement actions that lead to settlements of at least \$500,000. Violation Tracker has been used in a spate of recent accounting and finance papers, including [Heese and Pérez-Cavazos \(2020\)](#), [Heese et al. \(2022\)](#), [Raghunandan \(2021\)](#), [Raghunandan and Rajgopal \(2020\)](#), [Raghunandan and Rajgopal \(2022\)](#), and [Stubben and Welch \(2020\)](#).

---

<sup>11</sup> See <https://www.wsj.com/articles/california-rolls-out-diversity-quotas-for-corporate-boards-11601507471>.

#### 4. Price Effect of Big Three Engagements

We use the event study methodology to estimate investors' assessment of the impact of Big Three engagements and portfolio firm value. Much of the literature on the role of the Big Three has been skeptical of these managers' incentives or ability to effectively monitor portfolio companies (Bebchuk and Hirst 2021). Under such a view, the public revelation of a firm being an engagement target should have no impact on its value, since investors would not treat an engagement as a useful measure of governance. On the other hand, because institutional investors are considered the "smart money" (Akbas et al. 2015, Keswani and Stolin 2008), the market may take engagements as a credible signal that the portfolio firm's governance has serious deficits. Such a strong signal could lead to Big Three engagements destroying portfolio firm value. We estimate a market model, using the value-weighted S&P 500 index as the market index, to empirically establish the price effect of Big Three engagements. For all results in the section, the estimation window extends over the 255 trading days preceding the start of the event window.

A significant challenge in the event study analysis is pinning down the actual date of the event; i.e., the date each portfolio firm was revealed to be an engagement target. We downloaded and carefully read engagement and stewardship reports dating back to 2014, 2017, and 2018 for State Street, Vanguard, and BlackRock, respectively. We designated the event window corresponding to the date each report was first made publicly available, based on the content of the report as well as Factiva and news wire searches. However, we were still unable to clearly establish the publication dates for all the Big Three engagement reports in the sample. Table 3 lists the publication dates for the various documents we assembled for State Street, Vanguard, and BlackRock in Panels A, B, and C, respectively. Vanguard issued a press release each time it released its engagement summary,

allowing us to determine the event date for each of its reports. However, we are only able to extract the date for one State Street and BlackRock publication each (the 2015 and 2018 reports, respectively).<sup>12</sup>

Tables 4, 5, and 6 present the results of the event study for State Street, BlackRock, and Vanguard, respectively. We regress cumulative abnormal returns against an indicator for whether the company was designated as an engagement target in the specific asset manager's report(s). The regression includes industry fixed effects (proxied by the three-digit Standard Industrial Classification (SIC)), and standard errors are clustered at the industry level. Broadly speaking, engagements seem to have a negative effect on firm value at targeted portfolio firms: the coefficients across event windows for all managers are mostly negative. However, none of these coefficients is significantly different from zero for State Street.

In contrast, the coefficient is negative and highly significant for all event windows for the BlackRock engagement report, barring the [-3,3] event window. The magnitude—60 basis points for the [-1,1] window—is modest. Finally, examining Vanguard, the coefficient is significant and implies a 10 (20) basis point reduction in cumulative abnormal returns for the [-1, 0] ([0]) window. However, the coefficient is not significant for other event windows examining the price effect of Vanguard engagements. Collectively, the results indicate that Big Three engagements have a small negative effect on portfolio firm value. However, this effect is limited to BlackRock and Vanguard, with State Street engagements not indicating any relationship with abnormal returns. Moreover, the effect seems transitory, concentrated in the [-2,2] window for BlackRock and the day of the event (i.e., [0]) itself for Vanguard. Finally, the price effect of Big Three engagements is modest, ranging from 10 to

---

<sup>12</sup> We are also unable to incorporate the 2022 Vanguard report into the event study analysis, since the CRSP data has not been updated till the relevant event date as of the time of our empirical analysis.

50 basis points depending on the asset manager and event window. The event study thus finds limited support for the notion that engagements lead to value destruction at targeted portfolio firms.

### **5. Is Big Three Engagement Related to Shareholder Value?**

Big Three asset managers are bound by fiduciary law, as well as their own policies as articulated in public documents, to consider financial returns when selecting targets for engagement. Therefore, in this section, we examine if engagement targets are more likely to be financial laggards. Tables 7, 8, and 9 estimate a linear probability model, with the dependent variable equaling 1 if the firm is engaged by State Street, BlackRock, and Vanguard, respectively. All specifications include firm, industry-year, and state-year fixed effects, with standard errors clustered at the firm level. The key variable of interest is the portfolio firm's abnormal returns over the preceding year, estimated using the market model. If engagement targets are selected using financial performance as a primary consideration, prior-year abnormal returns ought to be negatively and significantly correlated with the likelihood of a Big Three engagement at a given portfolio firm.

However, Tables 7, 8, and 9 collectively tell a story of Big Three engagement target selection being virtually unrelated for portfolio firm performance. Asset managers instead seem to be driven by heuristics such as the extent of their ownership stake in the firm and the size of the CEO's total compensation package. In all three tables, the baseline in column (1) only controls for the following variables: the share of the company owned by the asset manager, the portion of the asset manager's portfolio represented by the firm, and the previous-year abnormal returns. Column (2) adds the firm financial, corporate governance, and social responsibility variables listed previously in section 3. Irrespective of the asset manager, and regardless of whether we control for additional controls, the likelihood that any given portfolio company is targeted for engagement seems unrelated to its financial performance. The coefficient associated with prior-year abnormal returns is not significant

in any specification. In fact, in most of the models, it is positive (and insignificant)—the opposite sign from what we would expect if Big Three institutional investors were engaging with firms that were failing to deliver value for their clients. Return on assets, which as an accounting measure of profit could be seen as another proxy for firm performance, does have a negative coefficient for engagement by State Street. However, this coefficient is only marginally significant at the 10% level, and is insignificant for the biggest of the Big Three, BlackRock and Vanguard.

The asset manager's ownership of a portfolio firm is a far more salient predictor of engagement than the company's financial performance. The baseline regressions for engagement target selection show that all three asset managers are more likely to engage with a firm if their ownership stake in the company is larger. Because asset managers are passive investors, this finding cannot be explained by the Big Three buying a larger stake in a firm in order to subsequently engage with management and change corporate governance. A more plausible explanation for the significant association between Big Three ownership and engagement is that these portfolio companies may think they have a higher chance of changing corporate governance at firms where they have larger stakes and can more credibly threaten management.

Alternatively, such portfolio firms may be more *familiar* to asset managers. There is a longstanding literature in finance showing that investment activities are driven by prior familiarity between investors and firms (Bailey et al. 2011, Huberman 2001). The Big Three could similarly know more about firms they have greater voting power in and choose to engage with their management. Another conjecture is that these are cases of reverse engagement. That is, firms majority owned by a specific asset manager, engage with the manager as opposed to the other way around. The publicly available engagement reports do not distinguish between company-initiated and asset manager-initiated engagement.

All three of the large asset managers also seem to account for CEO compensation when determining engagement targets. The coefficient for the natural logarithm of CEO total compensation is positive and significant for each of the Big Three. This association is consistent with the Big Three's numerous policy statements decrying excessive executive compensation and promising to engage with firms that pay their top management too highly. It is also similar to the previous finding that engagement is correlated with Big Three firm ownership: both asset manager ownership and absolute CEO compensation are easily measurable and available heuristics that can be used to select engagement targets. Given that, as discussed in section 2, the Big Three hire less than 15 people to run their U.S. engagements, it may not be surprising that their target selection is based on such relatively easy to access heuristics.

A notable feature of the results in tables 7, 8, and 9 is that a host of factors conventionally considered to be important for corporate governance ([Bebchuk et al. 2009](#)) seem wholly unrelated to Big Three engagement. For instance, poison pills, CEO golden parachutes, and greenhouse gas emissions are unrelated to engagement for all three asset managers. The last of these insignificant relationships is especially striking, given asset managers' repeated references to climate change and fossil fuels in their stewardship reports and prior literature claiming that engagement is related to firm emissions ([Azar et al. 2021](#)). However, column (3) in Table 8 shows that BlackRock is significantly more likely to engage a portfolio company that has a dual class structure. This is consistent with institutional investors' public opposition to dual class arrangements that give founders and other controllers voting power disproportionate to their economic interests in the firm ([Winden 2018](#)).

Our analysis of the relationship between Big Three engagement and financial returns could neglect the possibility that engagement targets are systematically different from other firms.

Therefore, we re-run the analysis in this section on a matched sample. For each engaged firm, we find a “nearest neighbor” non-engaged firm based on natural logarithm of firm size, return on assets, industry, and year. The results, presented in Table 10, confirm that the Big Three do not target financial underperformers in their engagement efforts. In none of the six specifications, spanning the engagement efforts of all three asset managers, is the coefficient for engagement negatively related to prior-year abnormal returns. The non-association of engagement with portfolio firm financial performance hence persists in matched sample analysis.

Our analysis of Big Three engagement practices reveals that a portfolio company’s selection as target appears to have little to do with its financial returns or ability to deliver value for the asset managers’ clients. Instead, Big Three engagements seem correlated with the extent of their ownership stake in the firm and the CEO’s total compensation. A host of factors typically considered important in corporate governance and Big Three policies, including firm greenhouse gas emissions, are unrelated to the company’s selection for engagement. Collectively, the results indicate that Big Three engagements are not grounded in the wealth maximization norm entailed by fiduciary law.

## **6. Do the Big Three Punish Management at Engagement Targets?**

The previous section explored the determinants of Big Three engagements. This section investigates their consequences. Tables 11, 12, and 13 estimate a linear probability model for whether the Big Three voted against the portfolio firm management’s proposal. The data is at the proposal level. The key variable of interest is whether the asset manager engaged with the portfolio firm in the previous year. We include firm, fund, proposal type, state-year, and industry-year fixed effects. If engagements signal the asset manager’s concern or discontent over corporate governance at the firm, it is reasonable to expect that these activities would be followed by increased Big Three

voting against management on proposals at shareholder meetings. In each of the three tables, column (1) simply regressed the dummy for voting against management against the indicator for whether the asset manager engaged the firm in the previous year. Column (2) adds controls for corporate governance variables, and column (3) further controls for firm financials. Columns (4), (5), and (6) specifically focus on Big Three votes on “say on pay” proposals on executive compensation. Since the previous section found that asset managers’ target selection is significantly related to CEO compensation, one may think that the Big Three are more likely to vote “no” on say on pay proposals at engaged companies. The controls in these columns are analogous to those in columns (1) through (3).

The basic takeaway from these tables is that Big Three asset managers do not punish portfolio firms with which they engage; they do not become more likely to subsequently vote against management recommendations on proposals or specifically on say-on-pay. In columns (1) through (3), which relate to all shareholder proposals, none of the coefficients for prior-year engagement are positive and significant, as we would expect if asset managers were to punish management. Interestingly, for BlackRock and Vanguard, the coefficient is negative and significant. In other words, the two largest asset managers become *less* likely to vote against management at portfolio firms the year after engaging with them. However, this coefficient is only significant in the full specification with all firm controls (in column (3) of tables 12 and 13). For columns (4) through (6), focusing exclusively on say on pay proposals, the coefficient for prior-year engagement is not positive and significant. In fact, column (6) of Table 12 implies that BlackRock becomes *less* likely to vote against management on say on pay the year after engaging with the firm.

One caveat applies to the results in this section: engagement targets may have addressed governance concerns after being contacted by the asset manager. In exchange for prompt corrective

action, the Big Three could have decided not to vote against the management, or even become more likely to follow the managerial position on shareholder proposals. While we cannot completely rule out this possibility, it is highly unlikely that asset managers refuse to punish firm management or become less likely to vote against them because of concrete corporate governance changes in response to engagement. The sorts of issues engagements are focused on—climate change, board diversity, staggered boards—are difficult to resolve overnight. It is certainly not plausible that the portfolio firm response to the concern flagged in an engagement is substantive and far-reaching enough for the asset manager to become more likely to vote with management in the next year.

A more plausible story that can be told from the results in tables 11, 12, and 13 is that Big Three personnel take a “checklist” approach to handling engagements. Not only is the selection of engagement targets unrelated to shareholder value (as section 5 argued), but the follow-up to engagement is not completely focused on improving governance or boosting financial performance. We were told that it might be far easier for the understaffed Big Three departments handling U.S. engagements, numbering 15 or fewer at each asset manager, to classify an engagement as successfully concluded based on vague assurances in an email exchange with management rather than concrete changes to board composition or CEO compensation. This explanation is consistent with both the empirical correlations in this section as well as our analysis of the staffing of Big Three engagement teams and informal conversations with individuals closely associated with engagement activities. Tables 11, 12, and 13 thus indicate that the Big Three do not become any more likely to punish engagement targets by subsequently voting against management.

## **7. Does Engagement Spur Corporate Governance Changes at Portfolio Firms?**

Engagement could have effects that extend beyond a change in Big Three voting behavior: engaged portfolio firms could alter their corporate governance characteristics to comport with asset

managers' ideas of optimal corporate governance. In this section, we estimate whether engagement by a Big Three asset manager in year  $t$  is associated with a change in portfolio firm governance in  $t+1$ . We focus on three corporate governance variables shown in the previous section to predict Big Three engagement: CEO compensation, dual class stock structure, and the indicator for whether the firm has at least one female director. These variables have theoretical relevance to corporate governance (Bebchuk et al. 2009, Green and Hand 2021, Zhang 2020) and are emphasized throughout the stewardship policies of the Big Three. If asset manager engagement affected portfolio firm governance, we would expect engaged firms to reduce CEO compensation, increase female board representation, or become less likely to have dual class structures.

Tables 14, 15, and 16 estimate linear probability models where the dependent variable is CEO compensation or the indicators for dual class or female directors in the year after engagement. As in the rest of the paper, we estimate results separately for each of the Big Three. Odd-numbered columns present the baseline model, where we only control for the engagement dummy, prior-year abnormal returns, the asset manager's ownership stake, and the percentage of the asset manager's portfolio represented by the firm. Even-numbered columns add the other control variables used elsewhere in the paper. The three tables do not provide any strong evidence for the hypothesized effects of engagement on firm corporate governance. In fact, engagement is *positively* correlated with subsequent CEO compensation for both models for State Street, while engagement is positively associated with dual class arrangements for BlackRock (only for the "full" model with all controls). These correlations are the opposite of what one would expect if engagements led to firm governance becoming aligned with Big Three policies. Vanguard engagement in year  $t$  is negatively correlated with next-year CEO compensation (only in the full regression model) and positively associated with subsequent female board representation (solely for the baseline model). However,

these associations are only significant at the 10% level and not present in both baseline and full models for either governance variable.

## 8. Conclusion

We use a novel hand-collected dataset compiling all disclosed Big Three engagements at portfolio companies. In theory, engagement represents a tangible way for the largest asset managers to influence corporate governance at firms beyond the exercise of their voting power. Both principles of fiduciary law and publicly enunciated internal policies should lead asset managers to structure their engagement efforts to maximize wealth for their clients as shareholders of the portfolio firms. The core empirical effort of the paper is to investigate whether Big Three engagement complies with this legal and policy requirement to zealously maximize value.

We first use an event study methodology to evaluate the price effect of Big Three engagements. The revelation that a portfolio firm is targeted for engagement leads it to exhibit negative abnormal returns. However, the magnitude of value destruction is tiny, ranging from 10 to 50 basis points, and transient, concentrated in the days immediately around the public revelation of the engagement effort. Moreover, the abnormal returns are not significantly different from zero for engagements by State Street, the smallest of the Big Three.

Next, we find that the selection of portfolio firms for engagement is virtually unrelated to their financial performance, as measured by abnormal returns over the prior year. Instead, engagement is significantly correlated with the extent of the asset managers' ownership stake in the firm and the CEO's total compensation. Both these variables are easily available heuristics that can be used by the Big Three's understaffed stewardship teams to select engagement targets. Finally, we find no evidence that the Big Three punish engagement targets by subsequently becoming more likely to vote against management on proposals. In fact, BlackRock and Vanguard become *less* likely

to vote against management the year after they select a portfolio company for engagement. Our preferred interpretation of this finding is that Big Three personnel adopt a “checklist” approach and classify an engagement as successful after potentially cursory gestures or communications from management. This allows the asset manager to not punish management, and even become more likely to vote with it, after the engagement. Engagement also does not change subsequent corporate governance outcomes for portfolio firms. Companies do not reduce CEO compensation, increase female board representation, or become less likely to have dual class structures after being targeted for engagement by the largest asset managers.

We emphasize that our results do not imply that institutional investors cannot play a salutary role in corporate governance, or even that their engagement activities cannot possibly be grounded in client wealth maximization. Instead, our analysis is a description of Big Three engagement as it has been conducted till today. For instance, nothing prevents BlackRock from expanding its U.S. engagement team beyond its current strength of under 15 individuals. We thus echo [Bebchuk and Hirst \(2021\)](#), who assert that the current lack of effective stewardship “should not be regarded as a given fact of nature, but rather as the product of choices made by the Big Three managers.” We take no position on the optimal extent of Big Three involvement in corporate governance or engagement with portfolio firms. Our analysis, however, provides strong empirical support for the notion that their current engagement practices are not focused on targeting underperforming firms or maximizing value for their client.

## References

Akbas, Ferhat, Will J. Armstrong, Sorin Sorescu, and Avanidhar Subrahmanyam. "Smart money, dumb money, and capital market anomalies." *Journal of Financial Economics* 118, no. 2 (2015): 355-382.

Antón, Miguel, Florian Ederer, Mireia Giné, and Martin Schmalz. "Common ownership, competition, and top management incentives." *Journal of Political Economy* 131, no. 5 (2023): 1294-1355.

Appel, Ian R., Todd A. Gormley, and Donald B. Keim. "Passive investors, not passive owners." *Journal of Financial Economics* 121, no. 1 (2016): 111-141.

Azar, José, Miguel Duro, Igor Kadach, and Gaizka Ormazabal. "The big three and corporate carbon emissions around the world." *Journal of Financial Economics* 142, no. 2 (2021): 674-696.

Bebchuk, Lucian, Alma Cohen, and Allen Ferrell. "What matters in corporate governance?." *The Review of financial studies* 22, no. 2 (2009): 783-827.

Bebchuk, Lucian, and Scott Hirst. "Big three power, and why it matters." *BUL Rev.* 102 (2022): 1547.

Backus, Matthew, Christopher Conlon, and Michael Sinkinson. "Common ownership in America: 1980–2017." *American Economic Journal: Microeconomics* 13, no. 3 (2021): 273-308.

Bailey, Warren, Alok Kumar, and David Ng. "Behavioral biases of mutual fund investors." *Journal of financial economics* 102, no. 1 (2011): 1-27.

Calluzzo, Paul, and Simi Kedia. "Mutual fund board connections and proxy voting." *Journal of Financial Economics* 134, no. 3 (2019): 669-688.

Dimson, Elroy, Oğuzhan Karakaş, and Xi Li. "Active ownership." *The Review of Financial Studies* 28, no. 12 (2015): 3225-3268.

Edmans, Alex, Doron Levit, and Devin Reilly. "Governance under common ownership." *The Review of Financial Studies* 32, no. 7 (2019): 2673-2719.

Easterbrook, Frank H., and Daniel R. Fischel. "Voting in corporate law." *The Journal of Law and Economics* 26, no. 2 (1983): 395-427.

Fisch, Jill, Assaf Hamdani, and Steven Davidoff Solomon. "The new titans of Wall Street: A theoretical framework for passive investors." *University of Pennsylvania Law Review* (2019): 17-72.

Gormley, Todd A., Vishal K. Gupta, David A. Matsa, Sandra C. Mortal, and Lukai Yang. "The big three and board gender diversity: The effectiveness of shareholder voice." *Journal of Financial Economics* 149, no. 2 (2023): 323-348.

Green, Jeremiah, and John RM Hand. "Diversity matters/delivers/wins revisited in S&P 500® firms." *Wins Revisited in S&P 500* (2021).

Heath, Davidson, Daniele Macciocchi, Roni Michaely, and Matthew C. Ringgenberg. "Do index funds monitor?." *The Review of Financial Studies* 35, no. 1 (2022): 91-131.

Heese, Jonas, and Gerardo Pérez-Cavazos. "When the boss comes to town: The effects of headquarters' visits on facility-level misconduct." *The Accounting Review* 95, no. 6 (2020): 235-261.

Heese, Jonas, Gerardo Pérez-Cavazos, and Caspar David Peter. "When the local newspaper leaves town: The effects of local newspaper closures on corporate misconduct." *Journal of Financial Economics* 145, no. 2 (2022): 445-463.

Hemphill, C. Scott, and Marcel Kahan. "The strategies of anticompetitive common ownership." *Yale LJ* 129 (2020): 1392.

Huberman, Gur. "Familiarity breeds investment." *The Review of Financial Studies* 14, no. 3 (2001): 659-680.

Ilhan, Emirhan, Zacharias Sautner, and Grigory Vilkov. "Carbon tail risk." *The Review of Financial Studies* 34, no. 3 (2021): 1540-1571.

Keswani, Aneel, and David Stolin. "Which money is smart? Mutual fund buys and sells of individual and institutional investors." *The Journal of Finance* 63, no. 1 (2008): 85-118.

Klausner, Michael. "Fact and fiction in corporate law and governance." *Stanford Law Review* (2013): 1325-1370.

Krueger, Philipp, Zacharias Sautner, and Laura T. Starks. "The importance of climate risks for institutional investors." *The Review of Financial Studies* 33, no. 3 (2020): 1067-1111.

Lund, Dorothy S., and Adriana Robertson. "Giant Asset Managers, the Big Three, and Index Investing." *Available at SSRN* (2023).

Raghunandan, Aneesh. "Financial misconduct and employee mistreatment: Evidence from wage theft." *Review of Accounting Studies* 26, no. 3 (2021): 867-905.

Raghunandan, Aneesh, and Shiva Rajgopal. "Do ESG funds make stakeholder-friendly investments?." *Review of Accounting Studies* 27, no. 3 (2022): 822-863.

Raghunandan, Aneesh, and Shiva Rajgopal. "Do the socially responsible walk the talk." *SSRN Electronic Journal* (2020).

Sautner, Zacharias, Laurence Van Lent, Grigory Vilkov, and Ruishen Zhang. "Firm-level climate change exposure." *The Journal of Finance* 78, no. 3 (2023): 1449-1498.

Stubben, Stephen R., and Kyle T. Welch. "Evidence on the use and efficacy of internal whistleblowing systems." *Journal of Accounting Research* 58, no. 2 (2020): 473-518.

Winden, Andrew William. "Sunrise, sunset: an empirical and theoretical assessment of dual-class stock structures." *Colum. Bus. L. Rev.* (2018): 852.

Zhang, Letian. "An institutional approach to gender diversity and firm performance." *Organization Science* 31, no. 2 (2020): 439-457.

**Table 1. Variable Definitions**

	Definition	Source
Vanguard Engagement Indicator	Equals one if the U.S. domestic firm is included in the 2019 Vanguard Engagement Report, zero otherwise	<i>2019 Vanguard Engagement Report</i>
BlackRock Engagement Indicator	Equals one if the U.S. domestic firm is included in the 2018 Vanguard Engagement Report, zero otherwise	<i>2018 Vanguard Engagement Report</i>
Board Composition	Equals one if the U.S. domestic firm is included in the 2019 Vanguard Engagement Report and the engagement is focused on board composition.	<i>2019 Vanguard Engagement Report</i>
Executive Compensation	Equals one if the U.S. domestic firm is included in the 2019 Vanguard Engagement Report and the engagement is focused on executive compensation.	<i>2019 Vanguard Engagement Report</i>
Oversight Strategy & Risk	Equals one if the U.S. domestic firm is included in the 2019 Vanguard Engagement Report and the engagement is focused on the oversight of strategy and risk.	<i>2019 Vanguard Engagement Report</i>
Shareholder Rights	Equals one if the U.S. domestic firm is included in the 2019 Vanguard Engagement Report and the engagement is focused on shareholder rights.	<i>2019 Vanguard Engagement Report</i>
(t-1) year abnormal returns	Abnormal returns from August 2018 through July 2019, using a market model.	<i>CRSP, Eventus</i>
(t+1) year abnormal returns	Abnormal returns from August 2019 through July 2020, using a market model.	<i>CRSP, Eventus</i>
Ln(Scope 1+Scope 2 GHG emissions)	Natural logarithm of the sum of Scope1 and Scope 2 Green House Gases emissions	<i>TrueCost</i>
Book-to-Market	The ratio of book value to market value of equity.	<i>Compustat</i>

PP&E/Assets	Net PP&E divided by total assets.	<i>Compustat</i>
Sales per Employee	Total sales divided by the number of employees.	<i>Compustat</i>
Ln(Total CEO Compensation)	Natural logarithm of the total CEO compensation (TDC1)	<i>ExecuComp</i>
Poison Pills	Indicator of one if the firm has a visible poison pill.	<i>ISS</i>
CEO Golden Parachute	Indicator of one if the CEO has a golden parachute.	<i>ISS</i>
Dual Class Indicator	Indicator for whether the firm has dual class stock structure.	<i>ISS</i>
S&P 500	Indicator if the firm is in the S&P 500 index.	<i>ISS</i>
Female Directors on Board	Indicator of one if the corporate board as at least one female director.	<i>BoardEx</i>
Violation Tracker Penalty Indicator	An indicator of one if the firm has a penalty above \$500,000 for the current year.	<i>Violation Tracker</i>

---

**Table 2. Summary Statistics for Main Variables**

**Panel A. Number of engagements.**

<b>Main Variables:</b>	Number of Engagements
Engagements, <i>State Street</i> 2014	297
Engagements, <i>State Street</i> 2015	307
Engagements, <i>State Street</i> 2016	320
Engagements, <i>State Street</i> 2017	254
Engagements, <i>State Street</i> 2018	465
Engagements, <i>State Street</i> 2019	399
Engagements, <i>State Street</i> 2020	402
Engagements, <i>State Street</i> 2021	251
Engagements, <i>State Street</i> 2022	316
Engagements, <i>BlackRock</i> 2018	596
Engagements, <i>BlackRock</i> 2019	566
Engagements, <i>BlackRock</i> 2020	920
Engagements, <i>BlackRock</i> 2021	905
Engagements, <i>BlackRock</i> 2022	1,034
Engagements, <i>Vanguard</i> 2019	629
Engagements, <i>Vanguard</i> 2020	538
Engagements, <i>Vanguard</i> 2021	726
Engagements, <i>Vanguard</i> 2022	651

**Panel B. Average CARs.**

<b>Main Variables:</b>	CAR (-3,3)	CAR (-2,2)	CAR (-1,1)	CAR (-1,0)	CAR (0,0)	CAR (0,1)
<i>State Street</i> Report 2015	0.06%	0.06%	0.06%	0.02%	0.03%	0.06%
<i>BlackRock</i> Report 2018	-0.26%	-0.37%	-0.17%	-0.10%	-0.08%	-0.15%
<i>Vanguard</i> Report 2019	0.18%	0.10%	0.06%	0.01%	0.03%	0.07%
<i>Vanguard</i> Report 2020	-0.22%	0.01%	-0.02%	0.03%	0.05%	0.00%
<i>Vanguard</i> Report 2021	-0.04%	0.00%	-0.11%	-0.09%	-0.10%	-0.12%

**Panel C. Propensity to vote against management.**

	State Street	BlackRock	Vanguard
Percent of cases voting against management proposal	8.79%	5.21%	3.60%

**Panel D.** Control variables (per each investor panel.)

Sample for <i>State Street</i>	N	Mean	Std. Dev.
Share of Company Owned by <i>State Street</i>	32,446	.02	0.02
Share of <i>State Street</i> Portfolio Invested in Company	32,446	0.0001	0.0005
Staggered Board	32,446	.28	0.45
Debt Ratio	23,345	.27	0.26
Cash Ratio	28,238	.14	0.19
Ln (Assets)	28,689	7.11	2.11
ROA	25,616	-.05	0.40
(t-1) year abnormal returns	32,446	-.05	0.71
Ln(Scope2 GHG emissions)	32,446	-2.25	11.00
Book-to-Market	32,235	1	0.08
PP&E/Asset	27,948	.2	0.24
Sales per Employee	21,885	572	929.31
Ln(Total CEO Compensation)	9,126	8.57	0.93
Poison Pills	32,446	.01	0.09
CEO Golden Parachute	32,446	.19	0.39
Dual Class Indicator	32,446	.02	0.12
S&P 500	32,446	.1	0.29
Female Directors on Board	32,446	.79	0.40
Violation Tracker Penalty Indicator	32,446	.05	0.21

  

Sample for <i>BlackRock</i>	N	Mean	Std. Dev.
Share of Company Owned by <i>BlackRock</i>	18,919	.06	0.05
Share of <i>BlackRock</i> Portfolio Invested in Company	18,919	0.0001	0.0003
Staggered Board	18,919	.2	0.40
Debt Ratio	13,997	.28	0.27
Cash Ratio	16,624	.16	0.21
Ln (Assets)	16,889	7.14	2.16
ROA	15,248	-.07	0.40
(t-1) year abnormal returns	18,919	-.03	0.52
Ln(Scope2 GHG emissions)	18,919	-1.18	10.99
Book-to-Market	18,801	1	0.09
PP&E/Asset	16,468	.2	0.24
Sales per Employee	13,131	590.31	996.68
Ln(Total CEO Compensation)	5,481	8.58	0.93
Poison Pills	18,919	0	0.07
CEO Golden Parachute	18,919	.21	0.40
Dual Class Indicator	18,919	.02	0.13
S&P 500	18,919	.09	0.28
Female Directors on Board	18,919	.86	0.35
Violation Tracker Penalty Indicator	18,919	.04	0.21

Sample for <i>Vanguard</i>	N	Mean	Std. Dev.
Share of Company Owned by <i>Vanguard</i>	15,485	.06	0.04
Share of <i>Vanguard</i> Portfolio Invested in Company	15,485	0.0001	0.0003
Staggered Board	15,485	.17	0.37
Debt Ratio	11,561	.28	0.27
Cash Ratio	13,649	.17	0.22
Ln (Assets)	13,863	7.13	2.17
ROA	12,549	-.08	0.37
(t-1) year abnormal returns	15,485	-.14	0.93
Ln(Scope2 GHG emissions)	15,485	-1.48	10.94
Book-to-Market	15,344	1	0.10
PP&E/Asset	13,531	.19	0.24
Sales per Employee	10,845	588.19	1005.34
Ln(Total CEO Compensation)	6,398	8.62	0.94
Poison Pills	15,485	.01	0.08
CEO Golden Parachute	15,485	.3	0.46
Dual Class Indicator	15,485	.02	0.14
S&P 500	15,485	.12	0.33
Female Directors on Board	15,485	.88	0.33
Violation Tracker Penalty Indicator	15,485	.04	0.21

**Table 3. Announcement Dates of Engagement Reports by Investor (to use for event study price effect)**

Panel A. State Street

<b>Report Title</b>	<b>Report Date</b>
Annual Stewardship Report 2014 Year End	<i>Missing</i>
Annual Stewardship Report 2015 Year End	4/15/2016
Annual Stewardship Report 2016 Year End	<i>Missing</i>
Stewardship 2017	<i>Missing</i>
Stewardship Report 2018-19	<i>Missing</i>
Stewardship Activity Report Q1 2019	<i>Missing</i>
Stewardship Activity Report Q2 2019	<i>Missing</i>
Stewardship Activity Report Q3 2019	<i>Missing</i>
Stewardship Activity Report Q4 2019	<i>Missing</i>
Stewardship Activity Report 2020 Q1	<i>Missing</i>
Proxy Season Review 2020 Q2	<i>Missing</i>
Stewardship Activity Report 2020 Q3	<i>Missing</i>
Stewardship Activity Report 2020 Q4	<i>Missing</i>
Stewardship Activity Report 2021 Q1	<i>Missing</i>
Stewardship Activity Report 2021 Q2	<i>Missing</i>
Stewardship Activity Report 2021 Q3	<i>Missing</i>
Stewardship Activity Report 2021 Q4	<i>Missing</i>
Stewardship Activity Report 2022 Q1	<i>Missing</i>
Stewardship Activity Report 2022 Q2	<i>Missing</i>
Stewardship Activity Report 2022 Q3	<i>Missing</i>
Stewardship Activity Report 2022 Q4	<i>Missing</i>

Panel B. Vanguard

<b>Report Title</b>	<b>Report Date</b>
Investment Stewardship 2019 Annual Report	8/30/2019 (press release)
Investment Stewardship 2020 Annual Report	9/15/2020 (press release)
Investment Stewardship 2021 Annual Report	4/5/2022 (press release)
Investment Stewardship 2022 Annual Report	4/14/2023 (press release)
	<i>(CRSP data not available for 2023)</i>

Panel C. BlackRock

<b>Report Title</b>	<b>Report Date</b>
BlackRock Investment Stewardship 2018 Annual Report	8/30/2018
2019 Investment Stewardship Annual Report	<i>Missing</i>
BlackRock Investment Stewardship Annual Report September 2020	<i>Missing</i>
BlackRock Investment Stewardship Global Engagement Summary Report Q1-Q4 2021	<i>Missing</i>
BlackRock Investment Stewardship Global Engagement Summary Report Q1-Q4 2022	<i>Missing</i>

**Table 4. Event Study for Announcements of the *State Street* Engagement Report Publications**

This table shows the market model based cumulative abnormal returns in the event window around the date of the announcement and online publication of the “Annual Stewardship Report” for U.S. stocks by *State Street* on April 15, 2016. The control variable is defined in Table 1. The cumulative announcement returns are based on a market model. We include industry fixed effects (SIC-3). The control variables are defined in Table 1. T-statistics are displayed in parentheses. Standard errors are clustered at the SIC-3 industry level. The \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels.

	(1)	(2)	(3)	(4)	(5)	(6)
	-3 to +3	-2 to +2	-1 to +1	-1 to 0	0 to 0	0 to +1
VARIABLES	Annnc. Returns Market Model					
<i>SSGA Engagement Indicator</i>	-0.003	-0.002	-0.0005	-0.001	-0.001	-0.0004
	(-0.759)	(-0.495)	(-0.186)	(-0.583)	(-0.730)	(-0.264)
Constant	0.000**	0.000**	-0.000***	-0.000***	-0.000***	-0.000***
	(2.437)	(2.546)	(-4.797)	(-4.942)	(-3.859)	(-5.296)
Observations	7,035	7,035	7,035	7,035	7,033	7,034
R-squared	-0.003	-0.002	-0.000	-0.001	-0.001	-0.000
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust t-statistics in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 5. Event Study for Announcement of the *BlackRock* Engagement Report Publications**

This table shows the market model based cumulative abnormal returns in six event windows around the date of the announcement and online publication of the “*BlackRock* Investment Stewardship Annual Report” for the universe of U.S. domestic stocks in CRSP dataset. The control variable is defined in Table 1. The cumulative announcement returns are based on a market model. We include industry fixed effects (SIC-3). The control variables are defined in Table 1. T-statistics are displayed in parentheses. Standard errors are clustered at the SIC-3 industry level. The <sup>\*\*\*</sup>, <sup>\*\*</sup>, and <sup>\*</sup> denote significance at the 1%, 5%, and 10% levels.

	(1)	(2)	(3)	(4)	(5)	(6)
	-3 to +3	-2 to +2	-1 to +1	-1 to 0	0 to 0	0 to +1
VARIABLES	Annnc. Returns Market Model					
<i>BlackRock Engagement Indicator</i>	-0.003	-0.006 <sup>**</sup>	-0.006 <sup>***</sup>	-0.004 <sup>**</sup>	-0.002 <sup>**</sup>	-0.005 <sup>***</sup>
Constant	(-0.910)	(-2.360)	(-3.545)	(-2.207)	(-2.419)	(-4.065)
	-0.002 <sup>***</sup>	-0.003 <sup>***</sup>	-0.001 <sup>***</sup>	-0.001 <sup>***</sup>	-0.001 <sup>***</sup>	-0.001 <sup>***</sup>
	(-8.646)	(-15.341)	(-8.711)	(-4.633)	(-7.150)	(-12.105)
Observations	7,156	7,156	7,156	7,156	7,156	7,156
R-squared	0.060	0.071	0.065	0.057	0.061	0.076
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust t-statistics in parentheses  
<sup>\*\*\*</sup> p<0.01, <sup>\*\*</sup> p<0.05, <sup>\*</sup> p<0.1

**Table 6. Event Study for Announcement of the *Vanguard* Engagement Report Publication**

This table shows the market model based cumulative abnormal returns in six event windows around the date of the announcement and online publication of the first “*Vanguard* Engagement Report” for the universe of U.S. domestic stocks in CRSP dataset. The control variable is defined in Table 1. The cumulative announcement returns are based on a market model. We include industry fixed effects (SIC-3). The control variables are defined in Table 1. T-statistics are displayed in parentheses. Standard errors are clustered at the SIC-3 industry level. The \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels.

	(1)	(2)	(3)	(4)	(5)	(6)
	-3 to +3	-2 to +2	-1 to +1	-1 to 0	0 to 0	0 to +1
VARIABLES	Ann. Returns Market Model					
<i>Vanguard Engagement Indicator</i>	-0.002 (-0.742)	0.001 (0.428)	-0.002 (-1.091)	-0.002** (-1.976)	-0.001*** (-2.832)	-0.001 (-0.806)
Constant	-0.000 (-0.810)	0.000* (1.883)	-0.000 (-1.471)	-0.000 (-0.434)	-0.000 (-0.614)	-0.000* (-1.884)
Observations	23,639	23,639	23,639	23,639	23,639	23,639
R-squared	0.034	0.033	0.034	0.032	0.020	0.028
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust t-statistics in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 7. Propensity to engage a company as of (i) December 31, 2014, (ii) April 15, 2016, (iii) April 28, 2017, (iv) July 10, 2018, (v) August 30, 2019, (vi) March 31, 2019 (vii) April 30, 2020, (viii) December 30, 2020, and (ix) June 30, 2022  
(i.e., all annual *State Street* Engagement report publication dates)  
Controlling for Previous Year's Returns**

This table shows the propensity (linear probability model) of portfolio company engagement in the *State Street's* 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, and 2022 engagement reports from the universe of U.S. domestic stocks in CRSP dataset as of the corresponding years. We include firm, industry-year (SIC-3 x year) and state-year (state of headquarters location x year) fixed effects. The control variables are defined in Table 1. Continuous variables are winsorized at 1% in each tail. The report includes engagements ending at the corresponding engagement reports date for 2014 through 2022. The total number of engagements are 208 (2014), 231 (2015), 234 (2016), 197 (2017), 382 (2018), 171 (2019), 185 (2020), 201 (2021), and 220 (2022). The decreased number of engagements in 2019, 2020 and 2021 is due to missing quarterly engagement reports in those years as follows: Q4 in 2019, Q3 in 2020, Q3 and Q4 in 2021. T-statistics are displayed in parentheses. Standard errors are clustered independently at the firm level. The \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels.

VARIABLES	(1)	(2)
	<i>State Street</i> Engagemen t Indicator	<i>State Street</i> Engagemen t Indicator
Share of Company Owned by <i>State Street</i>	1.267*** (5.743)	0.476 (0.672)
Share of <i>State Street</i> Portfolio in Company	46.297** (2.414)	28.757 (0.809)
Staggered Board		-0.032* (-1.855)
Debt Ratio		0.020 (0.418)
Cash Ratio		-0.037 (-0.479)
Ln (Assets)		0.048* (1.934)
ROA		-0.081 (-1.518)
(t-1) year abnormal returns	0.002 (1.440)	0.002 (0.227)
Ln(Scope1 + Scope2 GHG emissions)		0.002 (0.183)
Book-to-Market		-0.032 (-0.721)
PP&E/Asset		-0.069

		(-0.627)
Sales per Employee		0.000
		(0.967)
Ln(Total CEO Compensation)		0.040***
		(3.583)
Poison Pills		0.025
		(0.469)
CEO Golden Parachute		0.017
		(0.818)
Dual Class Indicator		-0.040
		(-0.571)
S&P 500		0.084
		(1.336)
Female Directors on Board		-0.036*
		(-1.782)
Violation Tracker Penalty Indicator		-0.002
		(-0.109)
Observations	31,073	6,597
R-squared	0.472	0.540
Industry-Year Fixed Effects	Yes	Yes
State-Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes

Robust t-statistics in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 8. Propensity to engage a company as of (i) August 30, 2018, (ii) September 30, 2019, (iii) December 12, 2020, (iv) December 12, 2021, and (v) December 31, 2022 (i.e., all annual *BlackRock* Engagement report publication dates) Controlling for Previous Year's Returns**

This table shows the propensity (linear probability model) of portfolio company engagement in the BlackRock's 2018, 2019, 2020, 2021, and 2022 engagement reports from the universe of U.S. domestic stocks in CRSP dataset as of the corresponding years. We include firm, industry-year (SIC-3 x year) and state-year (state of headquarters location x year) fixed effects. The control variables are defined in Table 1. Continuous variables are winsorized at 1% in each tail. The report includes engagements ending at the corresponding engagement reports date for 2018 through 2022. The total number of engagements are in 596 (2018), 566 (2019), 920 (2020), 905 (2021), and 1,034 (2022). T-statistics are displayed in parentheses. Standard errors are clustered at the firm level. The \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels.

VARIABLES	(1) <i>BlackRock</i> Engagement Indicator	(2) <i>BlackRock</i> Engagement Indicator
Share of Company Owned by <i>BlackRock</i>	0.916*** (5.564)	1.045** (2.251)
Share of <i>BlackRock</i> Portfolio in Company	-35.616 (-0.991)	-68.396 (-1.121)
Staggered Board		0.015 (0.512)
Debt Ratio		0.012 (0.113)
Cash Ratio		-0.001 (-0.005)
Ln (Assets)		0.002 (0.048)
ROA		0.027 (0.265)
(t-1) year abnormal returns	-0.001 (-0.212)	-0.010 (-0.488)
Ln(Scope 1+Scope 2 CO <sub>2</sub> emissions)		0.013 (0.580)
Book-to-Market		0.061 (0.781)
PP&E/Asset		-0.543** (-2.369)
Sales per Employee		-0.000 (-1.208)
Ln(Total CEO Compensation)		0.031*

		(1.875)
Poison Pills		-0.007
		(-0.070)
CEO Golden Parachute		-0.027
		(-0.600)
Dual Class Indicator		0.534 <sup>***</sup>
		(2.684)
S&P 500		-0.120
		(-0.900)
Female Directors on Board		-0.031
		(-0.745)
Violation Tracker Penalty Indicator		0.033
		(1.168)
Observations	17,766	3,989
R-squared	0.567	0.624
Industry-Year Fixed Effects	Yes	Yes
State-Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes

---

Robust t-statistics in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 9. Propensity to engage a company as of (i) August 30, 2019, (ii) September 15, 2020, (iii) April 5, 2022, and (iv) December 30, 2022 (i.e., all annual *Vanguard* Engagement report publication dates) Controlling for Previous Year's Returns**

This table shows the propensity (linear probability model) of portfolio company engagement in the Vanguard's 2019, 2020, 2021, and 2022 engagement reports from the universe of U.S. domestic stocks in CRSP dataset as of the corresponding years. We include firm, industry-year (SIC-3 x year) and state-year (state of headquarters location x year) fixed effects. The control variables are defined in Table 1. Continuous variables are winsorized at 1% in each tail. The report includes engagements ending at the corresponding engagement reports date for 2019 through 2022. The total number of engagements are 629 (2019), 538 (2020), 726 (2021), and 651 (2022). T-statistics are displayed in parentheses. Standard errors are clustered at the firm level. The \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels.

VARIABLES	(1)	(2)
	<i>Vanguard</i> Engagement Indicator	<i>Vanguard</i> Engagement Indicator
Share of Company Owned by <i>Vanguard</i>	0.832*** (3.746)	0.441 (0.742)
Share of <i>Vanguard</i> Portfolio in Company	-41.920* (-1.829)	-31.120 (-0.843)
Staggered Board		-0.034 (-1.435)
Debt Ratio		-0.174* (-1.946)
Cash Ratio		-0.151 (-1.309)
Ln (Assets)		0.067* (1.868)
ROA		-0.074 (-0.893)
(t-1) year abnormal returns	0.003 (0.854)	-0.009 (-1.037)
Ln(Scope1+Scope2 GHG emissions)		0.002 (1.180)
Book-to-Market		0.039 (0.645)
PP&E/Asset		-0.277 (-1.517)
Sales per Employee		-0.000 (-0.674)
Ln(Total CEO Compensation)		0.040***

		(2.649)
Poison Pills		-0.161
		(-0.877)
CEO Golden Parachute		-0.019
		(-0.569)
Dual Class Indicator		0.342
		(1.566)
S&P 500		0.191**
		(2.291)
Female Directors on Board		-0.018
		(-0.605)
Violation Tracker Penalty Indicator		-0.007
		(-0.249)
Observations	14,533	4,431
R-squared	0.569	0.625
Industry-Year Fixed Effects	Yes	Yes
State-Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes

---

Robust t-statistics in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 10. Matching Regressions: Predictive Models**

This table shows the propensity (linear probability model) of portfolio company engagement in the State Street, BlackRock, and Vanguard's engagement reports from the universe of U.S. domestic stocks in CRSP dataset as of the corresponding years. We match engaged to non-engaged firms on natural logarithm of firm size, ROA, industry (3-digit SIC) and year. We include firm, industry-year (SIC-3 x year) and state-year (state of headquarters location x year) fixed effects. The control variables are defined in Table 1. Continuous variables are winsorized at 1% in each tail. T-statistics are displayed in parentheses. Standard errors are clustered at the firm level. The \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	<i>State Street</i> Engagement Indicator		<i>BlackRock</i> Engagement Indicator		<i>Vanguard</i> Engagement Indicator	
Share of Company Owned by Corresponding Fund <i>(shown in column)</i>	1.727 (0.796)	-3.234 (-0.659)	1.889*** (3.678)	1.751* (1.677)	0.990 (0.951)	0.408 (0.254)
Share of Corresponding Fund Portfolio in Company <i>(shown in column)</i>	-54.060 (-1.302)	45.742 (0.524)	-192.77*** (-2.881)	-44.305 (-0.513)	-78.589 (-1.605)	-51.458 (-0.698)
Staggered Board		-0.039 (-0.282)		0.025 (0.362)		-0.053 (-0.771)
Debt Ratio		-0.180 (-0.567)		0.216 (0.868)		0.027 (0.104)
Cash Ratio		0.030 (0.099)		0.125 (0.404)		-0.132 (-0.336)
Ln (Assets)		0.093 (1.036)		0.035 (0.396)		-0.050 (-0.507)
ROA		-0.205 (-0.634)		-0.014 (-0.064)		-0.371 (-1.301)
(t-1) year abnormal returns	0.057** (2.235)	0.011 (0.201)	-0.001 (-0.038)	-0.015 (-0.301)	-0.025 (-1.394)	-0.046 (-1.457)
Ln(Scope1+Scope2 GHG emissions)		-0.148** (-2.521)		0.024 (0.433)		0.002 (0.306)
Book-to-Market		-0.179 (-0.553)		0.229 (1.097)		0.081 (0.395)
PP&E/ Asset		-0.169 (-0.236)		0.084 (0.191)		-0.434 (-0.762)
Sales per Employee		0.000 (1.592)		0.000 (0.542)		0.000 (1.512)
Ln(Total CEO		0.041		0.052		0.013

Compensation)						
		(1.161)		(1.548)		(0.564)
Poison Pills		-0.131		-0.649**		-0.375
		(-0.573)		(-2.506)		(-1.299)
CEO Golden Parachute		0.413**		-0.035		-0.105
		(2.061)		(-0.334)		(-0.901)
Dual Class Indicator		-0.324		-		-
		(-0.655)		-		-
S&P 500		-0.249		-0.111		0.283
		(-0.996)		(-0.405)		(1.214)
Female Directors on Board		-0.336**		-0.119		0.170
		(-2.564)		(-1.107)		(1.481)
Violation Tracker Penalty Indicator		0.001		-0.008		-0.107**
		(0.012)		(-0.149)		(-2.227)
Observations	2,327	894	4,594	1,437	2,349	1,209
R-squared	0.819	0.861	0.759	0.810	0.798	0.837
Industry-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
State-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust t-statistics in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 11. Voting Against Management After Engagement for *State Street***

This table shows the propensity (linear probability model) of voting against the recommendations of portfolio company management following State Street engagement in the previous year. The sample period includes the years of available reports of State Street engagement (2014-2022) for U.S. domestic stocks (as available in the CRSP dataset. We include proposal type, fund-, firm-, industry-year (SIC-3 x year) and state-year (state of headquarters location x year) fixed effects. The control variables are defined in Table 1. Continuous variables are winsorized at 1% in each tail. The total number of engagements are 208 (2014), 231 (2015), 234 (2016), 197 (2017), 382 (2018), 171 (2019), 185 (2020), 201 (2021), and 220 (2022). The decreased number of engagements in 2019, 2020 and 2021 is due to missing quarterly engagement reports in those years as follows: Q4 in 2019, Q3 in 2020, Q3 and Q4 in 2021. T-statistics are displayed in parentheses. Standard errors are clustered at the firm level. The \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	<i>State Street</i> Voting Against Management on All Proposals			<i>State Street</i> Votes No on “Say-On-Pay”		
Indicator for <i>StateStreet</i> Engaging Comp in Year Preceding Vote	0.002 (0.562)	0.003 (0.841)	0.004 (1.020)	0.010 (0.905)	0.008 (0.726)	0.009 (0.654)
<i>Fund-Specific Controls</i>						
Percent of <i>State Street</i> Portfolio Invested in the Company			-5.822 (-0.707)			-22.313 (-0.988)
<i>Company-Specific Controls</i>						
(t-1) year abnormal returns			0.005* (1.911)			0.011 (1.130)
S&P 500			-0.007 (-0.440)			-0.041 (-0.589)
Debt Ratio			-0.014 (-0.948)			-0.071 (-1.358)
Cash Ratio			0.056** (2.478)			-0.113 (-1.394)
Ln (Assets)			-0.010 (-1.584)			0.014 (0.603)
ROA			0.017 (0.757)			-0.072 (-0.988)
Book-to-Market			0.005 (0.309)			-0.123*** (-2.720)
PP&E/Asset			0.024 (0.746)			0.124 (1.065)
Sales per Employee			-0.000 (-0.216)			0.000 (0.067)
<i>Company Governance Controls</i>						

Percent of Company Owned by <i>State Street</i>	-0.286*	-0.170			-1.298**	-0.794
	(-1.830)	(-0.831)			(-2.153)	(-0.975)
Staggered Board	-0.005	-0.008			-0.003	-0.011
	(-1.004)	(-1.594)			(-0.216)	(-0.762)
Ln(Total CEO Compensation)	0.004*	0.006**			0.018*	0.012
	(1.694)	(2.036)			(1.885)	(1.179)
Poison Pills	0.015	0.015			-0.009	0.010
	(1.438)	(1.397)			(-0.302)	(0.310)
CEO Golden Parachute	-0.005	-0.008			-0.010	-0.016
	(-1.096)	(-1.484)			(-0.575)	(-0.779)
Dual Class Indicator	0.008	0.017			0.049	0.089
	(0.568)	(0.991)			(0.830)	(1.066)
<i><u>Company Environmental &amp; Social Controls</u></i>						
Ln(Scope1+Scope2 GHG emissions)	0.000	0.003			0.002	-0.001
	(0.066)	(0.876)			(0.208)	(-0.099)
Female Directors on Board	-0.019***	-0.024***			-0.044**	-0.070***
	(-3.145)	(-3.740)			(-2.004)	(-3.140)
Violation Tracker Penalty Indicator	-0.003	-0.005			-0.005	-0.014
	(-0.953)	(-1.324)			(-0.381)	(-0.843)
Observations	1,033,830	968,622	721,538	90,746	83,401	64,336
R-squared	0.259	0.260	0.253	0.554	0.560	0.600
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Fund Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
State-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust t-statistics in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 12. Voting Against Management After Engagement for *BlackRock***

This table shows the propensity (linear probability model) of voting against the recommendations of portfolio company management following *BlackRock* engagement in the previous year. The sample period includes the years of available reports of *BlackRock* engagement (2018-2022) for U.S. domestic stocks (as available in the CRSP dataset. We include firm, industry-year (SIC-3 x year) and state-year (state of headquarters location x year) fixed effects. The control variables are defined in Table 1. Continuous variables are winsorized at 1% in each tail. The total number of engagements are in 596 (2018), 566 (2019), 920 (2020), 905 (2021), and 1,034 (2022). The decreased number of engagements in 2019, 2020 and 2021 is due to missing quarterly engagement reports in those years as follows: Q4 in 2019, Q3 in 2020, Q3 and Q4 in 2021. T-statistics are displayed in parentheses. Standard errors are clustered at the firm level. The \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	<i>BlackRock</i> Voting Against Management on All Proposals			<i>BlackRock</i> Votes No on “Say-On-Pay”		
Indicator for <i>BlackRock</i> Engaging Comp in Year Preceding Vote	-0.002 (-0.688)	-0.003 (-0.734)	-0.009** (-2.113)	-0.002 (-0.688)	-0.003 (-0.734)	-0.009** (-2.113)
<i>Fund-specific controls</i>						
Percent of <i>BlackRock</i> Portfolio Invested in the Company			7.873 (0.897)			33.767 (0.880)
<i>Company-Specific Controls</i>						
(t-1) year abnormal returns			0.002 (0.250)			-0.023*** (-2.800)
S&P 500			-0.003 (-0.097)			0.051 (0.832)
Debt Ratio			-0.031 (-1.560)			0.016 (0.183)
Cash Ratio			-0.046* (-1.715)			0.216** (2.415)
Ln (Assets)			0.003 (0.289)			0.031 (0.729)
ROA			-0.074*** (-2.684)			-0.042 (-0.332)
Book-to-Market			-0.007 (-0.346)			-0.113* (-1.907)
PP&E/Asset			-0.091* (-1.928)			0.145 (1.144)
Sales per Employee			0.000			-0.000

			(0.799)			(-0.791)
<i>Company Governance Controls</i>						
Percent of Company Owned by <i>BlackRock</i>	0.035	0.189*		0.035	0.189*	
	(0.415)	(1.737)		(0.415)	(1.737)	
Staggered Board	-0.004	0.001		-0.004	0.001	
	(-0.488)	(0.109)		(-0.488)	(0.109)	
Ln(Total CEO Compensation)	0.003	0.006*		0.003	0.006*	
	(1.142)	(1.884)		(1.142)	(1.884)	
Poison Pills	0.042	0.044		0.042	0.044	
	(1.297)	(1.360)		(1.297)	(1.360)	
CEO Golden Parachute	-0.008	-0.007		-0.008	-0.007	
	(-0.598)	(-0.405)		(-0.598)	(-0.405)	
Dual Class Indicator	0.242***	0.243***		0.242***	0.243***	
	(10.074)	(9.098)		(10.074)	(9.098)	
<i>Company Environmental &amp; Social Controls</i>						
Ln(Scope1+Scope2 GHG emissions)	-0.008*	-0.013**		-0.008*	-0.013**	
	(-1.706)	(-2.327)		(-1.706)	(-2.327)	
Female Directors on Board	-0.002	-0.013*		-0.002	-0.013*	
	(-0.259)	(-1.700)		(-0.259)	(-1.700)	
Violation Tracker Penalty Indicator	-0.008*	-0.009		-0.008*	-0.009	
	(-1.748)	(-1.469)		(-1.748)	(-1.469)	
Observations	1,356,161	1,148,907	867,004	98,742	71,816	52,786
R-squared	0.165	0.155	0.153	0.659	0.650	0.690
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Fund Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
State-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust t-statistics in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 13. Voting Against Management After Engagement for *Vanguard***

This table shows the propensity (linear probability model) of voting against the recommendations of portfolio company management following *Vanguard* engagement in the previous year. The sample period includes the years of available reports of *Vanguard* engagement (2018-2022) for U.S. domestic stocks (as available in the CRSP dataset. We include firm, industry-year (SIC-3 x year) and state-year (state of headquarters location x year) fixed effects. The control variables are defined in Table 1. Continuous variables are winsorized at 1% in each tail. The total number of engagements are 629 (2019), 538 (2020), 726 (2021), and 651 (2022). The decreased number of engagements in 2019, 2020 and 2021 is due to missing quarterly engagement reports in those years as follows: Q4 in 2019, Q3 in 2020, Q3 and Q4 in 2021. T-statistics are displayed in parentheses. Standard errors are clustered at the firm level. The <sup>\*\*\*</sup>, <sup>\*\*</sup>, and <sup>\*</sup> denote significance at the 1%, 5%, and 10% levels.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Vanguard</i> Voting Against Management on All Proposals			<i>Vanguard</i> Votes No on “Say-On-Pay”		
Indicator for <i>Vanguard</i> Engaging Comp in Year Preceding Vote	-0.006 <sup>**</sup> (-2.568)	-0.003 (-1.223)	-0.003 (-0.910)	-0.016 (-1.372)	-0.011 (-0.912)	-0.012 (-0.761)
<i>Fund-Specific Controls</i>						
Percent of <i>Vanguard</i> Portfolio Invested in the Company			1.289 (0.192)			33.767 (0.880)
<i>Company-Specific Controls</i>						
(t-1) year abnormal returns			-0.003 (-1.421)			-0.023 <sup>***</sup> (-2.800)
S&P 500			-0.053 <sup>**</sup> (-1.983)			0.051 (0.832)
Debt Ratio			0.003 (0.158)			0.016 (0.183)
Cash Ratio			0.023 (1.096)			0.216 <sup>**</sup> (2.415)
Ln (Assets)			-0.007 (-0.909)			0.031 (0.729)
ROA			0.001 (0.064)			-0.042 (-0.332)
Book-to-Market			-0.018 <sup>*</sup> (-1.681)			-0.113 <sup>*</sup> (-1.907)
PP&E/Asset			-0.005 (-0.142)			0.145 (1.144)
Sales per Employee			-0.000 (-1.187)			-0.000 (-0.791)
<i>Company Governance Controls</i>						

Percent of Company Owned by Vanguard	-0.075	-0.064		-0.215	-0.621	
	(-1.247)	(-0.504)		(-0.573)	(-0.860)	
Staggered Board	0.002	-0.002		-0.011	-0.020	
	(0.336)	(-0.276)		(-0.586)	(-1.039)	
Ln(Total CEO Compensation)	-0.006 <sup>***</sup>	-0.007 <sup>***</sup>		-0.020 <sup>**</sup>	-0.021 <sup>**</sup>	
	(-2.660)	(-3.013)		(-2.106)	(-2.162)	
Poison Pills	0.001	-0.003		-0.060 <sup>*</sup>	-0.062	
	(0.069)	(-0.162)		(-1.878)	(-1.306)	
CEO Golden Parachute	0.005	0.016		0.013	-0.016	
	(0.716)	(1.494)		(0.327)	(-0.326)	
Dual Class Indicator	0.009	-0.001		-	-	
	(1.007)	(-0.144)		-	-	
<i>Company Environmental &amp; Social Controls</i>						
Ln(Scope1+Scope2 GHG emissions)	-0.000	0.000		0.000	0.003	
	(-0.313)	(0.555)		(0.318)	(0.863)	
Female Directors on Board	-0.005	-0.005		-0.072 <sup>**</sup>	-0.106 <sup>***</sup>	
	(-0.549)	(-0.521)		(-2.385)	(-2.680)	
Violation Tracker Penalty Indicator	-0.002	-0.003		-0.011	-0.024	
	(-0.659)	(-0.610)		(-0.830)	(-1.285)	
Observations	1,045,237	800,280	571,335	98,742	71,816	52,786
R-squared	0.236	0.204	0.211	0.659	0.650	0.690
Proposal Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Fund Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
State-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust t-statistics in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 14. Changes in CEO Total Compensation, Female Director Propensity, and Dual Class Propensity After Engagement by *State Street***

This table shows the changes in logarithm of the CEO total compensation in columns (1)-(2), change in the propensity (linear probability model) of female director on the board in (3)-(4), and change in dual class structure propensity in (5) and (6) following *State Street* engagement in the previous year. The sample period includes the years of available reports of *State Street* engagement (2014-2022) for U.S. domestic stocks (as available in the CRSP dataset. We include firm, industry-year (SIC-3 x year) and state-year (state of headquarters location x year) fixed effects. The control variables are defined in Table 1. Continuous variables are winsorized at 1% in each tail. The total number of engagements are 208 (2014), 231 (2015), 234 (2016), 197 (2017), 382 (2018), 171 (2019), 185 (2020), 201 (2021), and 220 (2022). The decreased number of engagements in 2019, 2020 and 2021 is due to missing quarterly engagement reports in those years as follows: Q4 in 2019, Q3 in 2020, Q3 and Q4 in 2021. T-statistics are displayed in parentheses. Standard errors are clustered at the firm level. The <sup>\*\*\*</sup>, <sup>\*\*</sup>, and <sup>\*</sup> denote significance at the 1%, 5%, and 10% levels.

VARIABLES	(1) Ln(Total CEO Compens ation)	(2) Ln(Total CEO Compens ation)	(3) Female Directors on Board	(4) Female Directors on Board	(5) Dual Class Indicator	(6) Dual Class Indicator
Indicator for <i>State Street</i> Engaging the Company in the Year Preceding Vote	-0.004 (-0.224)	0.011 (0.462)	0.009 (1.361)	0.000 (0.020)	-0.001 (-0.762)	0.001 (1.178)
<i>Fund-Specific Controls</i>						
Percent of <i>State Street</i> Portfolio Invested in the Company	27.477 (0.619)	27.645 (0.454)	10.826 (0.663)	-32.069* (-1.780)	1.803 (0.490)	-5.232* (-1.785)
<i>Company-Specific Controls</i>						
(t-1) year abnormal returns	-0.009 (-0.682)	-0.009 (-0.651)	-0.003 (-1.001)	-0.011* (-1.719)	0.000 (1.093)	0.001 (0.844)
S&P 500		-0.091 (-0.636)		-0.025 (-0.546)		0.003 (0.182)
Debt Ratio		0.123 (1.219)		-0.001 (-0.030)		-0.008 (-1.002)
Cash Ratio		-0.277* (-1.954)		0.029 (0.453)		0.016 (0.658)
Ln (Assets)		0.047 (1.065)		0.058*** (2.860)		0.003* (1.857)
ROA		0.070 (0.658)		0.007 (0.118)		0.001 (0.156)
Book-to-Market		0.055 (0.608)		0.045 (1.562)		-0.006 (-1.438)

PP&E/Asset		0.206 (1.002)		0.212** (2.108)		0.016 (0.753)
Sales per Employee		0.000 (0.354)		0.000 (0.409)		-0.000 (-0.036)
<i>Company Governance Controls</i>						
Percent of Company Owned by <i>State Street</i>	0.901 (0.852)	-0.496 (-0.362)	0.751** (2.380)	2.034*** (3.138)	0.195*** (3.464)	0.065 (0.905)
Staggered Board		-0.023 (-0.766)		-0.000 (-0.004)		0.000 (0.007)
Ln(Total CEO Compensation)		-		0.005 (0.599)		0.000 (0.002)
Poison Pills		-0.049 (-0.560)		0.010 (0.273)		-0.000 (-0.099)
CEO Golden Parachute		0.048 (1.256)		0.051** (2.523)		-0.001 (-0.433)
Dual Class Indicator		0.156* (1.738)		-0.046 (-1.093)		- -
<i>Company Environmental &amp; Social Controls</i>						
Ln(Scope1+Scope2 GHG emissions)		0.031 (1.134)		0.016 (1.629)		-0.000 (-0.396)
Female Directors on Board		0.124*** (3.136)				-0.001 (-0.210)
Violation Tracker Penalty Indicator		0.029 (1.248)		0.010 (1.410)		-0.002 (-1.035)
Observations	8,497	6,471	31,073	6,597	31,073	6,597
R-squared	0.837	0.828	0.632	0.573	0.833	0.985
State-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust t-statistics in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 15. Changes in CEO Total Compensation, Female Director Propensity, and Dual Class Propensity After Engagement by *BlackRock***

This table shows the changes in logarithm of the CEO total compensation in columns (1)-(2), change in the propensity (linear probability model) of female director on the board in (3)-(4), and change in dual class structure propensity in (5) and (6) following *BlackRock* engagement in the previous year. The sample period includes the years of available reports of *BlackRock* engagement (2014-2022) for U.S. domestic stocks (as available in the CRSP dataset. We include proposal type, fund-, firm-, industry-year (SIC-3 x year) and state-year (state of headquarters location x year) fixed effects. The control variables are defined in Table 1. Continuous variables are winsorized at 1% in each tail. The total number of engagements are in 596 (2018), 566 (2019), 920 (2020), 905 (2021), and 1,034 (2022). The decreased number of engagements in 2019, 2020 and 2021 is due to missing quarterly engagement reports in those years as follows: Q4 in 2019, Q3 in 2020, Q3 and Q4 in 2021. T-statistics are displayed in parentheses. Standard errors are clustered at the firm level. The \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Ln(Total CEO Compensation)	Ln(Total CEO Compensation)	Female Directors on Board	Female Directors on Board	Dual Class Indicator	Dual Class Indicator
Indicator for <i>BlackRock</i> Engaging the Company in the Year Preceding Vote	-0.021 (-0.919)	-0.035 (-1.322)	-0.012*** (-2.911)	0.005 (1.063)	0.002 (0.906)	0.003* (1.714)
<i>Fund-Specific Controls</i>						
Percent of <i>BlackRock</i> Portfolio Invested in the Company	10.268 (0.138)	-15.286 (-0.151)	2.414 (0.219)	-6.854 (-0.510)	-4.343 (-0.698)	-2.784 (-0.954)
<i>Company-Specific Controls</i>						
(t-1) year abnormal returns	0.077*** (2.863)	0.084*** (2.831)	-0.008* (-1.941)	0.016* (1.800)	-0.002* (-1.844)	-0.001 (-1.080)
S&P 500		0.032 (0.087)		-0.061* (-1.710)		0.001 (0.279)
Debt Ratio		0.112 (0.733)		-0.014 (-0.506)		-0.007 (-0.751)
Cash Ratio		-0.253 (-1.260)		0.086 (1.621)		0.029 (0.958)
Ln (Assets)		0.162** (2.373)		0.013 (0.667)		-0.000 (-0.071)
ROA		-0.139 (-1.009)		0.032 (0.686)		-0.002 (-0.837)
Book-to-Market		0.158 (1.424)		0.023 (1.358)		-0.000 (-0.093)
PP&E/Asset		0.019 (0.065)		0.086 (1.259)		0.045* (1.713)

Sales per Employee		0.000 (1.206)		0.000 (1.241)		-0.000 (-1.193)
<i>Company Governance Controls</i>						
Percent of Company Owned by BlackRock	0.709 (1.479)	0.572 (0.882)	-0.206** (-2.013)	0.190 (1.009)	0.078** (2.083)	0.053 (1.450)
Staggered Board		-0.014 (-0.365)		0.004 (0.423)		0.002 (0.585)
Ln(Total CEO Compensation)		-		-0.008 (-1.564)		0.001 (0.960)
Poison Pills		-0.097 (-0.721)		-0.001 (-0.018)		0.001 (0.212)
CEO Golden Parachute		0.052 (0.844)		0.048* (1.831)		0.001 (0.244)
Dual Class Indicator		0.059 (0.469)		-0.018 (-0.545)		- -
<i>Company Environmental &amp; Social Controls</i>						
Ln(Scope1+Scope2 GHG emissions)		-0.042 (-1.119)		0.024** (2.403)		-0.000 (-0.064)
Female Directors on Board		0.166*** (2.861)		-		-0.006 (-0.814)
Violation Tracker Penalty Indicator		0.013 (0.340)		-0.002 (-0.351)		-0.001 (-0.969)
Observations	5,045	3,868	17,766	3,989	17,766	3,989
R-squared	0.854	0.847	0.644	0.605	0.831	0.992
State-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust t-statistics in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 16. Changes in CEO Total Compensation, Female Director Propensity, and Dual Class Propensity After Engagement by *Vanguard***

This table shows the changes in logarithm of the CEO total compensation in columns (1)-(2), change in the propensity (linear probability model) of female director on the board in (3)-(4), and change in dual class structure propensity in (5) and (6) following *Vanguard* engagement in the previous year. The sample period includes the years of available reports of *Vanguard* engagement (2014-2022) for U.S. domestic stocks (as available in the CRSP dataset. We include proposal type, fund-, firm-, industry-year (SIC-3 x year) and state-year (state of headquarters location x year) fixed effects. The control variables are defined in Table 1. Continuous variables are winsorized at 1% in each tail. The total number of engagements are 629 (2019), 538 (2020), 726 (2021), and 651 (2022). The decreased number of engagements in 2019, 2020 and 2021 is due to missing quarterly engagement reports in those years as follows: Q4 in 2019, Q3 in 2020, Q3 and Q4 in 2021. T-statistics are displayed in parentheses. Standard errors are clustered at the firm level. The \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Ln(Total CEO Compens ation)	Ln(Total CEO Compens ation)	Female Directors on Board	Female Directors on Board	Dual Class Indicator	Dual Class Indicator
Indicator for <i>Vanguard</i> Engaging the Company in the Year Preceding Vote	-0.003 (-0.110)	-0.010 (-0.270)	0.018*** (3.566)	0.001 (0.391)	-0.002 (-0.763)	-0.002 (-0.287)
<i>Fund-Specific Controls</i>						
Percent of <i>Vanguard</i> Portfolio Invested in the Company	75.452 (1.002)	66.234 (0.737)	-1.159 (-0.136)	-0.801 (-0.107)	-0.934 (-0.091)	-4.512 (-0.268)
<i>Company-Specific Controls</i>						
(t-1) year abnormal returns	0.043** (2.462)	0.043** (2.167)	0.004* (1.906)	0.005 (1.338)	0.001 (0.958)	0.002 (0.500)
S&P 500		-0.049 (-0.119)		-0.029 (-1.509)		0.015 (0.819)
Debt Ratio		0.095 (0.443)		0.010 (0.344)		-0.019 (-0.629)
Cash Ratio		-0.007 (-0.031)		-0.048 (-0.856)		-0.033 (-0.760)
Ln (Assets)		0.128 (1.410)		0.017 (1.110)		-0.007 (-0.653)
ROA		-0.237 (-1.511)		0.004 (0.121)		-0.013 (-0.923)
Book-to-Market		0.181 (1.434)		0.030** (2.397)		-0.016 (-1.336)
PP&E/Asset		0.162 (0.429)		-0.014 (-0.245)		0.010 (0.148)

Sales per Employee		0.000 (0.056)		0.000 (1.156)		0.000 (1.030)
<i>Company Governance Controls</i>						
Percent of Company Owned by Vanguard	0.659 (0.690)	0.832 (0.638)	0.185 (1.304)	-0.003 (-0.021)	0.111* (1.947)	0.336 (1.576)
Staggered Board		-0.032 (-0.739)		0.002 (0.279)		-0.008 (-1.023)
Ln(Total CEO Compensation)		-		-0.005 (-1.587)		0.003 (0.558)
Poison Pills		-0.170 (-0.638)		0.008 (0.320)		-0.013 (-0.482)
CEO Golden Parachute		0.021 (0.319)		-0.008 (-0.568)		0.010 (0.689)
Dual Class Indicator		-0.138 (-1.010)		0.005 (0.364)		- -
<i>Company Environmental &amp; Social Controls</i>						
Ln(Scope1+Scope2 GHG emissions)		-0.009 (-0.762)		0.002** (2.287)		0.002* (1.956)
Female Directors on Board		0.249** (2.460)		- -		-0.011 (-0.682)
Violation Tracker Penalty Indicator		-0.027 (-0.641)		0.004 (1.181)		-0.003 (-0.272)
Observations	4,298	3,070	14,533	4,431	14,533	4,431
R-squared	0.868	0.858	0.644	0.579	0.793	0.817
State-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry-Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust t-statistics in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1