A new take on voice: the influence of BlackRock's 'Dear CEO' letters

Andrea Pawliczek¹ · A. Nicole Skinner² · Laura A. Wellman³

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Abstract

We examine whether broad-based public engagement by institutional investors influences the behavior of portfolio firms. We investigate this question in the context of BlackRock's annual Dear CEO letter, which in recent years has called for portfolio firms to acknowledge and quantify the impact of environmental and regulatory factors on their firms. We find that portfolio firms' disclosures during the post-letter period reflect topics similar to those discussed in the letters, controlling for a variety of firm and disclosure characteristics and the occurrence of private engagements. Moreover, BlackRock appears to value these additional disclosures, as it more often votes with management on shareholder proposals during subsequent annual shareholder meetings. Finally, motivated by BlackRock's attempts to mobilize firms toward its specific policy recommendations, we also provide some evidence that firms' lobbying efforts during the post-letter period become more aligned with the issues highlighted in the letter, especially when firms' share BlackRock's policy preferences *ex ante*. Taken together, our evidence suggests that portfolio firms are responsive to BlackRock's public engagement efforts.

Keywords Institutional ownership · Shareholder engagement · Shareholder voice · Disclosure · ESG · Lobbying

JEL classification G32 · G34 · M41

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✉ Laura A. Wellman
law613@psu.edu

Extended author information available on the last page of the article

1 Introduction

Institutional owners have strong incentives to monitor and engage with portfolio firms to strengthen firms' performance and corporate governance (Appel et al. 2016; Bebchuk et al. 2017). Historically, institutional owners have communicated recommendations to specific firms through private engagement (McCahery et al. 2016) or targeted public actions such as activist campaigns (e.g., Brav et al. 2010). However, for large institutional owners with diverse holdings, relying solely on firm-specific engagements to influence portfolio firms can be cost prohibitive. As an alternative, legal scholars point to broad-based public engagement as a mechanism for seeking reforms across many firms, which can complement or substitute for more costly private interactions (Fisch et al. 2019). Specifically, large institutions with substantial influence may leverage their platforms to push portfolio firms toward favored strategies, and firms may benefit from responding if they can avoid disciplinary actions (e.g., adverse voting and exit).¹ However, we lack evidence of whether broad-based public engagement is effective at influencing firm behavior.

We investigate this question in the context of BlackRock's annual Dear CEO letter, which is addressed to the CEOs of BlackRock's portfolio firms and published on BlackRock's website. Beginning in 2012, the letters initially focused on the importance of corporate governance and long-term firm value creation. More recently, the letters have expanded to include recommendations pertaining to environmental and social issues, such as climate change and workforce disparities. In the letters, BlackRock CEO Larry Fink explicitly urges portfolio firms to acknowledge and quantify the impact of environmental and social risks and opportunities through public disclosure. In addition, he encourages firms to detail, in their disclosures, any strategic actions taken or planned in response to the evolving environmental and regulatory landscape.

The recent emphasis on environmental and social issues provides a unique opportunity to study whether portfolio firms respond to broad-based public engagement, particularly because BlackRock's recommendations diverge from the preferences of other large institutional investors.² Firms may not react to these letters because of this divergence or for other reasons, including proprietary costs and direct implementation costs (such as the costs of providing disclosure or of taking the actions described in the disclosure). Motivated by the recent shift in the tenor of the letters, we ask three related research questions: Do firms respond to BlackRock's broad-based public engagement by altering their public disclosures? If so, does BlackRock value these additional disclosures? Finally, do firms take actions, beyond changes in disclosure, to align themselves with BlackRock's recommendations? Specifically, because BlackRock also uses the letters as a platform for public advocacy, we investigate the extent to which portfolio firms' public advocacy (i.e., lobbying) is influenced by the content of the letters.

¹ BlackRock is one of the Big Three investors along with Vanguard and State Street. As of December 2019, BlackRock had over \$7 trillion in assets under management with approximately 65% in passive investments.

² For example, in its letter to board members in 2019, State Street explicitly states that it does not approach investing decisions with a political or social agenda (State Street 2019). The letters have also received mixed responses in media coverage: an article by Jim Cramer of CNBC praised Fink's 2020 letter for showing what true leadership looks like (Cramer 2020), but a Barron's article titled Did BlackRock's Larry Fink Go Too Far? was more skeptical of the 2018 letter's contents (Racanelli 2018).

We begin by studying the relation between changes in firms' public disclosures around the letter release date and the magnitude of BlackRock's ownership stake in the firm. BlackRock's call for increased public disclosure is consistent with large institutions demanding public disclosure to minimize the cost of monitoring (Bird and Karolyi 2016; Boone and White 2015; Bushee and Noe 2000; Jung 2013). In addition, as a money manager, BlackRock has incentives to attract additional investors to its funds. Portfolio firms' public disclosures can facilitate this process if they reveal an alignment with BlackRock's preferred strategies. To investigate whether firms respond to BlackRock's letters, we study how firms alter their 8-K disclosures within a narrow window around the letter release date, which reduces the influence of confounding events (e.g., trends in public sentiment). Moreover, we focus on 8-K disclosures because firms have flexibility as to the content of these disclosures and issue 8-Ks frequently throughout the year. If portfolio firms respond to BlackRock through disclosure, then we expect an increase in the discussion of letter-related topics in firms' 8-Ks subsequent to the letters.

We use a cosine similarity score to capture the similarity between the text contained in the BlackRock letter and the text in firms' 8-K disclosures.³ Our measure of disclosure similarity is flexible across periods, allowing us to measure firms' disclosure response more precisely as the topics of interest to BlackRock change over time. Thus, our measure of disclosure similarity is intended to capture discussions related not only to corporate governance and long-term value creation but also to environmental and social issues. To validate that our disclosure similarity measure reflects (in part) firms' discussion of environmental and social issues in their 8-Ks, we identify policy topics covered in the letters, create a dictionary of terms used to discuss each topic, and search for those terms in firms' 8-Ks. We then compare the frequency of policy-related terms in the 8-Ks of firm-years with high levels of disclosure similarity and the 8-Ks of firm-years with relatively low levels of disclosure similarity. We find that the high-disclosure-similarity firms include relatively more discussion of key policy topics in their subsequent 8-K disclosures.

We rely on two measures to identify firms with significant BlackRock ownership. Our first measure draws from prior research suggesting that firms are more likely to respond to investors with a blockholding interest in the firm (Edmans 2014). Thus, we identify whether BlackRock is a blockholder that owns at least 5% of the firm's outstanding shares. While this indicator variable is useful for interpreting economic magnitudes, it does not consider the degree of BlackRock ownership beyond the 5% level. Our second measure, which is based on BlackRock's holding interest in the firm, captures more variation in ownership across firms.

Using these measures and a sample of 7,900 firm-years for 3,550 unique firms, we find that 8-Ks filed 30 days after the letter by firms with significant BlackRock ownership exhibit relatively more similar language (to that contained in the BlackRock letter), relative to firms with less BlackRock ownership. In terms of economic magnitude, BlackRock block-held firms experience a 22% more positive change in disclosure

³ Cosine similarity scores are commonly used in natural language processing, as well as accounting and finance research, to calculate similarity of any two texts (Loughran and McDonald 2016). Specifically, the texts are converted to vectors of word counts. The cosine of the angle between the two vectors ranges between zero and one and is increasing in the similarity of the documents. See Appendix 3 for further detail and a simple example.

similarity, compared to firms of which BlackRock is not a blockholder. This result is robust to controlling for firm characteristics that influence disclosure decisions, including firms' general propensity to discuss topics included in the letter (i.e., the similarity of firms' pre-period 8-Ks to the BlackRock letters), 8-K attributes, and both time and industry fixed effects. Moreover, because BlackRock may advocate for policies that are of general interest to other institutional investors, we include additional controls for Vanguard ownership and State Street ownership (i.e., the two other members of the Big Three), as well as the number of blockholders and the overall level of institutional ownership. Interestingly, we do not find a significant association between either Vanguard or State Street ownership and our measure of disclosure similarity. This is consistent with the notion that the observed changes in disclosure are linked specifically to BlackRock ownership.

Overall, our evidence is consistent with firms altering their disclosures in response to BlackRock's broad-based public engagement. However, it is possible that firms' tendency to pursue and discuss their public policy objectives through disclosure may coincide with the BlackRock letters as a result of ongoing private engagement with BlackRock. That is, if BlackRock is engaging privately with firms on the same issues conveyed in the letters, it is possible that firms' disclosures are responding to private engagement, to broad-based public engagement (i.e., the letters), or to both. To investigate this possibility, we construct a novel dataset of private-engagement firms from BlackRock's Stewardship Annual Report. Using this data, we control for occurrences of private engagement between BlackRock and portfolio firms, and continue to find that the change in portfolio firms' disclosure around the letter release date is more similar to the language contained in the letter. To further isolate the impact of public engagement, we exclude the private-engagement firms from our sample and continue to find significant changes in disclosure similarity. Thus, the observed changes in disclosure similarity around the letter release date do not appear to result from private engagement between BlackRock and portfolio firms.

Although studying the change in firms' 8-K disclosures within a short window around the release of the letters is useful for isolating the impact of the letters from that of other events, we also analyze firms' subsequent 10-K Management Discussion and Analysis (MD&A) and risk factor disclosures. Specifically, we investigate the change in MD&A and risk factor disclosures conditional on BlackRock ownership and observe similar changes in disclosure similarity for portfolio firms following the release of the letter. Analyzing these additional disclosures provides a better understanding of the impact that BlackRock's public engagement has on firms' overall disclosure choices.

Because the composition of BlackRock's portfolio is not random, another concern is that our results are an artifact of self-selection (i.e., BlackRock may choose to invest in firms that are already aligned with the preferences expressed in the letter). Studying changes in disclosure that take place immediately after the letter helps to mitigate this concern. We mitigate further by exploiting BlackRock's index holdings. Because BlackRock offers many index funds to its clients, it must own firms that are part of common indices (e.g., S&P 500). If observed changes in disclosure similarity occur because BlackRock *selects* specific portfolio firms, then we expect the disclosure response to be less pronounced among the Blackrock portfolio firms that are *not* individually selected (i.e., the index firms). We do not find any evidence consistent with this prediction.

For our second research question, we investigate whether BlackRock values the change in portfolio firms' disclosures following the release of the letter. A potential drawback of our disclosure measure is that it does not distinguish between a range of possible responses. For example, we may observe an increase in disclosure similarity in the post-letter period if firms quantify the impact of climate risk or regulatory changes or elaborate on their plans to promote and/or implement BlackRock-favored strategies. However, changes in disclosure may reveal opposition to BlackRock or may not be particularly informative. Thus, we investigate whether BlackRock values these additional disclosures by analyzing its voting behavior during firms' subsequent annual shareholder meetings.

Prior research indicates that investors may discipline portfolio firms that are not responsive to engagement efforts by voting against management's recommendations on proposals during shareholder meetings (Appel et al. 2016). Consistent with this evidence, Fink explicitly asks portfolio firms to discuss how environmental, social, and governance factors will impact performance, and states that BlackRock will not hesitate to exercise (its) right to vote (BlackRock 2017).⁴ Thus, if firms' disclosures are valuable to BlackRock, then we expect firms' disclosure response to influence BlackRock's voting behavior. Moreover, if firms' disclosures indicate that the firms are aligned with BlackRock's preferred strategies, then we expect BlackRock to reward portfolio firms with more favorable voting outcomes. To investigate this possibility, we collect data on all shareholder proposals from ISS Voting Analytics. We find that BlackRock is less likely to vote in opposition to management's recommendation when firms' disclosures become more similar to the BlackRock letter. This result extends to the subset of proposals related to environmental and social issues. Collectively, these results suggest that the change in portfolio firms' disclosures is informative to BlackRock, and that portfolio firms' disclosures do not express opposition to BlackRock's policy recommendations on average.⁵ Moreover, this evidence is consistent with changes in disclosure reflecting an acknowledgement of the issues and/or a discussion of actions that firms have taken or plan to take in response to the letters.

To investigate whether firms respond to the letters by taking actions that go beyond changes in disclosure, we focus on an action that is particularly relevant in light of the recent letters' content and also observable across a broad set of firms. Specifically, one apparent objective of the recent Dear CEO letters is to mobilize firms to advocate for public policies such as environmental regulation, comprehensive tax reform, and investments in infrastructure. Thus, we investigate whether BlackRock-owned firms

⁴ Consistent with firms' disclosures representing an important input into BlackRock's voting decisions, BlackRock's Stewardship Guidelines related to environmental and social issues state, We will use these disclosures and our engagements to ascertain whether companies are properly managing and overseeing these risks within their business and adequately planning for the future. In the absence of robust disclosures, investors, including BlackRock, will increasingly conclude that companies are not adequately managing risk. See BlackRock's Investment Stewardship guidelines: <https://www.sec.gov/Archives/edgar/data/1051004/000119312520262143/d847437dex99globalcorpgo.htm>.

⁵ An alternative disciplinary action that BlackRock can pursue is to exit its position. However, BlackRock is likely to exercise its voice through voting before it decides to exit its position. Moreover, BlackRock is primarily a passive investor and thus does not have a feasible exit option. Finally, BlackRock's ownership in a firm will vary from quarter to quarter, but a significant portion of that variation is related to other transactions (e.g., rebalancing) rather than strategic exit decisions. We do not observe significant variation in ownership conditional on firms' disclosure response (untabulated).

are more likely to alter their public policy efforts (i.e., lobbying) during the post-letter period. For this analysis, we rely on LobbyView, a comprehensive dataset that collects and analyzes firms' mandatory lobbying disclosures, providing details on the specific bills and policies for which firms lobby. If firms respond to BlackRock's letters by lobbying for the specific issues identified in the letters, then we expect the description of issues lobbied in firms' lobbying disclosures to mirror the recommendations in the letter. To test this prediction, we construct a measure based on the similarity between the most recent BlackRock letter and the description of specific issues lobbied and study the change in these disclosures around the letter release date. With this measure, we find some evidence that portfolio firms exhibit changes in their lobbying behavior in the post-letter period, on average. However, this effect is stronger for firms that are more likely to share BlackRock's policy preferences *ex ante*.

Overall, our results are consistent with institutional investors influencing the behavior of portfolio firms through broad-based public engagement. Our study contributes to the literature on investors' influence over portfolio firms. Prior research in this area has focused primarily on interactions with individual firms through institutional owners' private engagements (Becht et al. 2009; McCahery et al. 2016) and shareholder activism (e.g., Nesbitt 1994; Brav et al. 2010; McDonough and Schoenfeld 2018). For example, Flammer et al. (2019) find that when specific firms are targeted by environmentally focused activists, the quality of the firms' climate change disclosures increases. In contrast, the BlackRock letters provide an expansive form of engagement consistent with the legal theory proposed by Fisch et al. (2019), in which diversified investors seek broad and low-cost mechanisms to influence portfolio firms. Moreover, using our novel dataset of private engagements between BlackRock and portfolio firms, we provide evidence on effects of broad-based public communication that are incremental to any private engagement effects. Collectively, our evidence suggests that BlackRock's public engagement efforts are an effective way for BlackRock to communicate with all portfolio firms and a possible complement to, or substitute for, more costly individual interactions.

We also contribute to the literature that links institutional ownership to portfolio firms' disclosure attributes. For example, Abramova et al. (2020) and Basu et al. (2019) find that firms respond directly to institutional owners' spotlight by increasing the provision of voluntary disclosure and improving the quality of non-GAAP disclosures. In contrast to existing research, our evidence suggests that BlackRock's broad-based public engagement is a mechanism through which institutional owners may influence the narrative of portfolio firm's disclosures. In addition, our finding that BlackRock rewards responding firms with more favorable voting at shareholder meetings suggests that portfolio firms' disclosure response may be informative to BlackRock.

Finally, we contribute to the literature that examines the role of institutional ownership in influencing firms' strategic actions motivated by environmental and social factors (e.g., Krueger et al. 2020; Grewal et al. 2016; Kim et al. 2019; Dimson et al. 2015). Complementing these studies, this paper is the first to investigate whether institutional investors can mobilize portfolio firms through broad-based engagement and the first to provide evidence on the direct effects of institutional ownership on firms' public advocacy. Specifically, we find some evidence that portfolio firms align their lobbying activities with the policies advocated in the letters, and that the effect is particularly strong among the firms that share BlackRock's policy preferences *ex ante*.

These findings are important, considering BlackRock's increasing discussion of environmental and social public policy objectives that may not be broadly shared by investors.

Our study is subject to certain caveats and limitations. First, companies can use a variety of channels to communicate, to investors, how environmental, labor, and other laws affect their business. Institutional investors are increasingly monitoring many of these channels to gain a better understanding of corporate management's position and behavior on these critical issues. We focus on the 8-K disclosure channel because we are interested in analyzing disclosures immediately following the Dear CEO letter. However, we recognize that other channels are also important. In addition, while we attempt to address alternative explanations related to private engagement and self-selection, these explanations cannot be completely eliminated in our setting. Despite these limitations, our study provides novel evidence of the impact of broad-based public engagement by institutional investors on firms' disclosures and public advocacy.

2 Prior research

The role of institutional owners in monitoring portfolio firms depends on the relative costs and benefits of monitoring. On one hand, institutional owners may have incentives to incur monitoring costs if monitoring improves portfolio firm performance and governance and attracts additional investment (Fisch et al. 2019). On the other hand, diversified shareholders may suffer from a hold-up problem: the benefits from monitoring are shared by all owners, but the costs are not, so there is a disincentive to engage. Additionally, institutional owners with primarily passive funds may charge lower fees for these funds, limiting the resources they have available for costly monitoring and engagement activities (Bebchuk et al. 2017); this, too, may lead to less effective monitoring (Heath et al. 2019).

Prior research indicates that when institutional investors monitor their portfolio firms, they enjoy some success in influencing firm behavior. For example, portfolio firms respond to monitoring by including more independent directors and more equal voting rights (Appel et al. 2016). Relevant to our setting, one way in which BlackRock influences managerial strategies is through private engagement with portfolio firms. For example, between 2016 and 2020, BlackRock reported an average of 858 engagements per year with firms in the Americas region. These engagements most commonly focused on governance issues.

While BlackRock continues to engage with firms on an individual basis, in 2012 it implemented a new broad-based public engagement strategy: Dear CEO letters. Addressed to the CEOs of portfolio firms, these letters are made publicly available on BlackRock's website, most often in January or early February of each year.⁶ In them, BlackRock CEO Larry Fink writes about key issues and favored strategies. Early Dear CEO letters focus on policies pertaining to long-term growth, strong corporate governance, and retirement security, but more recent ones call for collective support for various government policy objectives and

⁶ See <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter> for letters. We include the 2017 Dear CEO letter in its entirety in Appendix 1.

advocate for a wide range of issues, including work-retraining, healthcare, and environmental initiatives. The use of such letters is consistent with the idea that institutional investors seek to promote broad reforms across many firms, which can substitute for (or complement) more costly private interactions with individual firms (e.g., Fisch et al. 2019).

In the letters, Fink encourages firms to acknowledge and quantify the impact of major legislative or regulatory changes, as well as to detail, in public disclosure, the strategic actions they have taken to mitigate/capitalize on those changes (BlackRock 2018). Indeed, an important input into institutional investors' engagement activities is the information they obtain from portfolio firms about various business risks and the strategies for navigating those risks. Historically, large institutions with diverse holdings are more likely to demand public disclosure, to minimize the cost of gathering the information necessary to monitor portfolio firms (Bird and Karolyi 2016; Boone and White 2015; Bushee and Noe 2000; Jung 2013). Public disclosures not only are useful for monitoring portfolio firms, particularly when private engagement is infeasible, but also may be valuable if they attract new investors to the institution or fund (e.g., to justify the inclusion of a firm in a socially responsible fund (Epstein and Freedman 1994)).

Ex ante, it is not clear whether firms will respond to BlackRock's letters through their disclosures. On one hand, BlackRock, one of the largest institutional investors (with over \$7 trillion in assets under management),⁷ has a substantial voice and may use its platform to push portfolio firms toward favored strategies. For example, when firms are not responsive, passive investors can take disciplinary actions such as voting against proposals (Bolton et al. 2020). In addition, it is also possible that the Dear CEO letter shines a spotlight on BlackRock-owned firms, and that firms will respond to the letter to avoid negative attention (Abramova et al. 2020). Thus, firms may rationally respond to broad-based public advocacy from BlackRock to the extent that they believe they will suffer negative consequences if they do not. On the other hand, portfolio firms may determine that the costs of responding outweigh the benefits. For example, costs can include direct implementation costs, proprietary costs associated with disclosing specific strategies, or costs associated with alienating other investors that do not share BlackRock's policy preferences.⁸ In addition, portfolio firms may assume that disciplinary actions associated with a non-response are less likely when the public engagement is broad-based. Thus, whether firms will respond to broad-based public engagement is an open empirical question that we seek to address.

⁷ As reported on December 31, 2019.

⁸ For example, in its 2019 letter to board members, State Street says, We approach these issues from the perspective of long-term investment value, not from a political or social agenda (aka 'values'). This distinction is especially important to understand in light of growing concerns about the influence of large index managers. It is the focus on long-term value that drives our engagement around effective, independent board leadership; board quality, including cognitive diversity enhanced by better gender diversity; and environmental sustainability. Thus, it is not clear that State Street would value some of the advocacy in the BlackRock letters.

3 Data and measurement

3.1 Key variable definitions

3.1.1 Measurement of BlackRock ownership

We expect that firms with significant BlackRock ownership are more likely to respond to BlackRock's letters. Our first proxy for significant BlackRock ownership is an indicator set equal to one if BlackRock has a blockholding interest in the firm, where blockholding is defined as ownership greater than 5% of outstanding shares (*BlackRockBH*).⁹ Although the 5% cutoff is arbitrary, blockholders are generally considered to be influential owners of firms, and managers of block-held firms are more likely to respond to the blockholder's voice accordingly (Edmans 2014).¹⁰ This simple dichotomous variable, while useful for assessing economic magnitudes, does not consider the degree of BlackRock ownership beyond the 5% level. Thus, for our second measure, *BlackRock%*, we calculate BlackRock's holding interest in firm *i* at the end of the quarter immediately preceding the BlackRock letter. We form decile ranks for the percentage of BlackRock ownership (*BlackRock%*) to mitigate skewness in the variable.

3.1.2 Measurement of firms' disclosure response

If firms respond to BlackRock's letters by discussing topics outlined in the letter immediately after the letter is released, then we expect firms' disclosure to exhibit similar language to that of the letter.¹¹ We capture firms' disclosure response to the most recent BlackRock letter using a cosine similarity score. These scores are the most commonly used method of measurement to calculate document similarity in accounting and finance (Loughran and McDonald 2016). As employed in the literature, cosine similarity scores are the cosine of the angle between the word vectors representing the language of any two texts, and they range between zero and one. Appendix 3 provides more details about our cosine similarity score calculations (including a simple illustrative example). Basing the disclosure similarity measure on cosine similarity scores makes it flexible across periods, allowing us to measure firms' disclosure response more precisely as the topics of interest to BlackRock change over time. Because we restrict our disclosure measure to 8-Ks in the 30 days immediately following BlackRock's annual letter, we calculate this measure only once per year for each firm in our sample.

Because we are interested in the extent to which firms alter their disclosures in response to the BlackRock letter, we identify changes in disclosure similarity, $\Delta DisclosureSimilarity$, which is the similarity of the text of the BlackRock letter to the 8-Ks filed 30 days subsequent to the letter, minus the similarity of the text of the

⁹ See Appendix 2 for a complete list of variable definitions.

¹⁰ BlackRock has some ownership stake in 98% of firm-years in our disclosure sample. Thus, there is very limited variation if ownership is defined with a simple indicator.

¹¹ It is possible that firms' response to BlackRock's letters will involve firm-specific language or that firms will discuss topics from the letters using different words. In this case, our measure will fail to capture all of the firm's disclosure response and introduce attenuation bias into our results.

BlackRock letter to the 8-Ks filed in the 90 days prior.¹² We use 8-Ks because managers can exercise some discretion over the timing and content of these documents (He and Plumlee 2020). Moreover, 8-Ks are an important disclosure channel that firms use to communicate their supplementary filings (e.g., strategic plans and sustainability reports)—elements of public disclosures that are monitored by BlackRock's stewardship team. Finally, because we investigate disclosure immediately following the letter, we cannot use earnings announcements or 10-Ks/10-Qs as our primary disclosure measures, as their timing is inflexible and the filings may not occur in the appropriate windows.¹³

We are motivated by the letters' recent shift (i.e., those analyzed in our sample) to include recommendations related to various environmental and social policies. These letters provide a powerful setting in which to investigate the impact of broad-based public engagement: the fact that the content of BlackRock's letters varies from year to year and diverges from the preferences of other investors increases our confidence that we are identifying a response to the letter and not a broader change in sentiment.

Because our measure of disclosure similarity captures responses to all aspects of the letter, we perform a validation exercise to ensure that firms' disclosures respond (at least in part) to BlackRock's environmental and social recommendations. To do this, we identify policy-oriented topics discussed in the letters and create a representative word list for each policy topic. We identify seven policy-oriented topics: Climate, Infrastructure, Technology, Tax, Workforce, Retirement, and Globalization. Table 1, Panel A details policy categories, the years in which the topics are discussed, and the respective word lists.¹⁴ Figure 1 plots the frequency of policy-oriented words mentioned in firms' 8-Ks for high-disclosure-similarity firm-years relative to low-disclosure-similarity firm-years. If *DisclosureSimilarity* is capturing firms' discussion of topics from the BlackRock letter, we expect policy-oriented word counts to be higher for firms with higher values of *DisclosureSimilarity*. Consistent with our expectations, high *DisclosureSimilarity* firms mention more than twice as many policy-oriented words as low *DisclosureSimilarity* firms. Moreover, Table 1, Panel B reveals that high *DisclosureSimilarity* firms also exhibit statistically higher word counts for six of the seven policy categories in years when that policy category is mentioned in the BlackRock letter. This analysis validates our assertion that the disclosure similarity measure is capturing firms' response to the Dear CEO letters. In addition, in

¹² We summarize the distribution of 8-K item numbers in Appendix 4. We find that all item numbers are represented in both the pre- and post-period samples. Although we experience sample attrition ($n = 6337$), we restrict our sample to include only Item 2.02, 7.01 and 8.01 8-Ks. We provide some evidence that our result is robust to using only those filings (while *BlackRockBH* coefficient is insignificant, the coefficient on *BlackRock%* = 0.002, t -stat = 1.666, untabulated).

¹³ Although we focus on 8-Ks, we expect the change to be occurring across firms' various disclosure outlets which is why we perform the 10-K analysis. Moreover, we do not necessarily expect managers to issue new 8-Ks in response to the letter, rather we expect managers to alter the text of any 8-Ks they issue. This is because even though many 8-Ks are mandatory, managers can exercise discretion in how they communicate mandatory information.

¹⁴ Topics and word lists were developed using a two-step process. First, each author individually read and coded each letter. Second, only topics and words identified by all three authors were used for this validation exercise. We create short lists where possible, as the length of word lists can be positively correlated with noise in word count measures (Loughran and McDonald 2016).

Table 1 *DisclosureSimilarity* validation

Panel A: Word Lists						
Topic	Years	Word List				
Climate	2016, 2017, 2018	climate, sustainability				
Infrastructure	2016	infrastructure				
Technology	2016, 2017, 2018	technology				
Tax	2016, 2017, 2018	tax, tax reform, repatriation				
Workforce	2017, 2018, 2019	skill, worker, wage, job, salary, displace, employ				
Retirement	2017, 2018, 2019	savings, retirement, well-being, financial literacy				
Globalization	2017	globalization				
Panel B: Policy Word Counts by <i>DisclosureSimilarity</i>						
Variable	N	Mean	<i>DisclosureSimilarity</i>		Difference	
			<P50	>P50		
General Count:						
RelevantPolicyWords	7,900	50.460	33.208	67.687	34.479	***
Topic Counts:						
Climate	6,227	0.261	0.241	0.282	0.041	*
Infrastructure	2,206	0.680	0.634	0.727	0.092	
Technology	6,227	2.403	1.912	2.892	0.980	***
Tax	6,227	34.17	28.18	40.14	11.95	***
Workforce	5,694	22.53	7.958	36.95	28.99	***
Retirement	5,694	5.142	3.986	6.286	2.301	***
Globalization	2,138	4.751	2.220	7.194	4.974	***

Note: Table 1 presents the details of our *DisclosureSimilarity* validation exercise. Panel A presents the topics and word counts identified as relevant policy-specific topics from each of the four letters included in our study. We identified the topics through a two-step process. First, each author individually read and coded each letter. Second, only topics and words identified by all three authors were used for this validation exercise. Panel B contains policy word counts for the years in which the topic is relevant (see Panel A), split on high vs. low *DisclosureSimilarity*. These values are presented as a percentage of the relevant years' mean in Fig. 1. ***, **, and * represent significance levels of 1%, 5%, and 10%, respectively (two-tailed)

Appendix 5, we provide examples of post-letter 8-K disclosures that include a policy-oriented discussion that is similar to the discussion included in BlackRock's letters.

Our measure of disclosure similarity captures at least three categories of responses. First, portfolio firms may use vague or boilerplate language to acknowledge topics discussed in the letter without providing any additional discussion of the firm's strategies. Second, firms may convey opposition to BlackRock's favored strategies. Finally, firms may signal current alignment (or plans to align) with BlackRock's favored strategies through additional disclosures. To better understand whether portfolio firms are providing uninformative disclosures or expressing opposition to BlackRock's policy recommendations through disclosure, in section 4.2, we investigate BlackRock's opposition to management (as voiced through BlackRock's votes on shareholder proposals at the annual shareholder meeting). In addition,

Fig. 1 Relevant policy words and *DisclosureSimilarity*. **Note:** Fig. 1 plots the frequency of policy-oriented words mentioned in firms' 8-Ks for high-disclosure-similarity firm-years relative to low-disclosure-similarity firm-years. We identify policy-oriented topics discussed in the letters and create a representative word list for each policy topic. We identified the seven policy-oriented topics—Climate, Infrastructure, Technology, Tax, Workforce, Retirement, and Globalization—through a two-step process. First, each author individually read and coded each letter. Second, only topics and words identified by all three authors were used for this validation exercise. Topics and word counts are presented in Table 1, Panel A. Panel A of this figure contains the total word counts from all relevant topics, split on high and low *DisclosureSimilarity*. Panel B breaks out the word counts by topic. While the raw counts are presented in Table 1, Panel B, this figure reports high and low *DisclosureSimilarity* counts as a percentage of the average to account for differences in scale across topics

we investigate whether firms are taking actions, beyond disclosure, to further align themselves with BlackRock's recommendations. Specifically, the letters also incorporate a dimension of public advocacy (e.g., BlackRock makes specific public policy recommendations related to sustainability and tax reform, as well as investments in infrastructure). Thus, we study whether firms' public advocacy (i.e., lobbying) changes following the release of the letter in section 4.3. The analysis in section 4.3 provides additional evidence that at least some

firms take costly actions, beyond disclosure, that are specific to the issues discussed in the letter.¹⁵

3.2 Sample

In this section, we outline the restrictions we impose on our sample period and firms to arrive at our estimation sample. Our sample period is constrained by the duration over which BlackRock began issuing letters that advocated for a wide range of issues, thereby increasing the tension regarding whether and how firms should respond to BlackRock's public engagement efforts. When BlackRock began issuing letters in 2012, the letters focused on long-term investment, retirement, and corporate governance. Beginning in 2016, the content of the letters expanded to include more controversial issues such as climate change and workforce disparity brought about by technological development and globalization. Thus, we focus on BlackRock letters beginning in 2016 and restrict our sample to 2016, 2017, 2018, and 2019. We then require CRSP, Compustat, and Thomson Financial 13F coverage, as well as non-missing variables for key controls. Finally, we require that firms file a Form 8-K during both the pre- and post-letter windows (90 days prior to the letter and 30 days subsequent to the letter, respectively). As Table 2 shows, these steps result in 7,900 sample firm-years for 3,550 unique sample firms.

Table 3 presents the descriptive statistics for this sample. We winsorize all continuous variables at the 1% and 99% levels and present variable definitions in Appendix 2. BlackRock is a blockholder for 63% of our sample firm-years, with mean holdings of \$480 M (untabulated). State Street and Vanguard are blockholders for 16% and 57% of firm-years, respectively. Moreover, 65% of our sample firms issue at least one Item 2.02 8-K after the letter, while 27% issue at least one Item 7.01 8-K and 28% issue at least one Item 8.01 8-K.

4 Research design and results

4.1 Firms' disclosure response

To evaluate disclosure similarity for BlackRock-owned firms during the post-letter period, we estimate the following model:

$$\Delta DisclosureSimilarity = \alpha + \beta_1 BlackRockOwnership_{i,t} + \sum \delta Controls_{i,t} + \gamma_{FE} + \varepsilon \quad (1)$$

¹⁵ While changing their lobbying activities is one action that firms could take in response to BlackRock's public advocacy, firms could change other activities as well. In untabulated analysis, we collect environmental, social, and governance (ESG) activity scores from Thomson Reuters Datastream and investigate whether ESG activity scores change following the release of the letter, conditional on BlackRock ownership. We do not observe any significant variation. This is likely because the Datastream ESG activity score captures a broader set of issues than BlackRock focuses on in the letter. Thus, changes in ESG ratings may be less sensitive to BlackRock's letters. It is also unclear how quickly changes in firms' underlying ESG activities are reflected in the ESG activity score. Finally, there is disagreement in ESG scores, suggesting that the measures may contain too much noise to identify an effect (e.g., Christensen et al., 2019).

Table 2 Sample reconciliation

	Firm-Years	Firms
Compustat Firm-Years with non-missing total assets 2016–2019	32,874	9,673
Exclude:		
Firms without CRSP data	(13,380)	(3,844)
Firm-years without institutional ownership	(2,635)	(697)
Firm-years with insufficient data for other key controls and FE	(2,701)	(349)
Firms-years without an 8-K in both the [−90,0] and [1,30] disclosure windows	(6,258)	(1,233)
Sample for disclosure analysis	7,900	3,550

Note: Table 2 reconciles our sample from a broad 2016–2019 Compustat sample to the firm-years used in our primary analysis. Specifically, the table provides details about attrition resulting from each of our key data sources, at both the firm-year and the firm level

where the dependent variable, $\Delta DisclosureSimilarity$, is measured as the similarity between the BlackRock letter and the text of the firm's 8-Ks released in the first 30 days after the letter, minus the similarity of the letter to the 8-Ks filed in the 90 days prior, as defined in section 3.1.2. *BlackRockOwnership* represents one of the proxies for BlackRock ownership outlined in section 3.1.1 (*BlackRockBH* or *BlackRock%*). If firms owned by BlackRock are responding to the letter by altering their disclosures, we expect that the estimated coefficient on *BlackRockOwnership* will be positively associated with $\Delta DisclosureSimilarity$ (i.e., $\beta_1 > 0$).

We control for various disclosure attributes, as well as a variety of firm characteristics that may influence firms' disclosure choices (e.g., Li and Zhang 2015; Huang et al. 2017; Boone and White 2015; Field et al. 2005). BlackRock ownership is highly correlated with State Street and Vanguard ownership. As the two other members of the Big Three, these institutions are likely to be the institutional owners most similar to BlackRock. To address the possibility that portfolio firms discuss topics outlined in the letter because other institutional investors demand similar information as BlackRock, we include controls for ownership by State Street (*StateStreetBH*, *StateStreet%*) and Vanguard (*VanguardBH*, *Vanguard%*). In addition, we include controls for the total number of blockholders (*NumberBH*) and the total amount of institutional ownership (*IO*).¹⁶

Moreover, it is possible that disclosure similarity scores are correlated with the discretion-ary portion of 8-Ks and the overall amount of disclosure. Thus, we include indicators for items 2.02 (*Item202*), 7.01 (*Item701*), and 8.01 (*Item801*), as well as a control for the total number of 8-Ks issued during the period (*Number8Ks*). Our results are also robust to controlling for the total number of words included in 8Ks issued in the pre- and post-period (untabulated). We further control for firms' general disclosure tendencies by including

¹⁶ Another potential concern is that proxy advisors or other organizations such as ISS and Investor Stewardship Group (ISG) are expressing preferences similar to those in the BlackRock letter, and that firms are responding to guidelines published by these organizations. We do not believe this alternative explanation can fully explain our results, for two reasons. First, we do not find that these organizations consistently update their guidelines at the same time as the BlackRock letter. Second, if firms were responding to other organizations' guidance related to ESG issues instead of to the BlackRock letter, changes in disclosure similarity should not vary specifically with BlackRock ownership, as these organizations represent a large number of institutional owners (i.e., changes in disclosure would be associated with overall levels of institutional ownership).

Table 3 Descriptive statistics**Panel A: Variable Distributions**

Variable	N	Mean	P25	P50	P75
<i>ΔDisclosureSimilarity</i>	7,900	−0.040	−0.122	−0.032	0.033
<i>BlackRockBH</i>	7,900	0.634	0	1	1
<i>BlackRock%</i>	7,900	5.500	3	5.5	8
<i>PrivateEngagement</i>	7,900	0.366	0	0	1
<i>StateStreetBH</i>	7,900	0.157	0	0	0
<i>VanguardBH</i>	7,900	0.566	0	1	1
<i>StateStreet%</i>	7,900	5.500	3	5.5	8
<i>Vanguard%</i>	7,900	5.487	3	5.5	8
<i>NumberBH</i>	7,900	3.263	2	3	5
<i>IO</i>	7,900	0.764	0.592	0.893	1
<i>Item202</i>	7,900	0.645	0	1	1
<i>Item701</i>	7,900	0.271	0	0	1
<i>Item801</i>	7,900	0.280	0	0	1
<i>Number8Ks</i>	7,900	1.737	1	1	2
<i>PriorDiscSimilarity</i>	7,900	0.523	0.446	0.556	0.625
<i>MVE</i>	7,900	7.073	5.684	7.103	8.414
<i>MTB</i>	7,900	3.292	1.184	1.954	3.753
<i>Leverage</i>	7,900	0.608	0.410	0.611	0.835
<i>AnalystFollow</i>	7,900	0.839	0.693	0.693	1.099
<i>S&P500</i>	7,900	0.156	0	0	0
<i>ROA</i>	7,900	−0.010	−0.008	0.003	0.016
<i>Loss</i>	7,900	0.334	0	0	1
<i>AbnRet</i>	7,900	−0.005	−0.214	−0.034	0.161
<i>StdRet</i>	7,900	0.025	0.015	0.021	0.031
<i>Lawsuit</i>	7,900	0.038	0	0	0

Panel B: Institutional Ownership Correlation Table

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) <i>BlackRockBH</i>	1							
(2) <i>BlackRock%</i>	0.830*	1						
(3) <i>StateStreetBH</i>	0.346*	0.517*	1					
(4) <i>VanguardBH</i>	0.724*	0.718*	0.390*	1				
(5) <i>StateStreet%</i>	0.810*	0.848*	0.549*	0.765*	1			
(6) <i>Vanguard%</i>	0.781*	0.841*	0.462*	0.868*	0.858*	1		
(7) <i>NumberBH</i>	0.407*	0.377*	0.200*	0.373*	0.429*	0.436*	1	
(8) <i>IO</i>	0.648*	0.646*	0.289*	0.629*	0.718*	0.722*	0.679*	1

Note: Table 3, Panel A provides descriptive statistics for the variables used in our primary analysis. All variables are defined in [Appendix 2](#). Our key variables of interest are *ΔDisclosureSimilarity*, *BlackRockBH*, and *BlackRock%*. *ΔDisclosureSimilarity* is the cosine similarity of the text from BlackRock letter to the text from 8-Ks filed 30 days subsequent to the letter minus the similarity score from the 90 days prior. *BlackRockBH* is an indicator equal to one if BlackRock owns >5% of the firm's outstanding shares, and *BlackRock%* is the decile rank of BlackRock's percentage ownership in the firm. Table 3, Panel B provides correlation coefficients for the institutional ownership variables used throughout our analysis

measures for firms' prior disclosure attributes: namely, the total number of 8-Ks and the similarity of those 8-Ks to the BlackRock letter, measured in the 90 days prior to the release of the BlackRock letter (*PriorNumber8Ks* and *PriorDiscSimilarity*, respectively). We use a 90-day window to ensure we are capturing a stable baseline for the change calculation. In section 5.2, we find that our inferences do not change when we use alternative prior-period windows.

To control for systematic differences across firms' information environments, including the demand for information from multiple stakeholders, we include the logarithm of market capitalization (*MVE*), market-to-book ratio (*MTB*), leverage ratio (*Leverage*), analyst following (*AnalystFollow*), an indicator for membership in Standard & Poor's 500 index (*S&P500*), and litigation risk (*Lawsuit*). To control for financial performance, we include return on assets (*ROA*), an indicator for loss firms (*Loss*), stock returns (*AbnRet*), and stock return volatility (*StdRet*). We also include two-digit SIC industry and year fixed effects to control for industry and time trends that affect firms' disclosure decisions.

Table 4 reports the results of this estimation. In columns (1) and (2), we find that the change in *DisclosureSimilarity* is significantly higher in the 30 days after the BlackRock letter is issued for BlackRock-owned firms: the coefficient of interest, β_1 , is positive and statistically different from zero, whether we estimate our model using *BlackRockBH* ($p < 0.10$) or *BlackRock%* ($p < 0.05$). If the results are caused by the types of firms that large institutional investors tend to own, then we expect disclosure behavior after the release of the BlackRock letter to be similarly affected by Vanguard and State Street ownership. However, we do not find a significant association between our measure of disclosure similarity with the BlackRock letter and either Vanguard or State Street ownership.¹⁷ This result helps to alleviate the concern that our main results are an artifact of portfolio firms' general tendency to discuss the topics included in the letters (i.e., because the topics covered are popular or of general interest).¹⁸

While the evidence in columns (1) and (2) is consistent with firms altering their disclosures in response to BlackRock's public engagement (as conveyed in the letters), it is also consistent with at least one other explanation. Specifically, it is possible that changes in disclosure similarity around the letter release date can be attributed to private engagement between BlackRock and portfolio firms. While we do not expect private engagement activities to be concentrated in the short window around the letter release, private engagement firms might increase their discussion of the topics outlined in the letter over time, even if the public engagement letter had never been released. To investigate this possibility, we utilize a novel data set on BlackRock's private engagements, which we hand collect from BlackRock's Stewardship Annual Report.¹⁹ The data are available beginning in BlackRock's

¹⁷ Several of the institutional ownership measures are highly correlated with our BlackRock ownership measures (see Table 3, Panel B). We confirm that all VIF factors are below 10 in our main analysis, mitigating multicollinearity concerns (Kennedy 2008). The results remain unchanged when we drop any of the institutional ownership variables, including State Street (*StateStreetBH*, *StateStreet%*) and Vanguard (*VanguardBH*, *Vanguard%*) variables, as well as *NumberBH* and *IO*.

¹⁸ To help alleviate concerns that we document trends in public sentiment, we also re-estimate equation (1) using alternative windows to calculate the dependent variable. Specifically, we do not find that either of the BlackRock ownership measures is correlated with an increase in similarity to the letter in either the 30 days immediately preceding the letter (i.e. [-30,-1]) or the 30-day window prior to that ([-60,-30]). This further alleviates this endogeneity concern (untabulated).

¹⁹ The 2018 Stewardship Annual Report can be found here: <https://www.blackrock.com/corporate/literature/publication/blk-annual-stewardship-report-2018.pdf>. The 2019 and 2020 Stewardship Annual Reports can be found here: <https://www.blackrock.com/corporate/about-us/investment-stewardship#guidelines>.

Table 4 Disclosure response to BlackRock letters

DEPVAR =		Δ DisclosureSimilarity					
	Pred?	(1)	(2)	(3)	(4)	(5)	(6)
BlackRock Variables:							
<i>BlackRockBH</i>	(+)	0.009* (1.920)		0.009* (1.912)		0.009* (1.696)	
<i>BlackRock%</i>	(+)		0.003** (2.566)		0.003** (2.564)		0.003** (2.155)
<i>PrivateEngagement</i>				0.000 (0.009)	0.000 (0.106)		
Other IO:							
<i>StateStreetBH</i>		-0.006 (-1.112)		-0.006 (-1.110)		-0.008 (-0.865)	
<i>VanguardBH</i>		-0.002 (-0.353)		-0.002 (-0.353)		-0.004 (-0.796)	
<i>StateStreet%</i>			-0.002 (-1.291)		-0.002 (-1.292)		-0.003 (-1.485)
<i>Vanguard%</i>			-0.001 (-1.281)		-0.002 (-1.286)		-0.001 (-0.750)
<i>NumberBH</i>		0.001 (0.643)	0.000 (0.495)	0.001 (0.643)	0.000 (0.496)	0.001 (0.436)	0.000 (0.272)
<i>IO</i>		-0.012 (-1.250)	-0.009 (-0.909)	-0.012 (-1.250)	-0.009 (-0.911)	-0.005 (-0.467)	-0.002 (-0.183)
8-K Controls:							
<i>Item202</i>		-0.034*** (-10.036)	-0.034*** (-10.088)	-0.034*** (-10.037)	-0.034*** (-10.091)	-0.025*** (-6.120)	-0.025*** (-6.185)
<i>Item701</i>		0.002 (0.446)	0.002 (0.417)	0.002 (0.446)	0.002 (0.417)	0.005 (1.115)	0.005 (1.101)
<i>Item801</i>		0.020*** (5.673)	0.020*** (5.736)	0.020*** (5.672)	0.020*** (5.737)	0.017*** (4.018)	0.017*** (4.084)
<i>Number8Ks</i>		0.034*** (21.113)	0.034*** (21.101)	0.034*** (21.107)	0.034*** (21.095)	0.030*** (14.832)	0.030*** (14.852)
<i>PriorNumber8Ks</i>		-0.008*** (-9.869)	-0.008*** (-9.949)	-0.008*** (-9.868)	-0.008*** (-9.949)	-0.007*** (-7.202)	-0.007*** (-7.221)
<i>PriorDiscSimilarity</i>		-0.658*** (-44.305)	-0.658*** (-44.298)	-0.658*** (-44.340)	-0.658*** (-44.338)	-0.658*** (-33.155)	-0.658*** (-33.168)
Firm Characteristics:							
<i>MVE</i>		-0.009*** (-6.401)	-0.009*** (-5.855)	-0.009*** (-6.332)	-0.009*** (-5.815)	-0.012*** (-6.956)	-0.011*** (-6.563)
<i>MTB</i>		0.000 (0.299)	0.000 (0.368)	0.000 (0.299)	0.000 (0.367)	0.000 (1.093)	0.000 (1.102)
<i>Leverage</i>		-0.003 (-0.562)	-0.002 (-0.404)	-0.003 (-0.562)	-0.002 (-0.403)	0.002 (0.324)	0.003 (0.407)

Table 4 (continued)

DEPVAR =	$\Delta DisclosureSimilarity$						
	Pred?	(1)	(2)	(3)	(4)	(5)	(6)
<i>AnalystFollow</i>		-0.004 (-1.242)	-0.004 (-1.121)	-0.004 (-1.242)	-0.004 (-1.120)	-0.008* (-1.763)	-0.007 (-1.634)
<i>S&P500</i>		0.011 (1.640)	0.013** (1.962)	0.011 (1.628)	0.013* (1.938)	0.019* (1.675)	0.023** (2.013)
<i>ROA</i>		0.038 (1.455)	0.036 (1.381)	0.038 (1.454)	0.036 (1.379)	0.012 (0.417)	0.011 (0.386)
<i>Loss</i>		0.005 (1.313)	0.005 (1.258)	0.005 (1.313)	0.005 (1.253)	0.001 (0.306)	0.001 (0.226)
<i>AbnRet</i>		0.007* (1.911)	0.007* (1.885)	0.007* (1.908)	0.007* (1.884)	0.011*** (2.850)	0.011*** (2.852)
<i>StdRet</i>		-0.126 (-0.863)	-0.130 (-0.889)	-0.126 (-0.863)	-0.130 (-0.891)	-0.276* (-1.684)	-0.279* (-1.700)
<i>Lawsuit</i>		-0.004 (-0.558)	-0.004 (-0.492)	-0.004 (-0.557)	-0.004 (-0.490)	-0.003 (-0.336)	-0.003 (-0.284)
Industry/Year FE		Y	Y	Y	Y	Y	Y
Observations		7,900	7,900	7,900	7,900	5,009	5,009
Adj. R-squared		0.403	0.404	0.403	0.404	0.396	0.397

Note: Table 4 contains results from OLS regressions of $\Delta DisclosureSimilarity$ on BlackRock ownership measures (*BlackRockBH* and *BlackRock%*) and controls. $\Delta DisclosureSimilarity$ is the cosine similarity of the text from the BlackRock letter to the text from the 8-Ks filed 30 days subsequent to the letter minus the similarity score from the 90 days prior. *BlackRockBH* is an indicator equal to one if BlackRock owns >5% of the firm's outstanding shares, and *BlackRock%* is the decile rank of BlackRock's percentage ownership in the firm. All remaining variables are defined in Appendix 2. In columns (3) and (4), we include an additional control for whether BlackRock privately engaged with the firm in any of its fiscal years spanning 2017–2020 (*PrivateEngagement*), and in columns (5) and (6) we exclude firms with *PrivateEngagement* = 1. t-statistics are in parentheses, and ***, **, and * represent significance levels of 1%, 5%, and 10%, respectively (two-tailed). Standard errors are clustered at the firm level

2018 fiscal year, which covers a subset of our sample period. Thus, we construct a firm-level variable with the available data. *PrivateEngagement* is equal to one if BlackRock privately engages with the firm in any of BlackRock's three fiscal years from 2018 to 2020, zero otherwise.²⁰

To corroborate our conclusion that observed differences in disclosure for BlackRock-owned firms are a function of the public demands laid out in BlackRock's annual letter, we repeat the tests from Table 4, columns (1) and (2). We include an additional control for private

²⁰ We confirm that all results are also robust to including an alternative measure for instances of private engagement, set equal to one if BlackRock engages in all three years, zero otherwise. We also find that our results are generally robust to excluding *PrivateEngagement* firms. To provide more detail on which firms BlackRock engages with, we present sample descriptives split by *PrivateEngagement* in Appendix 6. BlackRock appears to engage with larger firms with greater BlackRock ownership.

engagement (*PrivateEngagement*) in columns (3) and (4) and exclude the firms with which BlackRock privately engages in columns (5) and (6).²¹ The positive coefficients on *BlackRockBH* and *BlackRock%* remain and are of the same magnitude across all specifications. Firms for which BlackRock is a blockholder have a 22% more positive change in *DisclosureSimilarity* (or equivalently a 2% increase in the level of *DisclosureSimilarity*) relative to the sample mean.²²

Taken together, the evidence in Table 4 is consistent with portfolio firms responding specifically to BlackRock's broad-based public engagement. Moreover, it does not appear that changes in disclosure similarity around the letter release date are explained by ongoing private engagements between BlackRock and portfolio firms. However, changes in disclosure may be boilerplate or otherwise uninformative to BlackRock, or they may indicate that the firm does not support BlackRock's preferred strategies. To evaluate these possibilities, in the next section we investigate whether BlackRock values firms' disclosure responses by examining disciplinary action by BlackRock conditional on the change in firms' post-letter disclosures.

4.2 Voting outcomes for firms responding through disclosure

Prior research indicates that passive investors may escalate disciplinary action when they believe portfolio firms' practices are not sufficiently aligned with their principles and when efforts at engagement produce insufficient responses. Such escalation often includes voting in opposition to management at shareholder meetings (Appel et al. 2016). To the extent that our measure of disclosure similarity captures (1) information that is valuable to BlackRock and/or (2) firms' efforts to align with BlackRock's policy recommendations (as expressed in the letter), we expect firms that provide more similar disclosure to be less likely to face BlackRock opposition to management's recommendations on proposals at shareholder meetings. BlackRock specifically states in its Global Corporate Governance and Engagement Principles that when it believes management is not effectively addressing a material issue, it may reflect such concern by supporting shareholder proposals, including proposals related to environmental and social (ES) factors (BlackRock 2020). In contrast, if firms acknowledge letter-related issues without quantifying the impact of environmental and regulatory changes and/or detailing strategic responses, then changes in disclosure may not affect BlackRock's assessment of the firm. It is also possible that portfolio firms are disclosing opposition to BlackRock's recommendation. If that is the case, then we expect changes in disclosure to lead to greater BlackRock opposition to management at shareholder meetings.

²¹ The insignificant coefficients on *PrivateEngagement* in columns (3) and (4) do not necessarily imply that BlackRock's private engagements do not affect firm disclosure. Since private engagements take place throughout the year, the majority of changes in disclosure resulting from private engagement are unlikely to be concentrated in the 30-day window after the release of the letter (i.e., if private engagement takes place either during or before the pre-period or after the post-period, any effect is unlikely to be captured in Δ *DisclosureSimilarity*). Further, we do not have information about the topics of private engagements with specific firms and the degree to which they align with the topics in the letter. If some private engagements relate primarily to firm-specific issues or other issues outside the scope of the letter, we would not expect private engagement to increase disclosure similarity to the letter.

²² In untabulated analysis, we examine changes in disclosure similarity over two alternative 30-day windows (i.e., [30,60] and [60,90]) and do not observe significant variation in disclosure similarity during these windows. This is consistent with documenting a response to the letter specifically, rather than a general trend in firms' disclosures.

To investigate this question, we obtain data on shareholder proposals, including ES proposals, managements' recommendations for those proposals, and BlackRock voting data from ISS Voting Analytics. The database provides details on whether BlackRock voted for or against each proposal in each firm meeting and provides management's recommendation for each proposal as reported in the firm's proxy statement. For this analysis, BlackRock opposition is defined as voting against (for) a shareholder proposal supported (opposed) by management.

Because BlackRock references a broad set of issues, including governance issues, in its annual letter, we consider BlackRock's opposition to all shareholder proposals (i.e., proposals with an ISSAgendaItemID beginning with S) during the firm's annual shareholder meeting (BlackRock 2020; ISS 2019).²³ Given that shareholder voting is a key mechanism of firm governance, many proposals relate to issues of firm governance (e.g., staggered board, independent board chair, adopt or amend proxy access rights). This set also includes proposals related to environmental and social issues.

Motivated by the recent inclusion of ES issues in BlackRock's annual letter, we also separately identify the subset of shareholder proposals related to these types of issues. Flammer (2015) and Cao, Liang, and Zhan (2019) identify ES-related proposals by ISS resolution type SRI, which consists of 52 subcategories. He et al. (2020) further refine the definition of ES-related proposals by analyzing the proposal descriptions (*ItemDesc*) to check for potential inconsistencies and data errors, and identify 55 unique categories.²⁴ When we use the categories from He et al. 2020, our final sample of shareholder proposals on which BlackRock voted within our sample firm-years contains 33 of the 55 categories. Table 5, Panel A provides descriptive statistics on the categories included in our analysis, as well as the rate of BlackRock opposition across each of these categories. The top five ES categories in our sample are Greenhouse Gas (GHG) Emissions, Climate Change, Link Executive Pay to Social Criteria, Gender Pay Gap, and Social Proposal. BlackRock opposed our sample firms' management on these proposals 3.5%, 10.5%, 1.0%, 6.2%, and 2.7% of the time, respectively.

We are interested in whether BlackRock opposes managements' recommendations. Thus, we evaluate whether a firm's disclosure response is associated with the likelihood that BlackRock opposes management at shareholder meetings after the letter and subsequent firm disclosure. We do this by estimating the following linear probability model:

²³ We exclude management proposals (M code) because the majority of them either relate to routine business (e.g., authorizing additional shares) or represent director elections. In the case of most routine business, there is not a clear connection to the topics discussed in the letters. In the case of director elections, BlackRock's decision to vote against the directors recommended by management (as stated in its US Proxy Voting Guidelines) relates to several personal attributes of the director (e.g., independence, number of other board seats) that are unrelated to the firms' disclosure choices. Additionally, voting against directors is often considered an escalation tactic that is resorted to only if a firm's initial response to shareholder concerns is insufficient. For example, ISS recommends voting against directors if the board does not respond to a shareholder proposal that received majority support in the prior year. Thus, we expect that votes against directors are unlikely to be related to the firm's response to the letter in the time window in our sample (i.e., annual meetings that are approximately five months after the letter for calendar-year-end firms).

²⁴ He et al. (2020) eliminate 10 categories that do not have a clear association with ES or appear to be a result of data errors, and identify 13 additional ES-related categories.

Table 5 BlackRock voting response to disclosures

Panel A: Descriptive Statistics					
ISS ItemID	Description per He et al. 2020	N	Pct BlackRock Oppose	N BlackRock Support	N BlackRock Oppose
S0743	GHG Emissions	1,284	0.035	1,239	45
S0742	Climate Change	1,273	0.105	1,139	134
S0510	Link Executive Pay to Social Criteria	1,267	0.009	1,255	12
S0817	Gender Pay Gap	1,265	0.062	1,187	78
S0999	Social Proposal	1,224	0.027	1,191	33
S0352	Company Specific-Governance Related	659	0.049	627	32
S0414	Improve Human Rights Standards or Policies	658	0.040	632	26
S0731	Community- Environmental Impact	645	0.033	624	21
S0777	Report on Sustainability	559	0.095	506	53
S0781	Recycling	519	0.158	437	82
S0812	Report on EEO	518	0.050	492	26
S0206	Establish Environmental/Social Issue Board Committee	436	0.037	420	16
S0779	Renewable Energy	424	0.012	419	5
S0738	Product Safety	347	0.029	337	10
S0224	Require Env/Social Issue Qual. for Director Nominees	307	0.029	298	9
S0412	Human Rights Risk Assessment	296	0.014	292	4
S0810	Company-Specific -- Shareholder Miscellaneous	275	0.153	233	42
S0911	Anti-Social Proposal	194	0.000	194	0
S0205	Establish Other Governance Board Committee	176	0.023	172	4
S0423	Operations in High Risk Countries	169	0.024	165	4
S0710	Facility Safety	137	0.022	134	3
S0815	Labor Issues - Discrimination and Miscellaneous	126	0.032	122	4

Table 5 (continued)

S0890	Animal Welfare	111	0.045	106	5
S0745	Climate Change Action	99	0.020	97	2
S0744	Hydraulic Fracturing	97	0.000	97	0
S0727	Review Foreign Military Sales	76	0.000	76	0
S0733	Reduce Tobacco Harm to Health	58	0.000	58	0
S0891	Animal Testing	50	0.000	50	0
S0736	Genetically Modified Organisms (GMO)	48	0.000	48	0
S0735	Health Care - Related	47	0.064	44	3
S0729	Review Drug Pricing or Distribution	45	0.089	41	4
S0427	Data Security, Privacy, and Internet Issues	35	0.086	32	3
S0725	Weapons - Related	22	0.000	22	0
Panel B: Multivariate Evidence					
DEPV/AR =					
Response Variables:					
Δ DisclosureSimilarity	Pred? (-)	BlackRockOppose BlackRockOpposeES			
		(1)	(2)		
		-0.040**	-0.021**		
		(-2.283)	(-2.103)		
		0.007	0.003		
		(1.381)	(1.241)		
<i>PrivateEngagement</i>					
Proposal Variables:					
BlackRockOpposePY		0.162***	0.205***		
		(6.178)	(5.353)		
Nproposals		0.010**	0.006***		

Table 5 (continued)

<i>PctShareholder</i>	(2.338)	(2.811)
	2.185***	0.106
	(11.007)	(1.613)
<i>PctEnvSocial</i>	0.365	3.737***
	(0.818)	(8.257)
Firm Characteristics:		
<i>BlackRockOwn</i>	−0.004	−0.002
	(−1.487)	(−1.217)
<i>PctPassive</i>	−0.009	−0.003
	(−0.415)	(−0.283)
<i>IO</i>	−0.047***	−0.008
	(−3.417)	(−0.916)
<i>MVE</i>	0.021***	0.005***
	(6.148)	(3.197)
<i>MTB</i>	−0.001	0.000
	(−1.472)	(0.308)
<i>Cash</i>	0.024*	0.019**
	(1.665)	(2.241)
<i>ROA</i>	−0.057	−0.044*
	(−1.182)	(−1.655)
<i>Sales</i>	0.004	0.001
	(0.358)	(0.187)
<i>AbnRet</i>	−0.007	−0.001

Table 5 (continued)

<i>StdRet</i>	(-1.188)	(-0.461)
	-0.369	-0.010
	(-1.517)	(-0.072)
Industry/Year FE	Y	Y
Observations	5,583	5,583
Adj. R-squared	0.467	0.488

Note: Table 5 contains the results from our voting analysis. Panel A contains the 33 (of 55) environmental and social proposal categories BlackRock voted on during our sample period, from the ISS database. We include descriptives on the number of instances BlackRock voted and how frequently it opposed management on these topics. Panel B contains the results of the linear probability model regressions of *BlackRockOppose* (an indicator equal to one if BlackRock voted opposite management) and *BlackRockOpposeES* (an indicator equal to one if BlackRock voted opposite management on Environmental and Social topics) on $\Delta DisclosureSimilarity$ and controls. $\Delta DisclosureSimilarity$ is the cosine similarity of the text from the BlackRock letter to the text from the 8-Ks filed 30 days subsequent to the letter, minus the similarity score from the 90 days prior. All other variables are defined in [Appendix 2](#). t-statistics are in parentheses, and ***, **, and * represent significance levels of 1%, 5%, and 10%, respectively (two-tailed). Standard errors are clustered at the firm level

$$\begin{aligned} \text{BlackRock Oppose} = & \alpha + \beta_1 \text{Disclosure Similarity Measure}_{i,t} + \sum \delta \text{Controls}_{i,t} \\ & + \gamma_{FE} + \varepsilon \end{aligned} \quad (2)$$

The dependent variable, *BlackRockOppose*, represents one of two measures of BlackRock opposition to proposals made during the annual shareholder meeting. The first measure, *BlackRockOppose*, is an indicator equal to one if BlackRock votes against (for) any shareholder proposal supported (opposed) by management. The second measure, *BlackRockOpposeES*, is an indicator of whether BlackRock votes against (for) proposals supported (opposed) by management on environmental and social topics, following He et al. (2020).²⁵ We consider votes at the shareholder meeting in the same year as the BlackRock letter (approximately five months, on average, after the BlackRock letter for calendar-year-end firms). Our independent variable of interest is $\Delta \text{DisclosureSimilarity}$, which is the same variable we use in our primary analysis. In these tests, we limit our sample to firms owned by BlackRock, as BlackRock casts votes only for these firms. To the extent that a firm's disclosure response suggests firms' alignment with issues conveyed in the letter, we expect β_1 to be negative.

We control for a variety of proposal and firm characteristics that have been shown to influence voting outcomes (e.g., Gordon and Pound 1993; Morgan et al. 2011; He et al. 2020). Prior research shows that mutual funds are more likely to vote in favor of proposals perceived as value-increasing, including governance-related proposals, especially when governance is believed to be weak (e.g., Morgan et al. 2011). Thus, we include controls for the total number of proposals (including management and shareholder) (*Nproposals*), the percentage of proposals related to environmental and social (ES) issues (*PctEnvSocial*), the percentage of shareholder proposals (*PctShareholder*), and total institutional ownership (*IO*). Moreover, He et al. (2020) show that firms with ES proposals tend to be significantly larger and have more resources, higher performance, and higher market-to-book ratios, but lower sales growth. Thus, we include controls for market value of equity (*MVE*), market-to-book (*MTB*), cash holdings (*Cash*), return on assets (*ROA*), total sales (*Sales*), stock returns (*AbnRet*), and stock return volatility (*StdRet*), measured as of the quarter ending immediately prior to the letter. Additionally, we control for BlackRock's ownership in the firm (*BlackRockOwn*), as BlackRock is likely to evaluate voting decisions more carefully when it has a larger stake in the firm. We also control for prior disagreement between BlackRock and firm management, as indicated by whether BlackRock voted opposite management on proposals in the prior year (*BlackRockOpposePY*). Finally, we also control for the percentage of votes cast by BlackRock ETFs (i.e., fund names including iShares), *PctPassive*, as passive funds face different incentives due to their inability to exit.

Table 5, Panel B reports the results of this estimation. In columns (1) and (2), we find that BlackRock opposition to management is decreasing with the change in disclosure similarity: the coefficient of interest, β_1 , is negative and statistically different from zero whether we are investigating all shareholder proposals ($p < 0.05$) or ES proposals specifically ($p < 0.05$). This result holds when we control for private engagement (*PrivateEngagement*). Overall, these

²⁵ We rely on a linear model to accommodate our fixed effects structure (e.g., Greene 2004). However, untabulated analysis confirms that the result is also robust to estimating the equation using a probit model ($p < 0.05$ and $p < 0.01$ for the shareholder proposal and environmental/social voting tests, respectively).

results suggest that firms can mitigate subsequent disciplinary actions by BlackRock by responding to BlackRock's letters through disclosure during the post-letter period.

4.3 Firms' public policy response

The evidence in the previous section suggests that BlackRock values the post-letter change in firms' disclosures (i.e., firms' disclosures are informative and influence BlackRock's voting behavior), and that portfolio firms do not generally oppose BlackRock's recommendations. In this section, we investigate whether firms take actions, beyond disclosure, to further align themselves with BlackRock's preferences. Specifically, BlackRock also uses the letters as a platform to advocate for certain public policies, including ones that address uneven wage growth, labor displacement, infrastructure investment, and tax reform. Thus, in addition to altering their disclosures, firms may respond to BlackRock's public policy recommendations by changing their own public advocacy efforts. To evaluate this possibility, we analyze firms' lobbying activity in the post-letter period. Studying firms' lobbying activity is ideal in our setting not only because the letters emphasize public advocacy efforts, but also because lobbying is observable and practiced by a wide set of firms.

To identify firms' lobbying activity, we gather data on the issues lobbied by sample firms from LobbyView, a comprehensive lobbying database that is based on the universe of lobbying reports filed under the Lobbying Disclosure Act of 1995 (Kim 2018).²⁶ The dataset includes details on the general issues lobbied (e.g., environment, taxes, healthcare, etc.), as well as a description of specific policies and bills targeted by firms. To create our measure of firms' lobbying response to the most recent BlackRock letter, we compare the text that details the specific issues lobbied in firms' lobbying disclosures to the text in the BlackRock letter. Firms are required to report lobbying activities quarterly. However, because BlackRock generally publishes letters in the first calendar quarter of the year, we study firms' lobbying disclosures over the remaining three quarters. Our proxy for firms' public advocacy response to the BlackRock letters is $\Delta\text{LobbySimilarity}$, measured as the difference between (1) the cosine similarity score of the text included in BlackRock's letter in quarter t to the text description of specific issues lobbied in firm i 's lobbying disclosures in quarters $t+1$ through $t+3$, and (2) the cosine similarity score of the letter from period t and quarters $t-3$ to $t-1$ (to avoid overlap with the previous year's letter).

To validate our measure, we identify whether lobbying activity by firms with relatively high levels of LobbySimilarity is more likely to reflect issues outlined in the letter. To do this, we link key policy topics identified in Table 1 to general lobby issue codes.²⁷ Specifically, firms are required to select one or more general issue codes that correspond to various policy areas. We identify six relevant lobby codes: Environmental (ENV), Science/Technology (SCI), Taxation/Internal Revenue Service (TAX), Labor Issues/Antitrust/Workplace (LBR), Retirement (RET), and Trade (TRD), and we compare the frequency of lobby codes mentioned across firms with high vs. low LobbySimilarity . In Fig. 2, we observe a higher

²⁶ Lobbying reports are filed with the Secretary of the Senate's Office. The lobbying reports disclose specific bills that firms lobby for or against. LobbyView analysts maintain the lobbying data, which they manually match to Compustat by company name. See lobbyview.org for more details.

²⁷ There are 83 codes in total: <https://lda.congress.gov/ld/help/default.htm?url=Documents%2FAppCodes.htm>.

We successfully link six of the seven policy topics from Table 1 to lobby issue codes (we did not identify a suitable lobby code for infrastructure).

frequency of lobby reports that contain issues pertaining to ENV, TAX, LBR, RET, and TRD, but Table 6, Panel A reveals that only TAX, LBR, and TRD are significantly different across the two groups. Nonetheless, this provides some evidence that our *LobbySimilarity* variable is identifying lobbying activity that aligns with topics discussed in the BlackRock letter.

In addition to investigating whether firms alter their lobbying activity in general, we also investigate whether firms that share BlackRock's policy preferences ex ante are even more likely to change their lobbying behavior in response to the letters. We rely on the political leanings of portfolio firms to identify whether firms' public policy objectives coincide ex ante with the policies detailed in Fink's Dear CEO letter. The two primary political parties in the United States generally hold distinct positions on issues such as taxes, competition, and environmental and labor laws (Alesina et al. 1997; Caporale and Grier 2000; McCarty et al. 2016).²⁸ Like the BlackRock letters, the Democratic party platform tends to promote environmental protection, advocate for equal access to quality healthcare and education, and criticize workforce disparity. To the extent that portfolio firms that contribute primarily to the Democratic party are also more likely to support the agenda conveyed in the BlackRock letters, we expect Democratic-leaning firms to respond more strongly to the letters. Thus, we identify firms whose campaign contributions, as reported to the Federal Election Committee (FEC), primarily support candidates from the Democratic party.²⁹ Specifically, we construct an indicator variable, *SupportsDemocrats*, that equals one if the firm allocates 75% or more of its political contributions to candidates from the Democratic party, zero otherwise. We interact this measure with our proxies for BlackRock ownership to evaluate lobbying similarity after the release of the BlackRock letter, by estimating the following equation:

$$\begin{aligned}\Delta\textit{LobbySimilarity} = & \alpha + \beta_1\textit{BlackRockOwnership}_{i,t} \\ & + \beta_2\textit{SupportsDemocrats}_{i,t} * \textit{BlackRockOwnership}_{i,t} \\ & + \beta_3\textit{SupportsDemocrats}_{i,t} + \sum \delta \textit{Controls}_{i,t} + \gamma_{FE} + \varepsilon \quad (3)\end{aligned}$$

The dependent variable, $\Delta\textit{LobbySimilarity}$, is measured as the similarity between the BlackRock letter and the text of the firm's lobbying disclosure filed over the three quarters after the letter minus *LobbySimilarityPY*; *BlackRockOwnership* represents one of the proxies for BlackRock ownership (*BlackRockBH* or *BlackRock%*); *SupportsDemocrats* is as previously defined. If firms are more likely to lobby for public policy issues detailed in the letter, regardless of whether they lobby for or against those policies, then we expect a positive coefficient on β_1 . If firms are more likely to

²⁸ Republicans: <https://www.gop.com/platform/>. Democrats: <https://democrats.org/where-we-stand/party-platform/>.

²⁹ Firms' campaign-financing activity is observable because of the Federal Election Committee (FEC) requirements to disclose campaign contributions. Although the Federal Election Campaign Act prohibits corporations from making contributions directly to federal election campaigns, corporations may legally participate in federal election activities through a corporate-sponsored Political Action Committee (PAC). For example, the corporate-sponsored PAC can solicit contributions from the corporation's executives, employees, and stockholders. The corporate executives who manage the PAC then strategically allocate these funds to political campaigns. These contributions (known as hard money contributions) are summarized and reported to the FEC on an interim basis.

Fig. 2 Lobby codes by *LobbySimilarity*. **Note:** Fig. 2 plots lobby code indicator averages by high/low *LobbySimilarity* firms. Specifically, we identified six lobby codes to represent topics from the BlackRock letters (we were unable to identify a lobby code that corresponded with infrastructure). The six lobby codes represent lobbying activity related to Environmental (ENV), Science/Technology (SCI), Taxation/Internal Revenue Service (TAX), Labor Issues/Antitrust/Workplace (LBR), Retirement (RET), and Trade (TRD) topics. To account for differences in scale and to remain consistent with Fig. 1, we present each of the indicator measures as a percentage of the average of that lobby code indicator. The raw percentages are tabulated in Table 6, Panel A

align their public advocacy with BlackRock's public policy agenda, then we expect a positive coefficient on β_2 .

As in eq. (1), we control for State Street (*StateStreetBH*, *StateStreet%*) and Vanguard (*VanguardBH*, *Vanguard%*) ownership, the total number of blockholders (*NumberBH*), and total institutional ownership (*IO*). We also control for firms' prior lobbying behavior by including *LobbySimilarityPY*, calculated as the cosine similarity of lobby filings from quarters $t-3$ to $t-1$ from the previous year to the current year's BlackRock letter, as previously described. Finally, we control for various firm characteristics previously linked to firms' political activity (e.g., Cooper et al. 2010). These characteristics, which are related to firm size, resources, and performance, include market value of equity (*MVE*), market-to-book (*MTB*), leverage ratio (*Leverage*), total number of employees (*Employees*), total number of business segments (*Segments*), market share (*Marketshare*), market share squared to capture non-linearities in market share (*Marketshare_sq*), return on assets (*ROA*), total sales (*Sales*), and stock returns (*AbnRet*). In addition, we control for industry characteristics that explain firms' propensity to engage in political activism; an indicator for whether the firm belongs to a politically sensitive industry (*Sensitive Industry*); and the Herfindahl index (*HHI*) for industry concentration. Finally, we include year and two-digit SIC industry fixed effects. Standard errors are clustered at the firm level.

Table 6, Panel B reports the results of estimating eq. (3). In column (1), we find that the estimated coefficient on *BlackRockBH* is positive and significant ($p < 0.10$). This result provides limited evidence that portfolio firms change their lobbying activity during the post-letter period. In addition, the estimated coefficient on *SupportsDemocrats*BlackRockBH* is positive and significant ($p < 0.05$), suggesting that firms that are aligned with BlackRock's policy preferences ex ante (i.e.,

Table 6 Lobby response to BlackRock letters**Panel A: LobbySimilarity Validation**

Variable	N	Mean	LobbySimilarity <P50	LobbySimilarity <P50	Difference
Lobby Code Indicators:					
<i>ENV_indicator</i>	1,780	0.185	0.178	0.193	0.014
<i>SCI_indicator</i>	612	0.071	0.073	0.070	-0.004
<i>TAX_indicator</i>	1,780	0.546	0.508	0.585	0.077***
<i>LBR_indicator</i>	1,780	0.15	0.122	0.174	0.051***
<i>RET_indicator</i>	1,636	0.05	0.043	0.050	0.007
<i>TRD_indicator</i>	577	0.291	0.260	0.322	0.061*

Panel B: Multivariate Evidence

DEPVAR =		Δ LobbySimilarity	
	Pred?	(1)	(2)
BlackRock Variables:			
<i>BlackRockBH</i>	(+)	0.008* (1.787)	
<i>BlackRock%</i>	(+)		-0.001 (-1.125)
<i>PrivateEngagement</i>		0.003 (1.087)	0.003 (0.991)
PAC Contributions:			
<i>SupportsDemocrats*BlackRockBH</i>	(+)	0.030** (2.283)	
<i>SupportsDemocrats*BlackRock%</i>	(+)		0.007*** (3.093)
<i>SupportsDemocrats</i>		-0.047* (-1.815)	-0.074** (-2.320)
Other IO:			
<i>StateStreetBH</i>		-0.005 (-1.447)	
<i>VanguardBH</i>		0.003 (0.578)	
<i>StateStreet%</i>			0.001 (0.472)
<i>Vanguard%</i>			0.002 (1.388)
<i>NumberBH</i>		0.001* (1.737)	0.001* (1.698)
<i>IO</i>		-0.024*** (-2.873)	-0.025*** (-2.636)
Firm Characteristics:			
<i>LobbySimilarityPY</i>		-0.207*** (-13.726)	-0.205*** (-13.557)
<i>MVE</i>		0.004*** (2.873)	0.004** (2.424)
<i>MTB</i>		-0.000	-0.000

Table 6 (continued)

	(−0.247)	(−0.283)
<i>Leverage</i>	0.004 (0.561)	0.003 (0.415)
<i>Employees</i>	0.002 (1.065)	0.002 (1.167)
<i>Segments</i>	0.000 (1.422)	0.000 (1.219)
<i>Sensitive Industry</i>	0.028*** (2.692)	0.029*** (2.686)
<i>Marketshare</i>	−0.015 (−0.067)	−0.010 (−0.045)
<i>Marketshare_sq</i>	0.048 (0.066)	0.001 (0.002)
<i>HHI</i>	0.005 (0.159)	0.004 (0.132)
<i>ROA</i>	−0.011 (−0.329)	−0.011 (−0.326)
<i>Sales</i>	−0.003 (−0.322)	−0.002 (−0.267)
<i>AbnRet</i>	0.002 (0.393)	0.002 (0.460)
Industry/Year FE	Y	Y
Observations	2,251	2,251
Adj. R-squared	0.107	0.106

Note: Table 6 contains the results of our lobbying analysis. Panel A presents descriptive statistics supporting our *LobbySimilarity* validation exercise. Specifically, we map topics identified for the $\Delta DisclosureSimilarity$ validation exercise (see Table 1) to lobby codes and tabulate the differences in lobby codes for relevant years by high and low *Lobby Similarity*. These values are presented as a percentage of the relevant years' mean in Figure 2. Panel B contains results from OLS regressions of *LobbySimilarity* on BlackRock ownership measures (*BlackRockBH* and *BlackRock%*), *SupportsDemocrats*, the interaction of BlackRock variables and *SupportsDemocrats*, and control variables. *LobbySimilarity* is the similarity of the text from the BlackRock letter to the text from corporate lobbying filings, calculated using the cosine similarity score. *SupportsDemocrats* is an indicator equal to one if more than 75% of the firm's political contributions are to Democrats, zero otherwise. All other variables are defined in Appendix B. *t*-statistics are in parentheses, and ***, **, and * represent significance levels of 1%, 5%, and 10%, respectively (two-tailed) in both panels. Standard errors are clustered at the firm level

Democratic-leaning portfolio firms) are more likely to alter their lobbying program following the letter release date. In column (2), we examine *BlackRock%* and continue to find that Democratic-leaning portfolio firms are more likely to alter their lobbying program following the letter release date ($p < 0.01$). These results suggest that the changes in lobbying activity are stronger for firms that share BlackRock's policy preferences ex ante. Taken together, the results in Table 6 are consistent with BlackRock-owned firms taking additional actions, beyond disclosure, to align themselves with BlackRock's policy preferences.

5 Additional analysis

5.1 Self-selection

Each investor has its own investment philosophy, which can influence the firms it selects for its portfolio. Therefore, our results may reflect some level of selection bias (i.e., BlackRock chooses to invest in firms whose strategies and disclosures more closely align with the preferences expressed in its letters). To address this concern, we exploit the fact that BlackRock offers a variety of index funds, including funds based on the S&P 500 index. To offer these funds, BlackRock must invest in firms that are included in the S&P 500 index, regardless of the characteristics of the individual S&P 500 firms. Thus, if the documented association between BlackRock ownership and $\Delta DisclosureSimilarity$ occurs because BlackRock selects specific firms, then the results in Table 4 should be less pronounced for firms included in the S&P 500 index.³⁰ We test this prediction using the following equation:

$$\begin{aligned} \Delta DisclosureSimilarity = & \alpha + \beta_1 BlackRockOwnership_{i,t} \\ & + B_2 S\&P500_{i,t} * BlackRockOwnership_{i,t} + \beta_3 S\&P500_{i,t} \\ & + \sum \delta Controls_{i,t} + \gamma_{FE} + \varepsilon \end{aligned} \quad (4)$$

S&P500 is an indicator variable equal to one if the firm is a member of the S&P 500 index. $\Delta DisclosureSimilarity$ and *BlackRockOwnership* are defined in sections 3.1.1 and 3.1.2, respectively. The coefficient of interest is represented by β_1 , which describes how the change in disclosure similarity for BlackRock-owned firms varies with S&P 500 membership.

If the results in Table 4 are an artifact of the types of firms BlackRock chooses to invest in, we expect β_1 to be negative (i.e., the disclosure response is less pronounced among S&P 500 firms). The results of this equation are presented in Table 7. We find insignificant coefficients on β_1 in each specification. These results are inconsistent with a muted disclosure response from S&P 500 firms. Overall, the results in Table 7 are inconsistent with the notion that the variation in disclosure similarity we observe in Table 4 is solely attributable to a selection effect.

5.2 Robustness to alternative pre-period definitions

In this section, we assess the robustness of our results to alternative controls for prior-period disclosure attributes. We argue that using a 90-day window in the pre-period allows us to capture an appropriate baseline for firms' general disclosure tendencies, as a shorter pre-period window may produce non-representative 8-Ks, which would add noise to our disclosure change measure. However, our use of a 90-day pre-period naturally increases the number of 8-Ks analyzed. This increase in the number of 8-Ks analyzed could influence changes in disclosure similarity for all firms, because more information is produced in the pre-period

³⁰ BlackRock still has some degree of choice in whether to blockhold individual firms included in the S&P 500 index if its ownership percentage in that firm resulting from its index funds is less than 5%. On average, however, we find that BlackRock is much more likely to be a blockholder of S&P 500 firms and has larger holdings in them, which suggests that S&P 500 membership is driving at least some of BlackRock's holdings in these firms. BlackRock is a blockholder in 92% of S&P 500 member firm-years in the sample and 58% of non-S&P 500 firm-years.

window than in the post-period window. To mitigate this concern, we confirm that our main result is robust to including alternative windows for pre-period disclosure similarity (i.e., *PriorDiscSimilarity*), namely (1) the average of disclosure similarity across three 30-day windows (i.e., $[-90, -60]$, $[-60, -30]$, and $[-30, -1]$), and (2) the disclosure similarity in the 30 days prior to the release of the letter (i.e., $[-30, -1]$). The results of this analysis, reported in columns (1) through (4) of Table 8, confirm that our main findings are robust to these alternative definitions of firms' prior disclosures.

Although the types of 8-Ks are largely similar across the pre- and post-periods in our main analysis, it is also possible that differences in the type of 8-Ks issued during the pre-period relative to the post-period may result in changes in disclosure similarity, because of variation in the discussion included across different 8-K items. In our primary specification, we control for differences in 8-K attributes. However, these controls may be insufficient if the relation between 8-K items and disclosure similarity is non-linear. Thus, we next compare firms' post-letter 8-K disclosures to 8-K disclosures issued over a similar 30-day window during the previous quarter (i.e., $[-90, -60]$). Because this alternative pre-period window covers a similar

Table 7 S&P500 and disclosure response to BlackRock letters

DEPVAR =		$\Delta DisclosureSimilarity$	
	Pred?	(1)	(2)
BlackRock Variables:			
<i>BlackRockBH</i>	(+)	0.008* (1.812)	
<i>BlackRock%</i>	(+)		0.004*** (2.711)
<i>PrivateEngagement</i>		0.000 (0.013)	0.000 (0.095)
S&P500 Variables:			
<i>S&P500*BlackRockBH</i>	(+)/0	0.006 (0.322)	
<i>S&P500*BlackRock%</i>	(+)/0		-0.001 (-0.581)
<i>S&P500</i>		0.005 (0.312)	0.023 (1.303)
Controls		Y	Y
Industry/Year FE		Y	Y
Observations		7,900	7,900
Adj. R-squared		0.403	0.404

Note: Table 7 presents the results from an OLS regression of $\Delta DisclosureSimilarity$ on BlackRock ownership measures, an indicator for S&P 500 inclusion (*S&P500*), and the interaction. $\Delta DisclosureSimilarity$ is the cosine similarity of the text from the BlackRock letter to the text from the 8-Ks filed 30 days subsequent to the letter, minus the similarity score from the 90 days prior. *BlackRockBH* is an indicator equal to one if BlackRock owns >5% of the firm's outstanding shares, and *BlackRock%* is the decile rank of BlackRock's percentage ownership in the firm. t-statistics are in parentheses, and ***, **, and * represent significance levels of 1%, 5%, and 10%, respectively (two-tailed). Standard errors are clustered at the firm level

30-day period relative to the quarter end, we expect the composition of 8-Ks in the pre-period window to be even more similar to that in the post-period. We report the results in columns (5) and (6) of Table 8. While this restriction results in sample attrition, we find that our main inferences are unaffected by it. This test further alleviates concerns that our result is an artifact of the timing or distribution of 8-Ks.

5.3 Robustness to alternative public disclosures

For our primary analysis, we rely on 8-K disclosures because (1) we can examine them immediately following the issuance of the letter, and (2) managers have discretion over their content. However, the effect of BlackRock's request for enhanced public disclosures likely extends beyond the immediate response in firms' 8-K disclosures. For example, managers may use the discretion inherent in the Management Discussion and Analysis (MD&A) portion of the 10-K to communicate historical and forward-looking information about environmental and regulatory risks and opportunities. Moreover, managers may take the opportunity to acknowledge and/or quantify these risks in their risk disclosures. Thus, we next evaluate whether portfolio firms also alter their MD&A and risk factor disclosures following the letter release date. While these disclosures are mandatory for all firms in our sample, the timing of the 10-K release is inflexible, and the disclosures therein may be preempted by more timely disclosures (i.e., 8-Ks).

Nonetheless, we extract both the MD&A and risk factor disclosures from the 10-Ks filed after each letter for our sample firm-years. Using item headers to identify and parse the appropriate sections (these disclosures are generally found in Item 7 and Item 1A, respectively), we require an identifiable MD&A/risk factor disclosure if the firm-year is to be included in each of the respective analyses. We then calculate similarity scores for the similarity between the relevant section and the preceding BlackRock letter, as well as for the similarity between the same letter and the previous year's 10-K (i.e., to control for prior period disclosure similarity). We calculate $\Delta MD\&A_Similarity$ and $\Delta RiskFactor_Similarity$ as the difference in similarity score between the 10-K immediately following the letter and the prior year's 10-K. We re-estimate eq. (1) excluding 8-K controls, replacing disclosure similarity calculated from firms' 8-Ks with disclosure similarity calculated from firms' MD&A and risk factor disclosures, respectively. All other controls are previously defined in eq. (1). The results are presented in Table 9.

Consistent with our expectations, we find some evidence that firms also respond to the letters in their 10-Ks. While the coefficient on the blockholder measures is not significantly different from zero, *BlackRock%* is positively associated with increases in similarity of MD&A ($p < 0.05$) and risk factor ($p < 0.01$) disclosures to the BlackRock letters. This analysis corroborates our evidence related to changes in firms' 8-Ks disclosures and suggests that BlackRock's public-engagement efforts influence a broader set of disclosures.

6 Conclusion

We examine whether broad-based public engagement by BlackRock influences the disclosure choices of portfolio firms. We investigate this question in the context of the annual Dear CEO letter, wherein the BlackRock CEO, Larry Fink, advocates for a variety of issues and makes specific public policy recommendations. We observe a change in portfolio firms' 8-K

Table 8 Disclosure response to BlackRock letters – alternative prior windows

DEPVAR =		$\Delta DisclosureSimilarity$					
	Pred?	(1)	(2)	(3)	(4)	(5)	(6)
PriorDiscSimilarity calc =		Avg. of 3 30-day win- dows		30 days, immediately prior		30 days, one quarter prior	
BlackRock Variables:							
<i>BlackRockBH</i>	(+)	0.010** (1.970)		0.014** (2.240)		0.009* (1.946)	
<i>BlackRock%</i>	(+)		0.003** (2.429)		0.004** (2.165)		0.003** (2.370)
<i>PrivateEngagement</i>		0.001 (0.118)	0.001 (0.216)	0.001 (0.309)	0.002 (0.403)	0.001 (0.309)	0.002 (0.403)
Other IO:							
<i>StateStreetBH</i>		-0.007 (-1.110)		-0.017** (-2.149)		-0.006 (-1.110)	
<i>VanguardBH</i>		-0.002 (-0.330)		-0.003 (-0.468)		0.002 (0.499)	
<i>StateStreet%</i>			-0.002 (-1.299)		-0.002 (-0.787)		-0.002 (-1.444)
<i>Vanguard%</i>			-0.001 (-1.138)		-0.003** (-2.111)		-0.000 (-0.311)
<i>NumberBH</i>		0.001 (0.446)	0.000 (0.307)	0.002 (1.037)	0.001 (0.827)	-0.000 (-0.169)	-0.000 (-0.340)
<i>IO</i>		-0.020* (-1.915)	-0.017 (-1.536)	-0.006 (-0.414)	0.004 (0.274)	-0.009 (-0.950)	-0.006 (-0.636)
8-K/Firm Controls		Y	Y	Y	Y	Y	Y
Industry/Year FE		Y	Y	Y	Y	Y	Y
Observations		7,900	7,900	4,010	4,010	6,785	6,785
Adj. R-squared		0.524	0.524	0.442	0.442	0.391	0.391

Note: Table 8 presents results from OLS regressions of $\Delta DisclosureSimilarity$ on BlackRock ownership measures (*BlackRockBH* and *BlackRock%*) and controls, using alternative prior-period windows to calculate $\Delta DisclosureSimilarity$. Columns (1) and (2) contain the average of three 30-day windows in place of the 90-day window, and columns (3) and (4) use only the 30 days immediately prior to the letter. Columns (5) and (6) use a 30-day window 90 days prior (90 to 60 days prior) to the letter. Otherwise, the models are the same as those presented in Table 4

disclosures around the letter release date, which suggests that firms are responding to Fink's call for more disclosure about topics of interest. Specifically, we find that portfolio firms' disclosures during the post-letter period reflect an increase in language similar to that of the letter, controlling for a variety of firm and disclosure characteristics. Moreover, our results indicate that the observed change in disclosure around the BlackRock letters is a response to BlackRock's broad-based public engagement letters, rather than to a general demand for information from other important stakeholders (e.g., Vanguard and State Street) or to BlackRock's private engagement.

Further, BlackRock appears to value these additional disclosures, as evidenced by its reduced opposition to management recommendations in votes during subsequent annual shareholder meetings. Taken together, our evidence suggests that portfolio firms are responsive to BlackRock's public engagement efforts, which allows them to evade disciplinary actions. Finally, to investigate whether the public advocacy in BlackRock's letters mobilizes portfolio firms to advocate for similar issues, we study whether portfolio firms alter their lobbying behavior in the post-letter period. We provide some evidence that firms' lobbying efforts become more focused on the issues highlighted in the letters, particularly for firms that are more likely to share BlackRock's policy preferences.

Table 9 Alternative disclosure responses to BlackRock letters

DEPVAR =		$\Delta MDA_Similarity$		$\Delta RiskFactor_Similarity$	
	Pred?	(1)	(2)	(3)	(4)
BlackRock Variables:					
<i>BlackRockBH</i>	(+)	-0.001 (-0.627)		-0.002 (-0.687)	
<i>BlackRock%</i>	(+)		0.001** (2.138)		0.002*** (3.028)
<i>PrivateEngagement</i>		0.000 (0.142)	-0.000 (-0.003)	-0.002 (-1.416)	-0.002 (-1.418)
Other IO:					
<i>StateStreetBH</i>		0.001 (0.366)		-0.002 (-0.819)	
<i>VanguardBH</i>		0.001 (0.227)		-0.001 (-0.444)	
<i>StateStreet%</i>			-0.001 (-1.037)		-0.001* (-1.647)
<i>Vanguard%</i>			-0.000 (-0.155)		-0.001 (-1.305)
<i>NumberBH</i>		0.000 (0.347)	0.000 (0.378)	0.000 (0.853)	0.000 (0.754)
<i>IO</i>		0.001 (0.264)	-0.003 (-0.656)	0.008* (1.717)	0.006 (1.278)
Other firm controls		Y	Y	Y	Y
Industry/Year FE		Y	Y	Y	Y
Observations		8,838	8,838	8,322	8,322
Adj. R-squared		0.103	0.103	0.161	0.161

Note: Table 9 contains the results of regressions of $\Delta MDA_Similarity$ and $\Delta RiskFactor_Similarity$ on BlackRock ownership measures. $\Delta MDA_Similarity$ is the similarity of the text from the BlackRock letter to the text from the MD&A for 10-Ks filed subsequent to the letter, minus the similarity of the text from the same BlackRock letter to the MD&A from the prior year's 10-K. $\Delta RiskFactor_Similarity$ is the similarity of the text from the BlackRock letter to the text from risk factor disclosures identified from 10-Ks filed subsequent to the letter, minus the similarity of the text of the same BlackRock letter to the text from risk factor disclosures from the prior year's 10-K. We exclude the 8-K controls; otherwise, the models are the same as those presented in Table 4

Collectively, our results show that institutional investors can impact the behavior of portfolio firms through broad-based public engagement. We extend prior research that investigates the mechanisms through which large institutional investors with diverse ownership use their voice to influence portfolio firms. Whereas prior research focuses on how these investors target individual firms, we show that BlackRock engages with portfolio firms more generally.

Appendix 1

BlackRock's 2017 'Dear CEO' letter

Dear CEO,

Each year, I write to the CEOs of leading companies in which our clients are shareholders. These clients, the vast majority of whom are investing for long-term goals like retirement or a child's education, are the true owners of these companies. As a fiduciary, I write on their behalf to advocate governance practices that BlackRock believes will maximize long-term value creation for their investments.

Last year, we asked CEOs to communicate to shareholders their annual strategic frameworks for long-term value creation and explicitly affirm that their boards have reviewed those plans. Many companies responded by publicly disclosing detailed plans, including robust processes for board involvement. These plans provided shareholders with an opportunity to evaluate a company's long-term strategy and the progress made in executing on it.

Over the past 12 months, many of the assumptions on which those plans were based – including sustained low inflation and an expectation for continued globalization – have been upended. Brexit is reshaping Europe; upheaval in the Middle East is having global consequences; the U.S. is anticipating reflation, rising rates, and renewed growth; and President Trump's fiscal, tax and trade policies will further impact the economic landscape.

At the root of many of these changes is a growing backlash against the impact globalization and technological change are having on many workers and communities. I remain a firm believer that the overall benefits of globalization have been significant, and that global companies play a leading role in driving growth and prosperity for all. However, there is little doubt that globalization's benefits have been shared unequally, disproportionately benefitting more highly skilled workers, especially those in urban areas.

On top of uneven wage growth, technology is transforming the labor market, eliminating millions of jobs for lower-skilled workers even as it creates new opportunities for highly educated ones. Workers whose roles are being lost to technological change are typically facing retirement with inadequate savings, in part because the burden for retirement savings increasingly has shifted from employers to employees.

These dynamics have far-reaching political and economic ramifications, which impact virtually every global company. We believe that it is imperative that companies understand these changes and adapt their strategies as necessary – not just following a year like 2016, but as part of a constant process of understanding the landscape in which you operate.

As BlackRock engages with your company this year, we will be looking to see how your strategic framework reflects and recognizes the impact of the past year's changes in the global environment. How have these changes impacted your strategy and how do you plan to pivot, if necessary, in light of the new world in which you are operating?

BlackRock engages with companies from the perspective of a long-term shareholder. Since many of our clients' holdings result from index-linked investments – which we cannot sell as long as those securities remain in an index – our clients are the definitive long-term investors. As a fiduciary acting on behalf of these clients, BlackRock takes corporate governance particularly seriously and engages with our voice, and with our vote, on matters that can influence the long-term value of firms. With the continued growth of index investing, including the use of ETFs by active managers, advocacy and engagement have become even more important for protecting the long-term interests of investors.

As we seek to build long-term value for our clients through engagement, our aim is not to micromanage a company's operations. Instead, our primary focus is to ensure board accountability for creating long-term value. However, a long-term approach should not be confused with an infinitely patient one. When BlackRock does not see progress despite ongoing engagement, or companies are insufficiently responsive to our efforts to protect our clients' long-term economic interests, we do not hesitate to exercise our right to vote against incumbent directors or misaligned executive compensation.

Environmental, social, and governance (ESG) factors relevant to a company's business can provide essential insights into management effectiveness and thus a company's long-term prospects. We look to see that a company is attuned to the key factors that contribute to long-term growth: sustainability of the business model and its operations, attention to external and environmental factors that could impact the company, and recognition of the company's role as a member of the communities in which it operates. A global company needs to be local in every single one of its markets.

BlackRock also engages to understand a company's priorities for investing for long-term growth, such as research, technology and, critically, employee development and long-term financial wellbeing. The events of the past year have only reinforced how critical the well-being of a company's employees is to its long-term success.

Companies have begun to devote greater attention to these issues of long-term sustainability, but despite increased rhetorical commitment, they have continued to engage in buybacks at a furious pace. In fact, for the 12 months ending in the third quarter of 2016, the value of dividends and buybacks by S&P 500 companies exceeded those companies' operating profit. While we certainly support returning excess capital to shareholders, we believe companies must balance those practices with investment in future growth. Companies should engage in buybacks only when they are confident that the return on those buybacks will ultimately exceed the cost of capital and the long-term returns of investing in future growth.

Of course, the private sector alone is not capable of shifting the tide of short-termism afflicting our society. We need government policy that supports these goals – including tax reform, infrastructure investment and strengthening retirement systems.

As the U.S. begins to consider tax reform this year, it should seize the opportunity to build a capital gains regime that truly rewards long-term investments over short-term

holdings. One year is far too short to be considered a long-term holding period. Instead, gains should receive long-term treatment only after three years, and we should adopt a decreasing tax rate for each year of ownership beyond that.

If tax reform also includes some form of reduced taxation for repatriation of cash trapped overseas, BlackRock will be looking to companies' strategic frameworks for an explanation of whether they will bring cash back to the U.S., and if so, how they plan to use it. Will it be used simply for more share buybacks? Or is it a part of a capital plan that appropriately balances returning capital to shareholders with prudently investing for future growth?

President Trump has indicated an interest in infrastructure investment, which has the dual benefits of improving overall productivity and creating jobs, especially for workers displaced by technology. However, while infrastructure investing can stem the flow of job losses due to automation, it is not a solution to that problem. America's largest companies, many of whom are struggling with a skills gap in filling technical positions, must improve their capacity for internal training and education to compete for talent in today's economy and fulfill their responsibilities to their employees. In order to fully reap the benefits of a changing economy – and sustain growth over the long-term – businesses will need to increase the earnings potential of the workers who drive returns, helping the employee who once operated a machine learn to program it.

Finally, as major participants in retirement programs in the U.S. and around the world, companies must lend their voice to developing a more secure retirement system for all workers, including the millions of workers at smaller companies who are not covered by employer-provided plans. The retirement crisis is not an intractable problem. We have a wealth of tools at our disposal: autoenrollment and auto-escalation, pooled plans for small businesses, and potentially even a mandatory contribution model like Canada's or Australia's.

Another essential ingredient will be improving employees' understanding of how to prepare for retirement. As stewards of their employees' retirement plans, companies must embrace the responsibility to build financial literacy in their workforce, especially because employees have assumed greater responsibility through the shift from traditional pensions to defined contribution plans. Asset managers also have an important role in building financial literacy, but as an industry we have done a poor job to date. Now is the time to empower savers with new technologies and the education they need to make smart financial decisions. If we are going to solve the retirement crisis – and help workers adjust to a globalized world – businesses need to hold themselves to a high standard and act with the conviction that retirement security is a matter of shared economic security.

That shared economic security can only be achieved through a long-term approach by investors, companies and policymakers. As you build your strategy, it is essential that you consider the underlying dynamics that drive change around the world. The success of your company and global growth depend on it.

Sincerely,

Larry Fink, Chairman and Chief Executive Officer.

Note: The full text of all Dear CEO letters can be found at <https://www.BlackRock.com/corporate/investor-relations/larry-fink-ceo-letter>.

Appendix 2

Table 10 Variable definitions

Variable	Definition
Disclosure Similarity Variables	
<i>ΔDisclosureSimilarity</i>	Similarity of text from that year's BlackRock letter to the firm's 8-Ks filed 30 days subsequent to the letter minus <i>PriorDiscSimilarity</i> . Similarity measures range from zero to one and are calculated using cosine similarity scores (see Appendix 3 for further details and examples).
<i>PriorDiscSimilarity</i>	Similarity of the text from that year's BlackRock letter to the firm's 8-Ks filed in the 90 days prior to the letter release. Similarity measures range from zero to one and are calculated using cosine similarity scores (see Appendix 3 for further details and examples).
BlackRock Variables	
<i>BlackRockBH</i>	Indicator set equal to one if BlackRock is a blockholder (owns more than 5% of the firm) at the end of the fiscal period immediately preceding the BlackRock letter, zero otherwise.
<i>BlackRock%</i>	The decile rank of BlackRock's holding interest as a percentage of all ownership at the end of the fiscal period immediately preceding the BlackRock letter.
<i>PrivateEngagement</i>	Indicator equal to one if BlackRock privately engages with the firm in any of BlackRock's three fiscal years during the period of 2018–2020 (hand-collected from BlackRock's website), zero otherwise.
Other IO	
<i>StateStreetBH</i>	Indicator equal to one if State Street is a blockholder (owns more than 5% of the firm), zero otherwise.
<i>VanguardBH</i>	Indicator equal to one if Vanguard is a blockholder (owns more than 5% of the firm), zero otherwise.
<i>StateStreet%</i>	The decile rank of State Street's holding interest as a percentage of all ownership at the end of the fiscal period immediately preceding the BlackRock letter.
<i>Vanguard%</i>	The decile rank of Vanguard's holding interest as a percentage of all ownership at the end of the fiscal period immediately preceding the BlackRock letter.
<i>NumberBH</i>	Total number of blockholders as of the fiscal period ending immediately prior to the letter.
<i>IO</i>	Total institutional ownership (%) as of the fiscal period ending immediately prior to the letter.
8-K controls	
<i>Item202</i>	Indicator set equal to one if the firm filed an Item 2.02 8-K in the 30 days subsequent to the letter, zero otherwise.
<i>Item701</i>	Indicator set equal to one if the firm filed an Item 7.01 8-K in the 30 days subsequent to the letter, zero otherwise.
<i>Item801</i>	Indicator set equal to one if the firm filed an Item 8.01 8-K in the 30 days subsequent to the letter, zero otherwise.
<i>Number8Ks</i>	Number of 8-Ks filed in the 30 days subsequent to the letter and included in the calculation of <i>DisclosureSimilarity</i> .
<i>PriorNumber8Ks</i>	Number of 8-Ks filed in the 90 days prior to the letter and included in the calculation of <i>PriorDiscSimilarity</i> .
Other Outcome Variables	
<i>BlackRockOppose</i>	Indicator set equal to one if BlackRock votes against management for any shareholder proposals in the annual meeting immediately following the letter,

Table 10 (continued)

Variable	Definition
	zero otherwise (i.e., excluding management proposals whose ISS codes start with M).
<i>BlackRockOpposeES</i>	Indicator set equal to one if BlackRock votes against management for any environmental or social proposals in the annual meeting immediately following the letter, zero otherwise. We identify environmental and social proposals following He et al. (2020).
<i>BlackRockOpposePY</i>	Indicator set equal to one if BlackRock votes against management in the prior year's annual meeting. Proposals included are all shareholder and environmental/social proposals for the <i>BlackRockOppose</i> and <i>BlackRockOpposeES</i> analyses, respectively.
Δ <i>LobbySimilarity</i>	Similarity of the text from the BlackRock letter to the text from corporate lobbying filings in quarters $t+1$, $t+2$, and $t+3$ minus <i>LobbySimilarityPY</i> . Similarity measures range from zero to one and are calculated using cosine similarity scores (see Appendix 3 for further details and examples).
<i>LobbySimilarityPY</i>	The similarity of the text of the BlackRock letter to the lobby filings from the previous three quarters. Similarity measures range from zero to one and are calculated using cosine similarity scores (see Appendix 3 for further details and examples).
Δ <i>MDA_Similarity</i>	Similarity of the text from the BlackRock letter to the MD&A for 10-Ks filed subsequent to the letter minus the similarity of the text from the BlackRock letter to the MD&A from the prior year's 10-K. Similarity measures range from zero to one and are calculated using cosine similarity scores (see Appendix 3 for further details and examples).
Δ <i>RiskFactor_Similarity</i>	Similarity of the text from the BlackRock letter to the risk factor disclosures identified from 10-Ks filed subsequent to the letter minus the similarity of the text of the BlackRock letter to the risk factor disclosures from the prior year's 10-K. Similarity measures range from zero to one and are calculated using cosine similarity scores (see Appendix 3 for further details and examples).
Control Variables	
<i>AbnRet</i>	Abnormal buy and hold returns over the 365 days prior to the letter.
<i>AnalystFollow</i>	Log of one plus the number of analysts following the firm at the end of the fiscal period immediately preceding the BlackRock letter.
<i>BlackRockOwn</i>	Log of dollar value of BlackRock ownership.
<i>Cash</i>	Cash holdings at the end of the fiscal period immediately prior to the BlackRock letter.
<i>Employees</i>	Log of employees from Compustat for the year preceding the letter.
<i>HHI</i>	The Herfindahl sales concentration index calculated using two-digit SIC industry for the quarter ending immediately preceding the BlackRock letter.
<i>Lawsuit</i>	Indicator set equal to one if the firm faced a class-action lawsuit in the year preceding the BlackRock letter, zero otherwise.
<i>Leverage</i>	Total liabilities divided by total assets for the period ending immediately prior to the letter.
<i>Loss</i>	Indicator set equal to one if the firm has negative net income for the period immediately preceding the letter.
<i>Marketshare</i>	Firm's market share using two-digit SIC industry, as of the period ending immediately prior to the letter.
<i>Marketshare_sq</i>	Marketshare, squared.
<i>MTB</i>	The ratio of market value of equity to book value of equity, calculated at the end of the fiscal period immediately preceding the letter.

Table 10 (continued)

Variable	Definition
<i>MVE</i>	Log of market value of equity, calculated at the end of the fiscal period immediately preceding the letter.
<i>Nproposals</i>	Log of the number of proposals voted on during that year's annual meeting
<i>PctPassive</i>	Percentage of BlackRock votes made by ETFs (passive funds with name iShares) during that year's shareholder meeting.
<i>PctShareholder</i>	Percentage of proposals that are shareholder proposals (excluding ISS codes starting with M) from that year's shareholder meeting.
<i>PctEnvSocial</i>	Percentage of proposals that qualify as environmental and social from that year's shareholder meeting. We identify environmental and social proposals following He et al. (2020).
<i>ROA</i>	Net income scaled by total assets for the period ending immediately preceding the letter.
<i>S&P500</i>	Indicator set equal to one if the firm is a member of the S&P 500 index at the end of the fiscal period immediately preceding the letter, zero otherwise.
<i>Sales</i>	Log of sales for the quarter immediately preceding the letter.
<i>Segments</i>	Number of segments reported in Compustat. To reflect segment reporting under ASC 280, we include operating segments when populated, and business segments otherwise.
<i>Sensitive Industry</i>	Indicator equal to one if the firm is in a sensitive industry following Julio and Yook (2012), zero otherwise. This includes the following Fama-French 49 industries: Beer (4), Tobacco (5), Gold (27), Mining (28), Coal (29), Oil (30). We additionally designate firms in Transportation (41) and Banking (45).
<i>StdRet</i>	Standard deviation of daily returns over the 365 days prior to the BlackRock letter.
<i>SupportsDemocrats</i>	Indicator equal to one if more than 75% of the firm's political contributions go to Democrats in the fourth quarter of the year preceding the letter, zero otherwise.

Appendix 3

Similarity measures – simple example

We create both the *DisclosureSimilarity* and the *LobbySimilarity* measures using cosine similarity scores. This approach is commonly used in natural language processing, and is highlighted by Loughran and McDonald (2016) as being commonly used in accounting and finance. For example, Brown and Tucker (2011), Hoberg and Phillips (2018), Merkley (2014), and Dyer et al. (2017) each use cosine similarity scores in their respective studies of quarterly and annual reports.

Cosine similarity scores for any two texts are created by calculating the cosine of the angle between the two n -dimensional vectors, where n is the total number of unique words from the texts. These vectors contain the frequency of occurrence of each word in the respective texts. In our study, we create *DisclosureSimilarity* by comparing firms' 8-K disclosures to the preceding BlackRock letter.³¹ We first remove headers, punctuation, and English stop words from all

³¹ *LobbySimilarity* is calculated by comparing firms' lobbying disclosures (as reporting by Lobbyview.org) to the BlackRock letter.

texts and convert all words to lower case. We then use the scikit-learn count vectorizer package in Python to create vectors of word counts. Formally, *DisclosureSimilarity* for 8-K disclosures for firm i and the preceding BlackRock letter j is calculated as follows:

$$\cos(\theta) = \frac{V_i \cdot V_j}{\|V_i\| \|V_j\|}$$

where the numerator is the dot product of the two word vectors, and the denominator represents the length of the vectors. Because similarity scores are created using non-negative word counts, they range between zero and one and are increasing in similarity between the texts. If the two texts are completely non-overlapping, the vectors will be orthogonal and the cosine of the angle will be zero. If the texts contain the same words in similar proportions, the vectors will be oriented in the same direction in space. The angle between these two word vectors will approach zero, and the cosine of that angle will approach one.

Simple Illustrative Example

Assume there is one BlackRock letter and we are studying 8-K disclosures for two firms. The texts contain only the following sentences:

BlackRock letter text = Infrastructure, trade, and globalization are important.

Firm A's 8-K text = Net income was better than expected.

Firm B's 8-K text = The Company believes income is important. The Company also believes that infrastructure, trade, and globalization are important.

After we remove stop words, the 10 dimensions on which the texts can be measured are infrastructure, trade, globalization, important, net, income, better, expected, believes, and company. The word vectors for each text are represented below.

BlackRock = [1,1,1,1,0,0,0,0,0,0].

Firm A = [0,0,0,0,1,1,1,1,0,0].

Firm B = [1,1,1,2,0,1,0,0,2,2].

The cosine of the angle between the BlackRock vector and the Firm A vector (representing the similarity between the BlackRock letter and Firm A's disclosure) is 0, while the cosine of the angle between the BlackRock vector and the Firm B vector (representing the similarity between the BlackRock letter and Firm B's disclosure) is 0.625. While not directly relevant to the measures used in this study, the cosine similarity score for Firm A's and Firm B's disclosures is 0.125.

Appendix 4

Distribution of 8-K item numbers

Fig. 3 Panel A: Percentage of All 8-K Items

Table 11 Panel B: Percentage of Firm-Years, Pre- vs. Post-Period.

8-K Item	Pct of Firm-Years with 8-K Items			
	Pre-Period	Post-Period	Difference	
Item 9.01	0.772	0.778	0.006	
Item 2.02	0.386	0.480	0.094	***
Item 7.01	0.218	0.194	−0.024	***
Item 8.01	0.209	0.194	−0.015	***
Item 1.01	0.118	0.095	−0.022	***
Item 2.03	0.051	0.037	−0.014	***
Item 5.03	0.028	0.025	−0.003	
Item 5.07	0.024	0.021	−0.003	*
Item 2.01	0.017	0.013	−0.004	**
Item 3.02	0.012	0.013	0.001	
Other	0.027	0.021	−0.006	***

Note: Panel A of [Appendix 4](#) depicts the percentage of all 8-K items by 8-K item number in both the 90-day pre-period window and 30-day post-period window (each column adds up to one). Panel B tabulates the percentage of firms reporting each item number in the same pre- and post-period windows. Differences in means are tabulated with ***, **, and *, representing significance levels of 1%, 5%, and 10%, respectively. We report the 10 most frequently occurring item numbers. The remaining items are grouped in the other category. A complete list of item descriptions can be found here: <https://www.sec.gov/fast-answers/answersform8khtm.html>

Appendix 5

Example disclosures

The Coca-Cola Company, 8-K, February 9, 2017.

<https://www.sec.gov/Archives/edgar/data/21344/000002134417000003/0000021344-17-000003-index.htm>

Advancing sustainable business practices: We continued to advance sustainability investments around the world. During the quarter, we announced a combined pledge with the U.S. Agency for International Development (USAID) of up to \$22 million to support the next five-year phase of USAID's Water and Development Alliance (WADA). This initiative aims to provide safe water access and sanitation to communities in developing nations in Africa, the Middle East, Asia, and Latin America. During the first phase of this partnership from 2005 to 2017, 35 projects were implemented in 30 different countries. By the end of 2015, these projects had yielded improved water access to over 600,000 people and improved sanitation for over 250,000 people.

Honeywell International Inc., 8-K, January 26, 2018.

<https://www.sec.gov/Archives/edgar/data/773840/000093041318000180/0000930413-18-000180-index.htm>

Our strong performance in 2017, together with the enactment of new U.S. tax legislation, has enabled us to increase our 401(k) match in the U.S. This is a sustained,

annual benefit that will provide a more secure retirement for our employees. We believe that enhancing this benefit is extremely valuable and important to our employees over the long term, Adamczyk concluded.

The Company recorded a provisional charge of \$3.8 billion in the fourth quarter to reflect the estimated impacts of the U.S. Tax Cuts and Jobs Act of 2017, including the U.S. tax on deemed repatriated earnings of non-U.S. subsidiaries, the writedown of net U.S. deferred tax liabilities at lower enacted corporate tax rates, and the effects of the implementation of the territorial tax system. The impacts of the legislation may differ from this estimate, possibly materially (and the amount of the provisional charge may accordingly be adjusted over the course of 2018), due to changes in interpretations and assumptions the Company has made, guidance that may be issued, and actions the Company may take as a result of the tax legislation. Honeywell has been a strong supporter of this legislation and is encouraged by the significantly enhanced capital mobility, lower U.S. corporate income tax rates, and more appealing investment environment in the U.S., which the legislation enables.

W.R. Grace & Co. 8-K, February 7, 2019.

<https://www.sec.gov/Archives/edgar/data/1045309/000104530919000002/0001045309-19-000002-index.htm>

Delivering on Our Strategic Initiatives: I'm pleased with our strong 2018 performance. Our team delivered double-digit sales and earnings growth, and significantly improved our ability to consistently deliver profitable growth, said Hudson La Force, Grace's President and Chief Executive Officer. Our recent investments to accelerate growth and extend our competitive advantages are producing results. I'm upbeat about 2019 and expect another year of solid demand for our high-value technologies with expanding margins and double-digit Adjusted EPS growth.

Grace's strategic framework for profitable growth includes four elements:

- *Invest to accelerate growth and extend our competitive advantages*
- *Invest in great people to strengthen our high-performance culture*
- *Execute the Grace Value Model to drive operating excellence*
- *Acquire to build our technology and manufacturing capabilities for our customers.*

Costco Wholesale Corp., 10-K Risk Factor Disclosure, 2017.

<https://www.sec.gov/Archives/edgar/data/909832/000090983218000013/0000909832-18-000013-index.htm>

Our members are increasingly using mobile phones, tablets, computers, and other devices to shop and to interact with us through social media. We are making technology investments in our websites and mobile applications. If we are unable to make, improve, or develop relevant member-facing technology in a timely manner, our ability to compete and our results of operations could be adversely affected.

Note: Appendix 5 contains representative excerpts from three sample firms' 8-Ks and one sample firm's 10-K risk factor disclosure. Each of these disclosures reflects an increase in similarity to the corresponding BlackRock letter.

Appendix 6

Table 12 Firm descriptives by *PrivateEngagement*

Variable	<i>PrivateEngagement</i> =0		<i>PrivateEngagement</i> =1			
	N	Mean	N	Mean	Difference	
<i>ΔDisclosureSimilarity</i>	5,009	-0.037	2,891	-0.046	-0.009	
<i>BlackRockBH</i>	5,009	0.520	2,891	0.832	0.312	***
<i>BlackRock%</i>	5,009	4.844	2,891	6.637	1.793	***
<i>StateStreetBH</i>	5,009	0.095	2,891	0.264	0.169	***
<i>VanguardBH</i>	5,009	0.437	2,891	0.790	0.353	***
<i>StateStreet%</i>	5,009	4.611	2,891	7.006	2.395	***
<i>Vanguard%</i>	5,009	4.742	2,891	6.814	2.072	***
<i>NumberBH</i>	5,009	3.082	2,891	3.576	0.493	
<i>IO</i>	5,009	0.700	2,891	0.876	0.176	***
<i>MVE</i>	5,009	6.420	2,891	8.204	1.785	***
<i>MTB</i>	5,009	3.094	2,891	3.636	0.542	*
<i>Leverage</i>	5,009	0.602	2,891	0.617	0.015	***
<i>AnalystFollow</i>	5,009	0.798	2,891	0.909	0.111	***
<i>S&P500</i>	5,009	0.057	2,891	0.328	0.271	***
<i>ROA</i>	5,009	-0.015	2,891	0.000	0.015	***
<i>Loss</i>	5,009	0.363	2,891	0.283	-0.080	***
<i>AbnRet</i>	5,009	-0.015	2,891	0.011	0.026	
<i>StdRet</i>	5,009	0.028	2,891	0.022	-0.006	***
<i>Lawsuit</i>	5,009	0.034	2,891	0.044	0.010	***

Note: Appendix 6 contains descriptive statistics for key variables from Table 4 split on whether BlackRock privately engages with firms using two *PrivateEngagement* variable calculations. *PrivateEngagement* is defined as an indicator equal to one if BlackRock engages with the firm in any of its disclosed fiscal years (2018, 2019, 2020), zero otherwise. ***, **, and * represent significance levels of 1%, 5%, and 10%, respectively, for differences in means

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Affiliations

Andrea Pawliczek¹ · A. Nicole Skinner² · Laura A. Wellman³

Andrea Pawliczek
andrea.pawliczek@colorado.edu

A. Nicole Skinner
nikki.skinner@uga.edu

¹ Leeds School of Business, University of Colorado at Boulder, 419 UCB, 995 Regent Drive, Boulder, CO 80305, USA

² University of Georgia, Athens, GA 30602, USA

³ Smeal College of Business, Pennsylvania State University, State College, PA, USA