

# Employee Responses to CEO Activism

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## Abstract

We examine employee responses to CEO activism, the increasingly common practice of CEOs taking public stances on socio-political issues. CEO activism may bolster employees' identification with their organizations and strengthen shared beliefs among employees. Alternatively, CEO activism may alienate employees if CEO stances contrast with employees' ideologies. We find that employee satisfaction is higher when CEOs engage in activism that is aligned with employees' ideologies. Furthermore, firms with CEO activism experience a net inflow of productive, ideologically-aligned inventors, which contributes to increased firm-level innovation. The improvements in employee satisfaction and innovation constitute an important channel that connects aligned CEO activism to increased firm value.

*Keywords:* CEO activism, employee satisfaction, innovation, human capital, corporate culture, diversity washing.

*JEL Classification Numbers:* G34

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## 1. Introduction

CEO activism—the practice of CEOs taking public stances on environmental, social, and political issues, such as climate change, LGBT rights, and immigration—is an increasingly common behavior of many corporate executives (Larcker, Miles, Tayan, and Wright-Violich, 2018; Chatterji and Toffel, 2019; Mkrtchyan, Sandvik, and Zhu, 2023). For example, Starbucks CEO Howard Schultz has been outspoken on gay marriage, and Under Armour CEO Kevin Plank has supported climate change initiatives and has publicly opposed President Trump’s withdrawal from the Paris Accord. While CEOs have likely always had personal views on important environmental, social, and political issues, their decision to take public stances on these issues is a recent phenomenon. The emerging literature on CEO activism has considered how investors and customers respond to the activist behaviors of executives,<sup>1</sup> but relatively little is known about the responses of employees to these public activist stances. Since human capital is seen as the primary driver of productivity in the modern economy (e.g., Zingales, 2000; Huselid, Jackson, and Schuler, 1997; Campbell, Coff, and Kryscynski, 2012), understanding employee reactions to the behaviors of corporate leaders is of utmost importance. We fill this gap in the literature by providing the first large-scale empirical evidence on employee responses to CEO activism.

Recent theoretical work suggests that CEO activism has the potential to impact the satisfaction and behaviors of both incumbent and prospective employees. Building on social identity and social influence theories, Hambrick and Wowak (2021) argue that CEO activism can lead to a greater alignment of values between employees and the organization. They suggest that CEOs’ public stances can drive the attraction-selection-attrition process, through which incumbent (prospective) employees who share the CEO’s espoused positions will be easier to retain (hire), and those who do not agree with the CEO’s activist stance will be more likely to leave (not accept employment with) the organization. This process can contribute to a more coherent and homogenous corporate culture and increased organizational identification among employees. Importantly, a more coherent culture and stronger employee identification can lead to reduced moral hazard and to increased employee satisfaction, productivity, and retention (Dutton, Dukerich, and Harquail, 1994; Lee, Lee, and Lum, 2008; Guiso, Sapienza, and Zingales, 2015; Garlappi, Giammarino, and Lazrak, 2017). In addition, Melloni, Pataconi, and Vikander (2019) develop a model wherein CEOs

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<sup>1</sup> See, for example, Bhagwat, Warren, Beck, and Watson (2020), Hou and Poliquin (2023), Gangopadhyay and Homroy (2023), and Mkrtchyan, Sandvik, and Zhu (2023).



engage in activism to increase employee satisfaction. In their model, the increase in satisfaction comes from the non-pecuniary benefits that an employee receives from working for a CEO with ideological leanings that align with their own.<sup>2</sup>

These theories also imply that if CEOs take activist stances that *do not* accord with the consensus views of the firm's employees, the employee response to CEO activism could be negative, as it may lead to workplace tensions and reduced morale. For example, Chip Bergh, CEO of Levi Strauss & Co., received hate mail and threats from his own employees in response to his stance against gun violence (Noguchi, 2018). Some reasons why CEOs may take activist stances that do not align with the views of their employees are: strong personal convictions, using CEO activism for personal benefits (e.g., building social capital among like-minded peers, attracting attention, or gaining favor from politicians), or simply mis-calibrating the alignment of their beliefs with those of employees. It is also possible that employees may not be aware of or care about CEO activism, in which case they may not respond in any significant way. Indeed, a survey of 1,027 participants conducted by Weber Shandwick and KRC Research (2016) indicates that CEO activism may elicit a wide range of employee reactions, as 26% of workers said they would feel more loyalty to their company if their CEO engaged in activism, 19% said their loyalty would erode, 33% reported they would not be affected, and 22% were undecided. Given that it is not obvious *ex ante* which type of employee response dominates, whether employees collectively respond to CEO activism positively, negatively, or neutrally presents an important empirical question.

We shed light on this question by using a detailed dataset of instances of CEO activism among CEOs of S&P 500 companies, which we hand-collect from news articles and Twitter accounts. In line with prior research on CEO activism, most of the events in our sample capture liberally leaning stances. We combine the CEO activism dataset with data on employee satisfaction from Glassdoor reviews. Glassdoor reviews provide a natural starting point to measure employee responses to CEO activism, as they represent some of the most accessible and candid measures of employees' perceptions of their firms (Green, Huang, Wen, and Zhou, 2019; Liu, Markridis, Ouimet, and Simintzi, 2023). In addition, Glassdoor estimates that 70% of job-seekers use online reviews to guide their career choices.

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<sup>2</sup> In addition, survey evidence suggests that younger employees, like Millennials and Gen Zers, want their CEOs to take a stand on issues that are important to them because they feel these "brand stands" have true societal purpose and impact (Carufel, 2018). Recent examples of CEO activism spurred by employees include: i) the CEO of Delta Airlines expressing opposition to legislation that limited voting rights (Gelles, 2021); and ii) the CEO of Disney denouncing Florida's controversial anti-LGBTQ laws (e.g., Fung, 2022).



We begin our analysis by examining the relationship between CEO activism and the overall employee satisfaction rating that Glassdoor contributors give to their firms. We estimate a positive relation between the number of times CEOs engage in activism in a year and the overall firm ratings posted by employees on Glassdoor in the next year. Importantly, employees respond positively only to CEO activism that is aligned with their ideological views (hereafter “aligned CEO activism”), whereas activism that does not accord with the employees’ views (hereafter “misaligned CEO activism”) is greeted with an insignificant response. We note that the positive relation between aligned CEO activism and employee satisfaction is not due to baseline differences in firm performance, CSR profiles, corporate culture, wages/employee benefits, CEO visibility, or a host of other observable firm and CEO characteristics. This relation holds when we: i) focus on changes in CEO activism around CEO turnovers; ii) remove very vocal outlier CEOs; iii) use entropy balancing estimations; or iv) account for unobservable time-invariant differences between firms with and without activist CEOs. We also find no evidence of differential pre-trends in employee satisfaction between firms that engage in CEO activism for the first time and those that do not. Nevertheless, we acknowledge that the consistent positive relation between aligned CEO activism and employee satisfaction that we document may still be affected by an unobservable factor.

When we consider the subcategories that contribute to the positive relation between aligned CEO activism and employee satisfaction, we find that employees’ assessments of the top managers of the firm and the firm’s overall culture drive the effect. Firms with aligned CEO activism also have less dispersion in their employee satisfaction ratings, indicating a greater consensus in satisfaction among employees. The positive relation between aligned CEO activism and employee satisfaction is present for workers at all levels within the firm’s hierarchy—senior managers, middle managers, and non-managers. Furthermore, this relation holds in both the earlier and later sub-periods of the sample, with a stronger effect during earlier years when CEO activism was not as common. Yet, not all CEO activist stances are associated with a positive employee response. We find that only stances on issues that are related to the workplace, such as diversity and pay equality, generate a positive employee reaction, whereas CEOs’ stances on topics related to politics, the environment, or other social issues result in an insignificant response. These findings are consistent with survey evidence that shows that people are more open to CEO activism on issues that directly impact their business and employees (Larcker and Tayan, 2018). Our further analysis shows that whereas employees respond positively to activism advertising current or future company practices related



to diversity and pay equality, they also view favorably more broad advocacy statements on these topics. We also document that employees respond positively to activism regardless of whether the motivation behind the decision to speak out is likely to be driven by the CEO's personal beliefs or by the firm's overall strategy as set by the board of directors or shareholders.

We next consider whether CEO activism may enhance a firm's reputation in the labor market and improve employee hiring outcomes. Recent studies suggest that prospective workers value non-pecuniary job characteristics, such as the culture within the firm, the firm's engagement in CSR, and the firm's level of workplace diversity (Choi, Pacelli, Rennekamp and Tomar, 2023; Pacelli, Shi, and Zou, 2022; Mas and Pallais, 2017; Cen, Qiu, and Wang, 2022; LaViers and Sandvik, 2023). Yet, a firm's culture, values, and diversity can be quite difficult for prospective workers to observe. For instance, survey evidence suggests that only 37% of employees are aware of their own company's social responsibility initiatives and that external stakeholders' awareness is even lower, only 17% (Bhattacharya and Sen, 2004; Bhattacharya, Sen, and Korschun, 2006, 2008).

CEO activism—wherein CEOs can publicly communicate their cultural values and norms—may help reduce the information asymmetry and search costs that job-seekers bear in learning about an organization's less observable characteristics. For instance, a CEO's public statement on the importance of diversity may signal a cultural value of fostering diversity within the firm, and a CEO's statement about actively reducing gender pay-gaps may signal a cultural norm of pay fairness within the firm. To examine whether CEO activism may help attract talent, we focus on the relocation decisions of a highly desirable group of employees—inventors. We focus on inventors because: i) they are major contributors to the overall human capital within the firm; ii) their labor mobility allows them to express their true preferences and more freely sort into the firms they prefer; iii) we are able to track their employment history using patent filing data; and iv) they are likely to value the non-pecuniary aspects of their jobs, as documented by prior studies (Gao and Zhang, 2017; Rice and Shiller, 2023). We posit that our analyses of inventors' relocations can, at least partially, generalize across many different types of employees.

We find that firms with more instances of liberally-leaning CEO activism experience greater net inflows of Democrat inventors. We also show that Republican inventors are more likely to depart following liberally-leaning activism. Yet, the relationship between the net inflows of the Republican inventors and liberally-leaning activism is insignificant. These results are consistent with Hambrick and Wowak's (2021)



argument that CEO activism can drive the attraction-selection-attrition process. Our findings also complement studies that examine consumer responses to CEO activism, which show that CEO activism positively impacts consumers who are already aligned with CEO stances without significantly affecting consumers with opposing views (Gangopadhyay and Homroy, 2023; Chatterji and Toffel, 2019).

We further document that the inventors who join firms with activist CEOs are more productive relative to the incumbent inventors and the inventors who leave after activist events. Moreover, the productivity of these inventors is higher than the productivity of inventors who join firms without activist CEOs. Importantly, we find that the positive effects of aligned CEO activism on recruitment and employee satisfaction appear to translate into improved firm-level innovation outcomes, as we document that firms with more instances of aligned CEO activism have higher innovation quantity (total number of patents, number of patents per employee) and innovation quality (citations and originality). These results suggest that the labor market benefits of aligned CEO activism (e.g., hiring more talented inventors and greater innovation) likely outweigh the costs of losing some productive, ideologically-misaligned inventors.

We also assess whether CEO activism sends credible signals to prospective employees about the business practices of the firm. To do this, we analyze whether the activist stances taken by CEOs align with firms' subsequent hiring and compensation practices. We find that firms with more instances of pro-diversity and pro-pay equality CEO activism hire a greater percentage of underrepresented (i.e., non-white and/or female) inventors and have smaller gender pay gaps, respectively. These results suggest that CEO activism appears to be a reliable signal of the firm's actual business practices, as CEOs that engage in activism do "walk the talk."

We conclude our analysis by examining whether the observed increases in employee satisfaction and firm-level innovation contribute to the positive relation between CEO activism and firm value documented by earlier studies on CEO activism.<sup>3</sup> To test this possibility, we conduct a path analysis, which allows us to quantify aligned CEO activism's direct effect on firm value, as well as its indirect effects through the employee satisfaction and innovation channels. We find significant indirect effects of aligned CEO activism on Tobin's Q through the employee satisfaction and innovation channels. Combined, these two channels can explain about 17% of aligned CEO activism's contribution to firm valuation. These

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<sup>3</sup> Prior studies estimate positive announcement returns to CEO activism events and a positive relation between CEO activism events and Tobin's Q and ROA (Mkrtychyan et al., 2023; Gangopadhyay and Homroy, 2023).



findings complement prior studies that focus on investor and customer responses to CEO activism, by showing that employee responses likely have a significant impact on firm value as well.

Our paper contributes to the relatively new literature on CEO activism. Most of the papers in the literature focus on how investors and customers respond to CEO activism.<sup>4</sup> The only two studies to consider employee responses to CEO activism are Burbano (2021) and Wowak, Busenbark, and Hambrick (2022), which both examine employees' responses to their employer's stance on gender identity-driven bathroom access. Burbano (2021) shows in an experimental setting that online labor market workers decrease their effort when their views are misaligned with the views of the company that they are doing work for, but they do not alter their effort when their views are aligned with the company's views. In contrast, Wowak et al. (2022) estimate a positive relation between CEOs opposing North Carolina's bathroom access law and employee organizational commitment among firms with liberally leaning employees. We differ from Burbano (2021) and Wowak et al. (2022), as we use a broad sample of events over a long period of time, rather than focusing on a single social issue, which increases the generalizability of our findings and allows us to examine the heterogeneity of employee responses to CEO activism on different topics. Our results show that the collective employee response to aligned CEO activism is positive. However, the positive response is only present when CEOs take stances on topics directly related to the workplace, such as diversity and pay equality.

Our findings are also connected to the growing literature on corporate culture (e.g., Graham, Grennan, Harvey, Rajgopal, 2016; 2022). Whereas the communication of corporate values and beliefs is often unobservable to a researcher, as it usually takes place through internal communication channels (e.g., email, intranet, company newsletters, network messages, and team meetings), CEO activism represents visible, high-profile, and easy-to-identify behaviors in which CEOs communicate to employees and other stakeholders where they stand on social, environmental, and political issues. Our finding of a positive relation between aligned CEO activism and employee ratings of corporate culture suggests that CEO activism can be an effective means of shaping and reinforcing the culture within the organization. Furthermore, our paper suggests that the non-financial benefits of CEO activism—e.g., “sharpened”

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<sup>4</sup> See, for example, Chatterji and Toffel (2019), Korschun, Rafieian, Aggarwal, and Swain (2019), Bhagwat et al. (2020), Gangopadhyay and Homroy (2023), Bedendo and Siming (2021), Durney, Johnson, Sinha, and Young (2020), Hou and Poliquin (2023), Mkrtchyan et al. (2023), Jin, Merkley, Sharma, and Ton (2022).



corporate culture and increased employer-employee value alignment—are associated with several advantageous outcomes, such as an increased ability to attract high-skilled inventors and greater innovation.

Lastly, our paper adds to the literature on whether firms publicly misrepresent their social and environmental activities (Baker, Larcker, McClure, Saraph, and Watts, 2023; Bailey, Glaeser, Omartian, and Raghunandan, 2022; Raghunandan and Rajgopal, 2021). Though CEO activism may be viewed as a form of voluntary and often unverifiable disclosure, our evidence shows that firms with activist CEOs exhibit behaviors that are consistent with their pro-diversity and pro-pay equality activist stances, as they hire more underrepresented employees and have smaller gender pay gaps.

## **2. Sample and descriptive statistics**

Our sample includes all firms that were part of the S&P 500 at any point from 2011 to 2019, excluding utilities and financials.<sup>5</sup> We obtain annual accounting and financial information from Compustat, stock return data from CRSP, and compensation data from Execucomp. We identify the characteristics of the CEOs of these firms using data from BoardEx, which provides information on the CEO's age and tenure. The data availability requirements led to a final sample of 3,570 firm-year observations for 457 firms and 793 unique CEOs. We present the descriptive statistics of firm characteristics in Table 1. The median firm in our sample has book assets of \$9.43 billion and Tobin's Q (i.e., market-to-book ratio) of 1.98.

### **2.1. CEO activism data**

We identify instances of CEO activism by relying on the sociopolitical topics proposed by Larcker et al. (2018) and Bhagwat et al. (2020), and we present the list of our keywords in Panel A of Table 2. We construct our measure of CEO activism using news articles from Google News search and data from Twitter. Appendix A provides a detailed description of our data collection and data cleaning process, as well as the approach used to categorize each event's ideological leaning. Our sample contains 1,402 unique CEO activism events.

In terms of activism topics, 32% of our events are related to diversity, 35% of the sample comprise stances related to the environment, 7% is related to politics, and 26% captures public stances on other social issues. Panel B of Table 2 presents several examples of CEO activism on each of these topics. Most of the activism events have a liberal (74%) or neutral (25%) ideological leaning, with very few (1%) capturing a

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<sup>5</sup> Our empirical results are similar if we include utilities and financials.



conservative ideological stance. The ideological distribution of the events in our sample aligns with other studies (e.g., Bhagwat et al., 2020; Gangopadhyay and Homroy, 2023).

Larcker et al. (2018) state that the perception of widespread CEO activism might be driven by a few vocal outliers. Indeed, 76% of CEOs in our sample never take public stances on activist topics. Furthermore, among activist CEOs the distribution of CEO activism events is skewed, as shown in Panel C of Table 2. For instance, 2.6% of activist CEOs engage in 30 or more activism events. These highly vocal CEOs include: Tim Cook (Apple) with 134 activist events, Mark Zuckerberg (Facebook) with 76 activist events, Satya Nadella (Microsoft) with 46 activist events, Jeff Bezos (Amazon) with 33 activist events, and Kevin Johnson (Starbucks) with 30 activist events. Yet, we note that our sample also contains a fair number of non-outlier activist CEOs. For instance, 37.9% of activist CEOs engage in 2–5 activist events, and 35.8% engage in 6–29 activist events. We discuss the robustness of our results when excluding outlier CEOs (those that engage in 30 or more activism events) in Section 3.3.2.

In Panel D of Table 2, we split our sample into three equal periods and report each period's average proportion of firms with activism events. The data in Column 1 shows that the average percentage of firms with at least one activism event has increased from 2.1% for the period 2011–2013 to 25.8% for the latter part of our sample, 2017–2019. This data suggests that although all CEOs likely have views on environmental, social, and political issues, it is only recently that some of them have chosen to take public stances on these issues. The uptick in the number of S&P 500 companies with CEOs who engage in activism is consistent with other studies documenting an upward trend in CEO activism.<sup>6</sup> In Column 2, we tabulate the average number of CEOs engaging in activism during each period and observe that the average number of activist CEOs increased from nine during the first three years of our sample to 97 during the last three years of our sample. We observe similar patterns if we exclude activism events by outlier CEOs (Columns 3 and 4).

## 2.2. Glassdoor data

We collect data on employee perceptions of their employers from Glassdoor.com, which is the largest website for employee reviews, where users have posted over 115 million reviews. The platform

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<sup>6</sup> For instance, 64% of the activism events in Gangopadhyay and Homroy (2023) occur over the period 2017–2019, while only 36% of the activism events take place between 2014 and 2016. Similarly, Mkrtchyan et al. (2023) show that the proportion of firms with activism events increased from 0.98% in 2011 to 37.53% in 2019.



allows current and former employees to anonymously review their employers across several dimensions on a scale from 1 (the lowest rating) to 5 (the highest rating). In addition, reviewers can post free-response comments, as well as the “pros” and “cons” of working for the company.<sup>7</sup> We find that contributors discuss activist topics in all three free-response sections and that 15% of the Glassdoor reviews mention at least one of our keywords. For example, in 2018 an Apple employee expressed dissatisfaction with how liberal their work environment was, saying, “Managers and coworkers [are] always making negative comments about [the] President and conservatives. Even Tim Cook sends company-wide emails about him trying to convince trump to change his mind on certain topics.” Appendix B lists other examples of free-response comments posted by Glassdoor contributors.

As can be seen from Table 1, the average overall Glassdoor ratings is 3.34, whereas the average top management and culture ratings are 2.92 and 3.30, respectively. The average rating dispersion is 1.18. Table 1 further shows that there are, on average, 279 employee reviews per firm-year for the overall company ratings, and 243 (262) employee reviews per firm-year for the management (culture) rating. This suggests that, on average, there are enough Glassdoor reviews per firm-year to calculate a reliable measure of employee satisfaction. However, we note that the variation in the number of reviews is quite large. The correlation between the number of reviews and the average overall ratings is 0.07 ( $p$ -value  $<0.01$ ), suggesting a small but positive correlation between the number of reviews and overall company ratings. Similarly, the correlation between the number of reviews and ratings dispersion is only -0.05 ( $p$ -value  $<0.01$ ). The coefficient of correlation between ratings dispersion and the average overall ratings is -0.29 ( $p$ -value  $<0.01$ ) (untabulated).

In Panel A of Table 3, we report summary statistics for the overall ratings given to companies by their employees, separately for firms that never engage in CEO activism and for those that do. For firms

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<sup>7</sup> A potential concern about online review data is response bias and anonymity. For instance, managers may encourage employees to write positive reviews on Glassdoor (Gong and Thomas, 2023) or employees might hesitate to post negative reviews out of fear of retaliation. To address these issues and ensure review quality, Glassdoor has several policies in place. For example, Glassdoor follows audit procedures to find and remove reviews that are likely to have been prompted by employers (Huang, Li, and Markov, 2020). In addition, Glassdoor’s “give to get” approach, which requires users to contribute to the site before accessing information submitted by others, makes individuals with moderate sentiment more likely to contribute reviews than they otherwise would be, reducing strong positive or negative biases in the data (Marinescu, Klein, Chamberlain, and Smart, 2021). Furthermore, Sockin and Sojourner (2023) suggest that anonymity concerns are even less of an issue among large companies, such as the S&P 500 firms that we study, and that respondents can leave certain details blank, such as their title or location, to enhance their anonymity.



with activist CEOs, we report ratings prior to the first activism event and those subsequent to the first activism event. The average employee ratings for firms that never engage in CEO activism is 3.25. For firms that do engage in CEO activism, the average ratings are 3.42 and 3.59 during pre- and post-activism periods, respectively. Another important takeaway from these descriptive statistics is that the distribution of Glassdoor ratings is substantial, indicating that meaningful quantities of positive, negative, and neutral reviews are left by Glassdoor contributors.

In Panel B of Table 3, we analyze Glassdoor ratings for 30 days before and 30 days after CEO activism events. We observe that the average and median employee ratings are slightly higher following activism events. The difference between pre- and post-activism periods is even greater if we restrict our sample to more vivid activism events, i.e., those that stand out to a greater degree and are more likely to elicit employee attention.<sup>8</sup>

### **3. Employee satisfaction**

In this section, we examine the relationship between CEO activism and employee satisfaction. We also explore several sources of cross-sectional variation in employee responses, and we address the endogeneity concerns that might affect estimates of the relation between CEO activism and employee satisfaction.

#### **3.1. Baseline analysis**

Recent theoretical work proposes that employees pay close attention to the signals sent from top management that can help the employees gauge their goodness-of-fit within the organization, which in turn influences their level of job satisfaction. CEO activism can serve as a signal that employees could use to assess their fit within the firm. If the CEO's activist stance resonates with employees' own values, the organizational identification among employees will likely improve, resulting in higher employee satisfaction. In contrast, if the activist stances taken by the CEO clash with employees' ideologies, the workers will likely experience diminished identification with the firm, resulting in lower employee satisfaction (Bermiss and McDonald, 2018; Hambrick and Wowak, 2021; Melloni et al., 2019). To test these theoretical predictions, we construct time-varying proxies of employee satisfaction using Glassdoor

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<sup>8</sup> As detailed in Appendix A, each activism event is classified by research assistants to capture the degree to which the statements/actions stand out on a scale from one (innocuous) to three (highly vivid). Activism events are considered vivid if their average vividness score is above 2.



ratings. The dependent variable in Column 1 of Table 4 is the average overall rating for a particular firm in a given year. The independent variable of interest, *# of activism events*, is the annual count of news articles and tweets that capture unique CEO activism events in the year prior to the year during which an employee review was posted on Glassdoor. This timing lag decision reduces reverse causality concerns, wherein CEOs may use concurrent Glassdoor reviews to determine whether they should take a stance on a particular issue, and it allows for the time required for the attraction-selection-attrition process to take place.<sup>9</sup>

We include several firm characteristics as controls in the regression specification, such as firm size, stock return, ROA, asset tangibility, leverage, R&D/Sales, stock volatility, Herfindahl-Hirschman index, sales growth, cash holdings, board independence, and board size. To account for the possibility that firms with CEO activism treat their employees differently than do firms without CEO activism, we include several additional variables. First, we include the firm's CSR index score, obtained from KLD Research & Analytics, which rates companies on different aspects, such as community, diversity, employee, environment, humanitarian, and product. Second, we control for a firm's inclusion on Fortune's list of "100 Best Companies to Work For," which covers aspects related to job satisfaction, fairness, and management's credibility. Third, we add an employee-related negative event indicator, which equals one if, in a given year, a firm experiences either: i) a labor-related class-action lawsuit; ii) a labor-related violation; or iii) an employee strike, zero otherwise. Fourth, to proxy for employee benefits, we add SG&A expense scaled by the number of employees in the firm, as programs related to work/life balance, childcare, and employee health and safety often fall under SG&A expense. Lastly, we control for the level of pay among rank-and-file employees. To do this, we use firms' disclosed median employee pay values from their 2017–2019 fiscal year-end proxy statements, which we obtain from the University of Alabama's public data library.<sup>10</sup> For each firm, we create a high-paying firm indicator that equals one if its median employee pay value is above the sample median value in two of the three years.

To delineate between CEO activism and a firm's pre-existing corporate culture, we add into the regression specification: i) a metric that aggregates scores of the five corporate cultural values of

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<sup>9</sup> Our baseline specifications use a lagged measure of CEO activism, yet we recognize that employees can also react to CEO activism instantaneously, as suggested by Panel B of Table 3. To examine this possibility, we run an alternative regression of time  $t$  employee satisfaction ratings on time  $t$  CEO activism behavior, and find a positive effect (untabulated). This suggests that employee satisfaction is, at least partially, impacted soon after an instance of CEO activism occurs.

<sup>10</sup> We are limited to the period 2017–2019, as firms began disclosing the median employee pay only starting from 2017. See the website at <https://guides.lib.ua.edu/c.php?g=879087&p=9004058>.



innovation, integrity, quality, respect, and teamwork, which is constructed following Li, Mai, Shen, and Yan (2020); and ii) a measure of ideological alignment between the CEO and employees, which is an indicator variable that equals one if CEOs and employees are either both Democrat leaning or both Republican leaning.<sup>11</sup> Additionally, to ensure that our results are not simply capturing a reaction to the visibility/publicity of the firm's CEO, we include CEO celebrity status (which is measured as the number of non-activism news articles and tweets featuring the company or CEO during a given year), and we control for several other CEO characteristics, such as CEO/Chairman duality, CEO tenure, CEO narcissism, CEO gender, CEO age, CEO's ideological leaning, CEO founder status, and CEO stock ownership. All regressions include Fama-French 48 industry dummies and year fixed effects to capture time trends and differences across industries. We cluster standard errors at the firm level to account for multiple observations per firm. Control variables are measured at the year-end prior to the review date, and we use these lagged control variables in all our subsequent tests. Lastly, to account for the positive correlation between the number of reviews and the average ratings, we include the number of reviews as a contemporaneous control in our employee satisfaction tests. All variable definitions are in Appendix C.

Column 1 of Table 4 shows that the coefficient on *# of activism events* is positive and significant at the 1% level, suggesting that CEO activism is associated with higher overall employee satisfaction. The coefficient of 0.015 represents about 3% of the sample standard deviation, suggesting a modest, but positive relation between CEO activism and employee satisfaction. The positive relation between CEO activism and Glassdoor ratings is robust to several alternative specifications, such as: i) the inclusion of state fixed effects to absorb time invariant characteristics within a state, which addresses some potential problems caused by

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<sup>11</sup> To capture employee ideology, we construct the weighted average democratic leaning of the states in which the firm operates based on the county of the firm's headquarters and state-level employment data from Infogroup. See Appendix C for details. We proxy for a CEO's ideological leaning based on their political contributions, which we hand-collect from the Federal Election Committee (FEC) website. During our sample period, 29% of CEOs make at least one political contribution. Sixty-one percent of CEOs whose political contributions we can identify from the FEC data donate more to Republicans than to Democrats. If no campaign contributions are found for the CEO, *CEO democratic leaning* is set to 0.5, which indicates political neutrality and corresponds to a CEO who has given the same amount to Republicans and Democrats (e.g., Hong and Kostovetsky, 2012; Di Giuli and Kostoevsky, 2014; Hutton, Jiang, and Kumar, 2015). In constructing the *CEO-employee alignment* variable, we require CEOs and employees to have democratic leaning values either both above or both below 0.5 in order for them to be classified as aligned. Hence, the *CEO-employee alignment* variable takes the value of zero for observations wherein *CEO democratic leaning* is set to 0.5, which contributes to the average of only 0.12 for *CEO-employee alignment* variable (See Table 1). Our results are robust if, for the construction of the *CEO-employee alignment* variable, we classify CEOs without political contributions either as Democrat or as Republican. The mean of *CEO-employee alignment* variable is 0.69 (0.28) if CEOs without political contributions are classified as Democrat (Republican) (untabulated).



omitted variable bias; ii) the inclusion of the Corporate Equity Index scores given to each firm by the Human Rights Campaign (HRC), which further controls for the level of diversity, equity, and inclusion within the firm;<sup>12</sup> iii) the inclusion of lagged Glassdoor ratings, which further attenuates reverse causality concerns; iv) the inclusion of a control for “abnormal” 5-star reviews to account for potential review management (Gong and Thomas, 2023); v) dropping firm-years with overall ratings of 4.5 and above; vi) omitting high-paying firms; vii) restricting employee reviews to only those that mention at least one of our keywords; and viii) the inclusion of an interaction of industry and year fixed effects. We further discuss the robustness of our results in Section 3.3.

The positive relationship between CEO activism and employee satisfaction implies that CEOs are not likely to engage in activism that is misaligned with the ideological leanings of the firm’s employees, which is consistent with Mkrtchyan et al. (2023), who show that CEOs are most likely to engage in activism when they have strong ideological alignment with the majority of their stakeholders, including their employees. Yet, we note that the *# of activism events* variable, by construction, treats all events equally, regardless of whether they are aligned or misaligned with employees’ views. To overcome this issue, we leverage data on the location of employees who leave Glassdoor reviews and match the information on reviewers’ location with state-level election outcomes data to estimate employees’ likely ideological tilt. We also decompose our *# of activism events* variable into *# of activism events–liberal*, *# of activism events–neutral*, and *# of activism events–conservative*, which capture activism events with liberal, neutral, and conservative leanings, respectively. In Columns 2 and 3, we regress these decomposed measures of activism on the average overall rating given by employees located in Democrat and Republican states, respectively. The results show that only employees located in Democrat states respond positively to liberally-leaning activism, whereas employees located in Republican states do not respond in a significant way. This suggests that employees respond positively only when CEOs’ stances align with their views. We do not observe a positive relation between conservative activism and the average ratings left by employees located in Republican states, which is likely due to there being a small number of conservative events in our sample.

In Column 4, we take a different approach to assessing the alignment between a CEO’s activist stance and the ideological leanings of the firm’s employees. Specifically, we split *# of activism events* into

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<sup>12</sup> We do not include this control across all our tests, as the HRC’s Corporate Equality Index scores are not available for all firm-year observations, which significantly reduces our sample size.



*# of activism events–aligned* and *# of activism events–misaligned*, using each event’s ideological tilt and the ideological leanings of the company’s employees, which we estimate based on the state-level employment data from Infogroup and state-level election outcomes, as detailed in Appendix C. We classify events as aligned if: i) an activism event has a liberal leaning and the company’s workforce is democratically leaning, i.e., the aggregate employee base has democratic leaning equal to or above 0.5; or ii) an activism event has a conservative leaning and the company’s workforce is conservatively leaning, i.e., the aggregate employee base has democratic leaning below 0.5. The rest of the activism events are classified as misaligned. One advantage of this measure of alignment is that it captures the views of the overall workforce, regardless of whether they leave a Glassdoor review or not. The results in Column 4 show that the coefficient on *# of activism events–aligned* is significantly positive, whereas the coefficient on *# of activism events–misaligned* is insignificant. These results further confirm that CEO activism is only associated with higher employee satisfaction when the CEO statements are aligned with the ideological leanings of the firm’s employees.

### **3.2. Cross-sectional variation**

In this section, we analyze Glassdoor subcategories that may explain the overall company rating and examine whether the employee response varies by employee ranks, time periods, activism topic, and the likely forces driving the decision to engage in CEO activism.

#### **3.2.1. Rating components, employee ranks, and time periods**

In Columns 1 and 2 of Panel A of Table 5, we consider the subcategories that may contribute to the positive employee satisfaction effect by considering the relationship between aligned CEO activism and employees’ perceptions of the firm’s top management and culture, respectively. Columns 1 and 2 show that aligned CEO activism is associated with higher ratings of a company’s top management and employee perceptions of the firm’s culture, respectively. In Column 3, we analyze the relation between aligned CEO activism and ratings dispersion, measured as the standard deviation in the ratings given to a firm in a particular year. If aligned CEO activism is a means whereby corporate leaders can communicate and refine the culture within the firm, by attracting and retaining employees with shared beliefs, then we would expect to see a greater consensus in ratings following CEO activism. The results are consistent with this, as we find that firms with more instances of aligned CEO activism realize less dispersion in employee satisfaction.



We next examine how employee responses to aligned CEO activism vary across the following job categories: i) senior management; ii) middle management; and iii) non-management.<sup>13</sup> We find that employees across all three groups respond positively to aligned CEO activism, which highlights the generalizability of our findings—specifically, that the positive relation between aligned CEO activism and employee satisfaction is not limited to a single, niche group of employees (untabulated).

Our earlier results show that CEO activism became more prevalent in the second half of our sample period. Hence, we consider whether the effect of CEO activism is different in recent years, by estimating the effect of CEO activism on employee satisfaction separately for the first (2011–2014) and second (2015–2019) halves of the sample period. We find positive, statistically significant effects in both sub-samples, however, the effects in the first half of the sample period are significantly larger ( $p < 0.01$  for the difference in coefficients) (untabulated). This finding suggests that CEO activism may have been a stronger signal in the earlier years and that employee responses have become relatively more muted as CEO activism has become more common.

### 3.2.2. Topic heterogeneity

In Panel B of Table 5, we analyze whether employee responses vary by the topics on which CEOs speak out, as some topics could be more relevant to employees than others. In Column 1, we decompose our main measure of aligned CEO activism into *# of activism events–aligned (diversity/pay equality)*, which captures public stances that are more likely to be directly relevant to the workforce, i.e., activism on diversity and pay equality topics, and *# of activism events–aligned (non-diversity/pay equality)*, which captures the rest of activism events, i.e., public stances related to the environment, politics, and the rest of other social issues (e.g., gun, violence). We find that employees respond positively to activism related to diversity and pay equality, but not to activism related to the environment, politics, or other social issues. These results suggest that employees mainly respond to activism that is more directly relevant to the

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<sup>13</sup> Using job titles reported in Glassdoor, employees are assigned to senior management if their titles contain any of the following words: President (this will also capture Vice Presidents and Group/Division/Regional Presidents), CFO, COO, CTO, CIO, CMO, CAO (chief administrative officer), CRO (chief risk officer), General Counsel, General Manager, Group Manager, Chief Executive, or Chairman. Employees are assigned to middle management if their titles contain any of the following words: supervisor, team lead, shift manager, foreman, section chief, assistant manager, office manager, section lead, foreperson, line manager, coordinator, assistant director, associate director, administrative director, facilities manager, administrative officer, business administrator, or business manager. Everyone else is assigned to non-management.



workplace, which is consistent with prior survey evidence (Larcker and Tayan, 2018). Whereas our results do not show a significant employee response to other issues, i.e., the environment, politics, or other social issues, other stakeholders—such as investors and customers—have been found to have significant reactions to CEO activism that is related to the environment, withdrawing from President Trump’s business advisory council, voting reform laws, and gun control (Mkrtchyan et al., 2023; Bedendo and Siming, 2021; Jin et al., 2022; Hou and Poliquin, 2023).

We then delineate between two possible reasons why employees respond positively to diversity-related and pay equality-related activism. First, it is possible that these activist stances reflect firms’ current or future business policies/practices in these areas, which could directly impact employees. Second, employees might care about these topics more broadly, even if they are not directly impacted, and they may appreciate hearing their CEOs advocate for diversity and pay equality in general. To this end, we manually examine each work-related activism event and classify it as: *# of activism events–aligned (diversity/pay equality–firm-specific)* if it reflects the company’s current or future efforts related to increasing diversity and pay equality among their workforce (this group comprises 25% of the aligned activism events in the diversity/pay equality category); and *# of activism events–aligned (diversity/pay equality–general stance)* if it reflects general advocacy stances (75% of the aligned activism events in the diversity/pay equality category). We include these two new variables in Column 2 of Panel B of Table 5 and observe significantly positive coefficients on both: *# of activism events–aligned (diversity/pay equality–firm-specific)* and *# of activism events–aligned (diversity/pay equality–general stance)*. The coefficients are not statistically different from each other. These results suggest that employees respond positively not only to activism that reflects their firms’ internal practices related to diversity and pay equality, but also to broader stances on these topics.

Given that the employee responses to events that might benefit them directly could partially reflect a reaction to internal firm practices, rather than to CEO activism per se, we construct *# of activism events–aligned (general stance only)* and *# of activism events–misaligned (general stance only)*, which omit activism events that communicate internal practices from all activism categories (i.e., diversity, politics, environment, and other social). We note that events featuring internal firm practices represent only 13% (8%) of the aligned (misaligned) activism events. Column 3 shows that our results are robust to removing such events, which reduces the concern that CEO activism may simply be a reflection of corporate practices.



### 3.2.3. CEO preferences vs. firm strategy

Prior studies on CEO activism suggest that a CEO's public statements can be prompted not only by the CEO's personal convictions, but also by the firm's overall strategy as set by the board of directors and/or other stakeholders (Chatterjin and Toffel, 2018; Larcker et al., 2018; Bedendo and Siming, 2021). That is, CEOs may engage in activism as a strategic decision to inform shareholders, consumers, employees, and other stakeholders about the values and direction of the firm, rather than solely to manifest their own personal beliefs. To shed light on the forces driving our results, we use three approaches to delineate between personal activism and corporate (i.e., firm strategy-related) activism.

First, in Column 1 of Panel C of Table 5, we decompose our measure of aligned CEO activism into: *# of activism events–aligned (founder CEO)* and *# of activism events–aligned (non-founder CEO)*. Founder CEOs are likely to have much more freedom to carry out their own activist agendas as opposed to hired CEOs who are more likely to be beholden to the board. Hence, we posit that activism undertaken by founder CEOs is more likely to stem from the CEO's personal beliefs, whereas activism by hired CEOs is more likely to reflect firm strategy. Using this classification, we categorize 12% of the aligned activism events as personal activism. Second, in Column 2, we separate our measure into: i) *# of activism events–aligned (high CEO ownership)*, which captures aligned activism events undertaken by CEOs with above-sample-median stock ownership, who may have more freedom to engage in activism due to their having a greater voting control of the firm (these events represent 34% of the aligned activist sample), and ii) *# of activism events–aligned (low CEO ownership)*, which captures activism events undertaken by CEOs with small ownership stakes, whose activism may be more likely to reflect firm strategy (the rest of the aligned activism events).<sup>14</sup> Lastly, Larcker et al. (2018) point out that some activism is proactive, in that the CEO takes a stance that reflects a personally held belief, while other activism is defensive or reactive, in that the CEO's position is made in response to external criticism or pressures. Therefore, in Column 3, we create *# of activism events–aligned (reactive)* that includes activism events if they follow: (i) Pride Month (for LGBT-related activism) or a mass shooting (for gun-related activism);<sup>15</sup> (ii) a corporate scandal; (iii) a

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<sup>14</sup> Our results are similar, if we use alternative ownership cut-offs to define high ownership, for example if we require CEOs ownership to be in top 25% or top 10% of stock ownership.

<sup>15</sup> Consistent with the notion that corporations “rainbow-wash” their brand-image during Pride month, we find that 35% of LGBT-related activism occurs in June. Similarly, 71% of gun-related activism events occur within two weeks of the most recent mass shooting (suggesting that most gun-related activism is likely prompted by recent instances of high-profile gun violence). The dates of historical mass shooting events are from Wikipedia (see [https://en.wikipedia.org/wiki/List\\_of\\_mass\\_shootings\\_in\\_the\\_United\\_States](https://en.wikipedia.org/wiki/List_of_mass_shootings_in_the_United_States)).



financial restatement; (iv) a lawsuit; or (v) the recent activism efforts of other CEOs (i.e., the focal event occurs less than 7 days after other CEOs' activism on the same topic). This category, which we conjecture is more likely to represent firm strategy, includes 70% of the aligned activism events. The rest of the aligned activism events (30%) is classified as *# of activism events–aligned (pro-active)*, as they are more likely to represent pro-active stances taken by the CEO independent of firm/board strategy. Our categorizations suggest that only about 12%–34% of the aligned activism events are likely to arise primarily from a CEO's personal beliefs, whereas the majority of aligned activist stances are likely to originate mainly from the board's/shareholders' preferences. Similarly, only 9%–34% of the misaligned activism is likely driven by a CEO's personal beliefs. The low proportion of activism events stemming from a CEO's personal convictions is consistent with Larcker et al. (2018), who suggest that only 10% of S&P 500 CEOs clearly took activist stances on a personal basis.

The results in Columns 1–3 of Panel C of Table 5 show significant positive employee reactions to both: aligned activism that is likely driven by CEOs' personal beliefs and aligned activism that likely represents firm strategy, with a slightly higher response to personal activism in Column 2 ( $p < 0.10$  for the difference in coefficients). This analysis suggests that employees are pleased to see their CEOs speaking out in support of a social issue that is important to them, regardless of whether the motivation behind the decision to speak out is more likely to be driven by the firm's public relations strategy or by the CEO's personal convictions. These findings complement those in Mkrtchyan et al. (2023), who show that investors react positively to CEO activism regardless of whether it appears to stem from a CEO's personal belief or from corporate strategy. We also acknowledge that it is often difficult to differentiate between personal activism and corporate activism, because CEO activism may be prompted by a combination of personal and strategic factors, as CEOs are the figureheads of their organizations.

### 3.3. Endogeneity

Our results thus far provide evidence of a positive relation between aligned CEO activism and employee satisfaction. Whereas the inclusion of control variables addresses many of the potential differences between firms with and without CEO activism that may confound our analysis, some differences may still persist and bias our results. For instance, activist CEOs and/or directors who might set a firm's activist strategy may sort into firms with better cultures and higher employee satisfaction. Furthermore, if CEOs in companies with stricter policies that ensure equal pay and/or better workplace culture are also



making public statements, the observed effects may be due to those policies, and not due to CEO activism. We use several approaches to address these issues.

### 3.3.1. CEO turnover

As a first step, we examine short-term changes in employee sentiment around CEO turnovers. This setting allows us to identify changes in CEO activism while keeping the changes in firm policies relatively constant. Specifically, to minimize the potential influence of changes in firm policies due to the CEO turnover event, we compare employee reviews in the quarter preceding ( $q-1$ ) the year of turnover (year  $t$ ) to employee reviews in the first quarter following the year of turnover ( $q+1$ ). Our sample period includes 347 CEO turnover events, out of which 113 involve the appointments of activist CEOs. Eighty percent of activist CEOs start engaging in CEO activism within the first three years of their appointment and 38% of activist CEOs engage in CEO activism in the first year of their appointment. Because we are interested in changes in CEO activism activity, we restrict the sample of CEO activist appointments to cases wherein activist CEOs succeed non-activist CEOs (86/113 of activist CEO appointments). To ensure that we are capturing the response to CEO activism, we further require newly-appointed CEOs to engage in activism in the year of the CEO appointment (year  $t$ ), which restricts the sample to 24 activist CEO appointments (hereafter, “right away” activist CEOs).

The top rows of Panel A of Table 6 present average Glassdoor reviews for the quarter before and the quarter after the year of these activist CEO appointments based on employee review-level data. The results show that the average employee ratings increase from 3.422 to 3.575 following the appointment of a right away activist CEO, with the difference being statistically significant at the 1% level. We compare this result to the results of two alternative CEO turnover sets (control groups). First, we use turnovers that did not involve changes in CEO activism, i.e., when a non-activist CEO is succeeded by another non-activist CEO. Second, we rely on CEO turnovers where an activist CEO succeeds a non-activist CEO, but where the activist CEO does not start engaging in activism until year  $t + 1$  or later (hereafter, not yet activist CEOs). This approach allows us to further isolate the characteristics of firms that hire activist CEOs from the CEO activism behavior itself, as both groups of firms appoint activist CEOs (right away activist CEOs versus not yet activist CEOs), but only one group of employees is exposed to activism behavior during the year of the appointment. Panel A shows that, in contrast to our earlier results documenting a significant increase in short-term changes in employee ratings following the appointment of right away activist CEOs,



firms appointing non-activist CEOs or not yet activist CEOs do not experience a significant change in employee ratings.

To examine whether the before-and-after changes in employee satisfaction of firms appointing right away activist CEOs and those appointing: i) non-activist CEOs (Column 1 of Panel B of Table 6) or ii) not yet activist CEOs (Column 2 of Panel B of Table 6) are statistically different from each other, we estimate the following regression using review-level data:

$$y_{i,j} = \beta_1 Post\text{-}turnover_i + \beta_2 Activist_i + \beta_3 Activist_i \times Post\text{-}turnover_i + \eta_i + \varepsilon_{i,j}$$

where  $y_{i,j}$  is an employee's Glassdoor rating,  $j$ , of company,  $i$ .  $Post\text{-}turnover_i$  is an indicator variable that assumes a value of one for the first quarter following the year of CEO turnover, and zero for the last quarter preceding the year of CEO turnover.  $Activist_i$  is an indicator variable that equals one if the newly appointed CEO has engaged in CEO activism in the year of their appointment, zero otherwise.  $\eta_i$  is firm fixed effects, which control for time-invariant firm-specific observable and unobservable factors, and which subsume the standalone  $Activist_i$  dummy variable, as firms with CEO activism experience only one activist CEO appointment; and  $\varepsilon_{i,j}$  is the error term. Our parameter of interest is  $\beta_3$ , which captures differences in changes in employee satisfaction between firms hiring activist CEOs and those hiring: i) non-activist CEOs (Column 1); and ii) not yet activist CEOs (Column 2). In Column 1, the coefficient on our variable of interest, the interaction  $Activist \times Post\text{-}turnover$ , is positive and statistically significant at the 1% level, suggesting that firms appointing activist CEOs experience a greater increase in employee ratings, relative to firms that transition between different non-activist CEOs. Column 2 similarly points to a greater increase in employee satisfaction for firms with right away activist CEOs relative to those who appoint not yet activist CEOs.<sup>16</sup>

To further minimize potential differences between firms hiring activist CEOs and the control firms, we require control firms to be in the same Fama-French 48 industry and in the same decile of lagged Glassdoor ratings. These restrictions further ensure that firms with right away activist CEO turnovers and those with non-activist/not yet activist CEO turnovers exhibit similar levels of employee satisfaction prior to the turnover event. The results, presented in Columns 3 and 4, continue to show a higher employee

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<sup>16</sup> Another way to examine changes in CEO activism would be to compare changes in employee satisfaction after a departure of an activist CEO. However, our ability to conduct such an analysis is limited by there being only a very small number of transitions from activist CEOs to non-activist CEOs, as many activism events occur in the later part of our sample.



response for firms with right away activist CEOs compared to the responses of firms with non-activist or not yet activist CEOs. These results are also robust if we require control firms to be in the same size or performance deciles (untabulated). Taken together, this analysis suggests that the increase in employee satisfaction for firms with CEO activism is likely driven by the employee responses to CEO activism behavior itself, rather than to differences in corporate practices between firms with and without CEO activism.

### 3.3.2. Outliers

We note that the most active CEOs in our sample (i.e., those with 30 or more activism events in the sample period) work for some of the largest and most profitable tech companies, which might be very different from the rest of the firms in our sample. Hence, it is possible that our results could be driven by a handful of these very active CEOs, which would limit the generalizability of our findings. To address this possibility, in Column 1 of Panel C of Table 6, we re-run our analysis using a sample that removes these outlier CEOs. We observe that although the coefficient on *# of activism events–aligned* remains similar in magnitude to our baseline result (Column 4 of Table 4), the significance goes down from the 1% level to the 5% level. This result suggests that, although outlier CEOs contribute to the positive relationship between aligned CEO activism and employee satisfaction, our findings are not driven by these outliers. All our subsequent tests are robust to removing outlier CEOs (untabulated). Our results are also robust if we remove not only the most prolific outlier CEOs, but also CEOs who engage in only one activist event during their tenure as CEOs (Column 2). Furthermore, our results hold if we winsorize our measure of *# of activism events–aligned* and *# of activism events–misaligned* at the 2.5% level (Column 3).

### 3.3.3. Entropy balancing

To further improve the comparability between firms, and to ensure that firms with and without CEO activism are similar ex-ante, we re-run our analysis using entropy balancing (Hainmueller, 2012). The covariates that we use to balance the treatment group (firms with CEO activism in a given year) and control group (firms without CEO activism in a given year) are the same as those in Column 1 of Table 4. We then re-estimate the relation between aligned CEO activism and employee satisfaction using the entropy-balanced data to produce the results displayed in Column 1 of Panel D of Table 6. The coefficient on *# of activism events–aligned* remains significant at the 5% level. These results provide additional confidence



that the estimated effect of aligned CEO activism on employee satisfaction is not likely to be driven by differences in the observable characteristics of firms with and without CEO activism. To further improve the quality of the matched controls, in Column 2, we repeat the entropy balancing analysis using a sample that excludes firm-years with outlier CEOs. We continue to observe a statistically significant relationship between aligned CEO activism and employee satisfaction.

### 3.3.4. Ever activism and pre-trends

Another approach to account for the differences between firms with and without CEO activism would be to include firm fixed effects, which would capture time-invariant differences across firms. However, given that most firms do not have instances of CEO activism in our sample period, the use of a firm fixed effects estimator is problematic, as we lose all the variation in covariates from firms whose CEOs never engage in activism. To circumvent this issue, while also accounting for some of the differences that cannot be easily controlled for with observational data, we include into the regression specification the dummy *Ever activism*, which equals one for firms that have at least one instance of CEO activism at any point in our sample period, and zero otherwise. This variable allows us to control for unobservable time-invariant differences between firms with and without activist CEOs. Column 3 of Panel D of Table 6 shows that the coefficient on *Ever activism* is positive and significant, indicating that firms with CEO activism do have a higher baseline level of employee satisfaction than do those without CEO activism. Importantly, though, the coefficient on *# of activism events–aligned* continues to be positive and significant.<sup>17</sup>

One may also wonder if firms that never engage in CEO activism and firms that do engage in CEO activism have differential pre-trends in employee satisfaction in the years before CEO activism occurs. To test for differential pre-trends, we form a treatment group using a stacked set of the firms that eventually engage in CEO activism, but who have not yet done so (“Not Yet Firms”), and a control group using the firms that never engage in CEO activism during the sample period (“Never Firms”). We take the difference in the employee satisfaction ratings of the control group and the employee satisfaction ratings of the treatment group in the year before the treatment groups’ first activism events (the focal year) and the three preceding years. We then compare the differences in the focal year to the differences in the preceding years

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<sup>17</sup> Our results are similar if, instead of controlling for whether the firm ever engages in activism (under any CEO), we include a dummy that equals one if the CEO ever engages in CEO activism at any firm during our sample period (untabulated).



to see if a differential trend is present. If these differences are statistically significant, we would reject the null that treatment and control firms have parallel pre-trends in employee satisfaction. We plot these differences, along with 95% confidence intervals, in Figure 1. We find that the differences are not statistically significant ( $p = 0.836$ ), suggesting the CEO activism firms and never activism firms have similar trends in employee satisfaction in the years leading up to the first incidence of CEO activism.

We also conduct additional tests, such as a placebo test, an instrumental variables estimation, and a test of the impact threshold for a confounding variable (ITCV), which we detail in Appendix D. Taken together, we find robust evidence suggesting that employees respond positively to aligned CEO activism. Nevertheless, we acknowledge that our attempts to mitigate endogeneity concerns have significant limitations, as none of our empirical strategies can completely eliminate the possibility that omitted factors might bias the estimated relationship between aligned CEO activism and employee satisfaction. We therefore urge readers to exercise considerable caution in interpreting our results.

#### **4. Labor market reputation**

In this section, we examine whether CEO activism may enhance a firm's reputation in the labor market by estimating the relation between CEO activism and inventor relocations. We also analyze the link between CEO activism and firm-level innovation outcomes, and we assess the credibility of CEO activism.

##### **4.1. Inventor relocations**

Prior literature suggests that, like other workers, inventors value many different non-pecuniary aspects of their employment. For instance, Gao and Zhang (2017) show that pro-gay inventors, who they argue to be younger and more creative than anti-gay employees, are more likely to relocate to firms headquartered in states that pass laws that prohibit discrimination based on sexual orientation and gender identity. In addition, Rice and Schiller (2023) find that inventors respond positively to the philanthropic donations made by companies in the wake of natural disasters. CEO activist behaviors may similarly impact the relocation of inventors, as activism could serve as a signal that current and prospective employees may use to assess their degree of fit within the firm, which in turn can help them decide whether they will be happier at the focal firm or elsewhere.

To identify inventor relocations, we rely on the patent datasets of Kogan, Papanikolaou, Seru, and



Stoffman (2017) and Stoffman, Woepfel, and Yavuz (2022).<sup>18</sup> Following prior literature, we assume that an inventor's job change occurs at the midpoint between the two patent application years (Marx, Strumsky, and Fleming 2009; Hombert and Matray, 2017; Li and Wang, 2022). For instance, if an inventor applies for a patent with firm A in 2015 and for their next patent with firm B in 2019, we assume the job change occurs in 2017. We define an inventor as a new hire for firm B in 2017 and as a leaver for firm A in the same year.<sup>19</sup> We identify an inventor's ideological tilt based on the democratic leaning of the county of their prior employer. Then we compute the number of Democrat and Republican inventor leavers and the number of Democrat and Republican inventor new hires for each firm in a given year.

In Column 1 (2) of Table 7, the dependent variable is the number of Democrat inventors joining (leaving) the firm each year. In Column 3, the dependent variable is the difference between the number of Democrat new hires and the number of Democrat leavers. The independent variables of interest are: *# of activism events-liberal*, *# of activism events-neutral*, and *# of activism events-conservative*. The coefficients on *# of activism events-liberal* are positive and significant in Columns 1 and 3, but not in Column 2. This shows that firms with more instances of liberally-leaning CEO activism experience greater inflows of Democrat inventors, whereas the outflows of Democrat inventors are insignificant, resulting in a significantly higher net inflow of liberally-leaning inventors for these firms. The coefficients on *# of activism events-neutral*, and *# of activism events-conservative* are insignificant in Columns 1–3, suggesting that these types of activism events have no effect on the relocation decisions of Democrat inventors. In Columns 4–6, we perform analogous tests by examining the inflows and outflows of the Republican inventors. Column 5 indicates that Republican inventors are more likely to depart following liberally-leaning activism. Yet, the relationship between the net inflows of the Republican inventors and liberally-

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<sup>18</sup> See Noah Stoffman's website at <https://kelley.iu.edu/nstoffma/> and Michael Woepfel's website at <https://www.mikewoepfel.com/data>.

<sup>19</sup> We also use an alternative approach to measuring the timing of the inventor relocations. Specifically, following Gao and Zhang (2017), we define an inventor as a new hire for firm *i* in year *t* if she files for her first patent in firm *i* in year *t* after filing a patent in a different firm in a previous year. We define an inventor as a leaver for firm *i* in year *t* if she previously filed patents for firm *i* but starts to file patents for another firm in year *t*. For instance, if an inventor applies for a patent with firm A in 2015 and for another patent with firm B in 2019, the job change is considered to have occurred in 2019. We define an inventor as a new hire for firm B in 2019 and a leaver for firm A in that same year. Our results are robust to this alternative approach (untabulated). As an additional robustness check, we re-estimate our regressions by restricting our measures of inventor flows to include only inventors who have moved between firms within a 1-year (3-year) window, e.g., an inventor applied for a patent at firm A in 2018 (2016) and for another patent with firm B in 2019. Doing so narrows the time-period during which a job change has occurred and improves our ability to capture the timing of inventor flows more accurately. Our results remain similar using these metrics (untabulated).



leaning activism is insignificant (Column 6). We do not observe that conservatively-leaning activism increases the inflows of Republican inventors, which could be due to there being a small number of conservatively-leaning events in our sample.

Taken together, our results are consistent with the attraction-selection-attrition process proposed by Hambrick and Wowak (2021), wherein liberally-leaning CEO activism attracts liberally-leaning inventors and drives away conservatively-leaning ones. Our analysis also indicates that the reaction of liberally- and conservatively-leaning inventors is asymmetric (as we document a weaker response from conservatively-leaning inventors). This evidence complements earlier research suggesting that CEO activism positively impacts stakeholders whose views are already aligned with the CEO's stances without significantly alienating stakeholders with opposing views. For instance, Gangopadhyay and Homroy (2023) show that liberally-leaning activism is associated with a 3% increase in consumer visits to a firm's stores in Democrat counties, while consumer visits in Republican counties show a significantly smaller decline. Similarly, experimental evidence suggests that consumers who agree with the CEO's activism stance show increased purchasing intent, but those who disagree do not react negatively (Chatterji and Toffel, 2019).

#### **4.2. Inventor productivity and firm-level innovation outcomes**

To determine whether firms with CEO activism are benefitting from the inflows and outflows of inventors that they incur, we compare the productivity of the incoming inventors to that of the incumbent and departing inventors, and we analyze whether the changes in inventor composition result in a change in corporate innovation outcomes.

To estimate the productivity of each inventor, we follow Gao and Zhang (2017) and track patents filed by each inventor and the patent citations received by these patents over our sample period. Following the existing innovation literature, we adjust these measures to address possible truncation problems (Hall, Jaffe, and Trajtenberg, 2001; 2005).<sup>20</sup> We measure the novelty of innovation by the patent's originality (i.e., the diversity of the patents cited by that patent) and its generality (i.e., the diversity of the patents citing that patent) (Trajtenberg, Henderson, and Jaffe, 1997). In Panel A of Table 8, we focus on firms with at

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<sup>20</sup> To account for the lag in patent approval, we adjust the number of patents by first estimating the distribution of the application-grant lag, based on the data from 2010 to 2015, and then by computing the truncation-adjusted patent counts for the period from 2016 to 2019, based on the estimated distribution. To take into account that the patents created near the end of the sample period have less time to accumulate citations, we scale the citation count of each patent by the average citation count received by all patents granted in the same year and same CPC patent class.



least one instance of CEO activism and compare the productivity of newly hired inventors, i.e., those hired in post-CEO activism periods, and incumbent inventors. We observe that newly hired inventors compare favorably to their incumbent counterparts. For instance, the median number of patents (citations) for newly hired inventors is 10.71 (4.65) which is significantly higher than the median number of patents (citations) for incumbent inventors, which is 5.21 (1.73). We also analyze the productivity of newly hired and incumbent inventors in firms that do not engage in CEO activism. We note that inventors hired by firms without CEO activism are also more productive relative to incumbent inventors. For instance, the median number of patents (citations) for newly hired inventors in firms without CEO activism is 9.19 (4.08) and the median number of patents (citations) for incumbent inventors in such firms is 6.66 (2.41). This suggests that newly hired inventors are more productive than incumbent inventors in general and not only in firms with CEO activism. However, when comparing newly hired inventors in firms with and without CEO activism, we observe that newly hired inventors in firms with CEO activism have higher median values of patents, citations, and patent originality relative to newly hired inventors in firms without CEO activism. These results suggest that firms with CEO activism can attract especially productive inventors.

We also examine whether the median differences between newly hired and incumbent inventors in firms with and without CEO activism are statistically different from each other. To this end, we estimate a quantile regression, wherein we regress inventor productivity measures on a new hire indicator, a CEO activist firm indicator, and the interaction between the new hire and CEO activist firm indicators. The coefficient on the interaction term captures the median difference in productivity between newly hired and incumbent inventors in firms with CEO activism relative to the median difference in productivity between newly hired and incumbent inventors in firms without CEO activism. We document a significantly positive coefficient on the interaction term when inventor productivity is measured by the total patents and citations. This suggests that the productivity differential between newly hired and incumbent inventors is greater in firms with CEO activism.

In Panel B of Table 8, we compare the productivity of newly hired and leaving inventors. The results show that the individual productivity of the newly hired inventors in firms with CEO activism is slightly greater than that of leaving inventors, as evidenced by a higher median number of total patents,



citations, and patent generality.<sup>21</sup> These findings suggest that whereas some productive inventors leave firms with CEO activism, other productive inventors join. For firms without CEO activism, however, newly hired inventors do not exhibit higher productivity relative to leaving inventors. When comparing median differences between newly hired and leaving inventors in firms with and without CEO activism, we find that the median difference in the number of patents filed by newly hired and leaving inventors is higher in firms with CEO activism.

In Table 9, we examine whether the changes in the inventor composition (i.e., greater ideological alignment among current and newly hired inventors) and the higher net inflow of inventors documented earlier lead to a meaningful change in firm-level innovation outcomes. Following the prior literature, we construct several measures of firm-level innovation. To measure the overall quantity of innovation within the firm, we use the number of patent applications filed in a given year (in Column 1) and the number of filed patent applications per employee (in Column 2). To capture the quality of innovation, we use the number of citations received by patents (in Column 3), patent originality (in Column 4), and patent generality (in Column 5). The distribution of patent grants and citations in the sample is right-skewed. To reduce skewness, we apply the inverse hyperbolic sine transformation to the dependent variables in Columns 1–3.<sup>22,23</sup> To account for the potential timing lag between the changes in inventor composition and innovation outcomes, the dependent variables in Columns 1–3 are measured at  $t+1$ .<sup>24</sup>

The results in Columns 1 and 2 indicate that firms with a higher number of aligned CEO activism events have a greater volume of innovative output, as such firms receive more patents and have higher patents per employee. Column 3 further shows that the economic quality of these patents is higher, as these patents generate more citations. Similarly, we estimate a significantly positive relation between aligned CEO activism and patent originality in Column 4. This analysis suggests that the overall relation between aligned CEO activism and firm-level innovation is positive.

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<sup>21</sup> We note that 87% of the incoming inventors come from firms with no activism activity in the prior three years. Similarly, 81% of the departing inventors leave for firms with no activism events in the prior three years (untabulated).

<sup>22</sup> Our results are robust if, instead of the inverse hyperbolic sine transformation, we use the log transformation, estimate negative binomial or Tobit empirical models (which account for censoring at zero), or restrict our sample to a subsample of firm-years with non-zero patents.

<sup>23</sup> Because both patent originality and generality scores are bounded between zero and one, as a robustness check, we use a Tobit model and find qualitatively similar results.

<sup>24</sup> Our results are robust if we estimate innovation outcomes at  $t+2$  to capture innovations that may take longer to develop.



### 4.3. Credibility of CEO activism

In this section, we examine the credibility of CEO activism and whether CEOs who “talk the talk” of activism actually “walk the walk” of engaging in business practices that align with their activist stances. To this end, we analyze the link between CEO activism and a firm’s hiring and compensation practices.

Given that a substantial share of the CEO activism events in our sample considers topics related to diversity, we first examine the association between pro-diversity CEO activism<sup>25</sup> and the gender and racial composition of the firm’s newly hired inventors. We infer inventors’ race based on their first and last names, using the Ethnicolr API, which is trained based on the data from the U.S. census, the Florida voting registration, and Wikipedia. We obtain inventors’ gender data from Michael Woepel’s website. The dependent variable in Column 1 of Table 10 is the percentage of newly hired inventors who are either female or non-white, individuals who have historically been underrepresented in corporate innovation (Bol, LaViers, Sandvik, 2023; Hofstra, Kulkarni, Galvez, Jurafsky, and McFarland, 2020). We observe a strong positive relationship between CEO activism related to diversity and the percentage of subsequently hired inventors who are female or non-white. This suggests that CEOs who “talk the talk” in advocacy for diversity do, on average, “walk the walk” of diversifying the demographic composition of their workforce.

Next, we examine the relation between pro-pay equality CEO activism<sup>26</sup> and the gender pay gap. Given the lack of data on inventor compensation, we shift our focus to a subset of employees for whom we can collect compensation data from Execucomp. Specifically, in Column 2 of Table 10, we restrict our sample to newly hired executives, i.e., those who joined the executive ranks of the firm within the last two years,<sup>27</sup> and we estimate an executive-level regression wherein the dependent variable is the natural log of total compensation (TDC1). Following prior literature (e.g., Carter, Franco, and Gine, 2017), we augment our firm-level controls with the following variables: executive tenure, tenure squared, age, age squared, corporate title dummy (which captures non-CEO corporate positions, such as CFO, COO, other Chief,

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<sup>25</sup> We note that less than 1% of events in the diversity category (i.e., only 2/445 events) represent statements *against* diversity, which we exclude from this analysis. However, our results are similar if we include these instances of CEOs opposing diversity.

<sup>26</sup> We note that none of the events related to pay equality represent statements *against* pay equality.

<sup>27</sup> Our results are robust if we use longer windows. However, we do not have enough observations to precisely estimate a model that restricts our sample to the executives who were hired only within the last year. Given that we can observe the demographic characteristics of executives, we can also examine the relation between pro-diversity CEO activism and the demographic composition of the newly hired executives. Similar to our earlier results, we document that firms with greater pro-diversity CEO activism activity are more likely to hire demographically underrepresented executives (untabulated).



President, Vice-President, Chairman, Vice-Chairman), and divisional title dummy (which captures executives with divisional titles, such as Division/Group President, Division/Group Manager, or Division/Group Chief). We include firm and year fixed effects, and we cluster standard errors at the executive level.

Our variable of interest is the interaction term between *Female dummy* and *# of activism events–pay equality*. Consistent with the existence of a gender pay gap documented by prior studies, we observe a negative coefficient on *Female dummy*, suggesting that female executives are paid less than their male counterparts, even when controlling for a host of observable executive characteristics. Our results show a positive and significant coefficient on the interaction term between *# of activism events–pay equality* and *Female dummy*. These findings suggest that the executive gender pay gap is attenuated among firms wherein CEOs take public stances in support of pay equality.

Taken together, it appears that CEO activism is a credible signal of the firm's actual business practices, as we find that pro-diversity and pro-pay equality activist behaviors are associated with more diverse hiring practices and reductions in gender pay gaps, respectively.

## 5. Path analysis and firm value

Our earlier findings provide evidence of a positive relation between aligned CEO activism and employee satisfaction and innovation. Given the importance of innovation and employee satisfaction for firm performance,<sup>28</sup> we turn to examine whether employee responses to aligned CEO activism can explain the positive relation between CEO activism and firm value documented by prior studies (Mkrtchyan et al., 2023; Gangopadhyay and Homroy, 2023). To do so, we perform a path analysis. We estimate a structural equation model to decompose the correlation between aligned/misaligned CEO activism and Tobin's Q, our measure of firm value, into the direct effect of aligned/misaligned CEO activism on firm value and the indirect effects of aligned/misaligned CEO activism on firm value through the employee satisfaction and innovation channels. This analysis includes a regression of Tobin's Q on our main CEO activism variables, *# of activism events–aligned* and *# of activism events–misaligned*, and two mediating variables: i) average

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<sup>28</sup> For instance, Edmans (2011) finds that the stocks of firms with satisfied employees experience abnormal returns in future periods. Similarly, Gartenberg, Prat, and Serafeim (2019) show that firms in which employees believe in the purpose of the firm have stronger accounting and stock market performance. Prior research also shows that innovation is a key driver of firm value, as it can facilitate the adoption of cost-saving production methods, increase firm efficiency, and improve the firm's competitive position (Simeth and Cincera, 2016; Cooper, Knott, and Yang, 2022; Bena, Ortiz-Molina, and Simintzi, 2022).



firm-year Glassdoor ratings (proxying for the employee satisfaction channel); and ii) the number of patents generated by the firm's inventors (proxying for the innovation channel). We also include all the control variables used in the prior analyses.

Table 11 reports the results from this path analysis. A direct path has one path coefficient. For instance, the data shows that only *# of activism events–aligned* contributes positively to Tobin's Q. A mediated path (capturing an indirect effect) contains a coefficient linking the source variable (aligned CEO activism) to the mediating variable (e.g., a proxy for the employee satisfaction or innovation channels) and a coefficient linking the mediating variable to the outcome variable (Tobin's Q). The path coefficient for a mediated path is the product of the individual path coefficients for each segment of that path. For instance, in Column 1, the coefficient of *# of activism events–aligned* on the average Glassdoor ratings is 0.020 and the coefficient of the average Glassdoor ratings on Tobin's Q is 0.223. Both coefficients are highly significant, giving rise to an indirect coefficient of *# of activism events–aligned* on Tobin's Q through the employee satisfaction channel of 0.004, which is significant at the 5% level. We test the significance of the indirect effects using the Sobel (1982) test statistics. Similarly, Column 2 shows that the indirect effect of aligned CEO activism on firm value is significant through the employee innovation channel at the 10% level. To measure the importance of the direct and indirect paths, we compute the ratio of the path coefficient for that path to the total correlation between aligned CEO activism and Tobin's Q. The results suggest that the employee satisfaction channel explains 4.9% of the total effect of aligned CEO activism on Tobin's Q, compared to 12.4% for the innovation channel. The direct and mediated paths for misaligned CEO activism are insignificant.

## 6. Conclusion

CEO activism is the increasingly common practice of CEOs speaking out on social, environmental, and political issues. Understanding how these public stances may impact employees is important, as employees are strategic assets to the firm and as the significance of human capital to organizational success is well established (e.g., Pfeffer, 1994; Zingales, 2000; Huselid et al., 1997; Campbell et al. 2012). Recent theoretical work suggests that activist stances on political and social issues taken by CEOs can have a positive effect on employee satisfaction if the stances taken align with the prevailing ideological leanings of the firm's employees. These stances may increase employees' identification with their organization, and they have the potential to shape and reinforce corporate culture. Alternatively, CEO activism may alienate



employees if the views expressed by the CEO do not accord with the collective views of the firm's employees. In such cases, activism can reduce employee satisfaction and hurt a firm's reputation.

We test these possibilities using a large-scale dataset of CEO activism events. We find that employees respond positively to CEO activism, as firms with more instances of CEO activism have higher subsequent employee satisfaction ratings posted on Glassdoor. Importantly, this positive relation only holds for CEO activism that is aligned with the prevailing ideological views of the workforce. Our additional tests show that these firms experience a positive net inflow of highly productive, ideologically-aligned inventors and increased levels of innovation firm wide. Lastly, our results suggest that CEO activism is a credible signal of the firm's actual future business practices, as firms with more instances of CEO activism in support of diversity and pay equality hire more diverse workers and have smaller gender pay gaps, respectively.

Overall, our findings demonstrate that CEO activism may be a means whereby companies can increase employee engagement, build a skilled workforce, and improve the cohesiveness of the organization's culture. Furthermore, the evidence presented in this paper shows that the employee satisfaction and innovation channels are important factors in explaining the previously documented positive relation between CEO activism and firm valuations. While this study and several others document an array of positive effects of CEO activism, some firms—such as Anheuser-Busch, Target, and North Face—have recently faced harsh backlash in response to their activist-like marketing and product-placement decisions.<sup>29</sup> Given the controversies surrounding such decisions, future research on CEO activism is necessary to determine what equilibrium behavior firms and CEOs arrive at in their activist endeavors.

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<sup>29</sup> See <https://fortune.com/2023/05/30/lgbtq-backlash-bud-light-target-pride-month/>; <https://www.wsj.com/articles/companies-new-cause-dodging-the-culture-wars-73e52cf3>.



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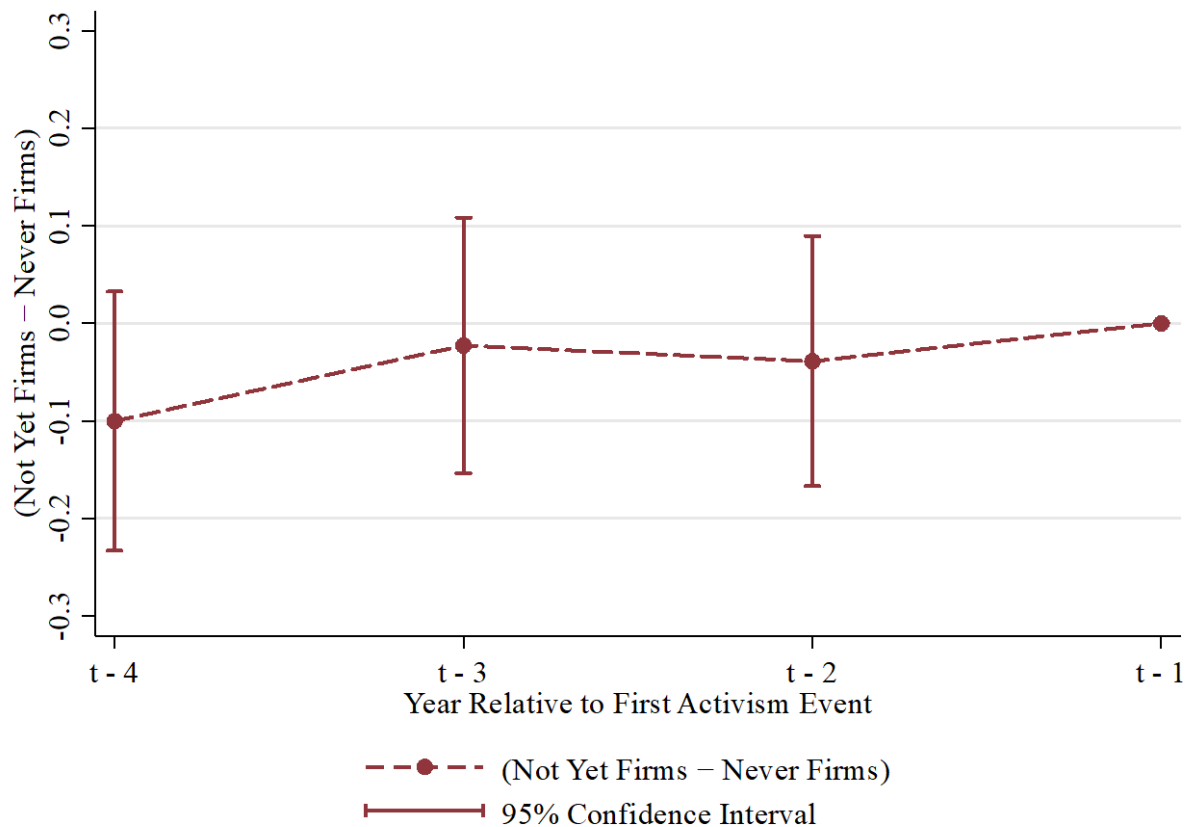
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### Figure 1. Pre-trends in employee satisfaction ratings

This figure compares the pre-trends in employee satisfaction ratings between firms that eventually engage in CEO activism, but that have not yet done so (Not Yet Firms), and firms that never engage in CEO activism in our sample period (Never Firms). Specifically, for every Not Yet Firm that engages in CEO activism for the first time in year  $t$ , we collect all the Never Firms as a control group. Setting year  $t$  to be the pseudo-event time for the control group, we subtract the observation year by  $t$  to form a relative timing measure, *Relative Year* (e.g., -4, -3, -2, -1, 0, ...). We repeat this process for all  $t$  in our sample period and stack the outcomes together. Next, we create dummies for *Relative Year* and only keep observations in the pre-period (i.e., before Not Yet Firms engage in CEO activism for the first time). Last, with the filtered, stacked sample, we run a regression of Glassdoor ratings on the interaction terms, *Not Yet Firm* x *Relative Year Dummies*, omitting observations for which *Relative Year* equals zero, which acts as the base year. We then compare the differences in the base year to the differences in the preceding years to see if a differential trend is present. If these differences are statistically significant, we would reject the null that Not Yet Firms and Never Firms have parallel pre-trends in employee satisfaction. We plot these differences, along with 95% confidence intervals below. We find that the differences are not statistically significant ( $p = 0.836$ ), suggesting that the firms with CEO activism and the firms without CEO activism have similar trends in employee satisfaction in the years leading up to the first incidence of activism among the firms with CEO activism.





**Table 1. Descriptive statistics**

This table presents descriptive statistics of the outcome variables used in our analysis and of the firm and CEO characteristics used as controls. The sample is comprised of 457 firms over the period 2011–2019 (3,570 firm-year observations). Variable definitions are given in Appendix C.

	Mean	Standard deviation	25 <sup>th</sup> percentile	Median	75 <sup>th</sup> percentile
<b><i>Firm &amp; CEO characteristics</i></b>					
# of activism events	0.21	1.25	0.00	0.00	0.00
# of activism events-aligned	0.14	0.93	0.00	0.00	0.00
# of activism events-misaligned	0.07	0.47	0.00	0.00	0.00
Firm size (in billions)	24.12	43.58	4.61	9.43	23.68
Stock return	0.05	0.33	-0.13	0.03	0.19
ROA	0.16	0.10	0.11	0.15	0.20
Asset tangibility	0.26	0.23	0.09	0.17	0.36
Leverage	0.15	0.12	0.07	0.13	0.21
R&D/Sales	0.05	0.12	0.00	0.01	0.06
Stock volatility	0.02	0.01	0.01	0.02	0.02
HHI	0.11	0.10	0.06	0.08	0.11
Sales growth	0.07	0.19	0.00	0.06	0.13
Cash/Assets	0.15	0.15	0.04	0.10	0.21
CSR index	2.34	3.53	0.00	2.00	4.00
Fortune's 100 best company	0.04	0.21	0.00	0.00	0.00
Employee-related negative event dummy	0.24	0.43	0.00	0.00	0.00
SG&A/Employees	0.11	0.13	0.04	0.07	0.15
High-paying firm	0.41	0.49	0.00	0.00	1.00
Corporate culture	14.34	6.67	10.49	13.63	17.65
CEO–employee alignment	0.12	0.33	0.00	0.00	0.00
Board independence	0.83	0.10	0.78	0.88	0.90
Board size	10.50	1.97	9.00	11.00	12.00
CEO celebrity status	0.03	0.05	0.01	0.02	0.04
CEO narcissism	2.24	2.26	1.41	2.12	2.77
CEO/Chair duality	0.50	0.50	0.00	1.00	1.00
Ln (CEO Tenure)	1.48	0.75	0.92	1.50	2.04
CEO age	57.15	6.51	53.00	57.00	61.00
CEO gender	0.96	0.19	1.00	1.00	1.00
CEO democratic leaning	0.47	0.22	0.50	0.50	0.50
CEO founder	0.06	0.24	0.00	0.00	0.00
CEO ownership	1.26	4.11	0.08	0.23	0.67
Number of Glassdoor reviews–overall rating	279	693	26	79	223
Number of Glassdoor reviews–management rating	243	589	24	73	200
Number of Glassdoor reviews–culture rating	262	621	26	78	214



**Table 1 (continued)**

	<b>Mean</b>	<b>Standard deviation</b>	<b>25<sup>th</sup> percentile</b>	<b>Median</b>	<b>75<sup>th</sup> percentile</b>
<i><b>Dependent variables</b></i>					
Glassdoor overall rating	3.34	0.49	3.04	3.38	3.66
Glassdoor overall rating-Democrat	3.44	0.70	3.00	3.49	3.92
Glassdoor overall rating-Republican	3.51	0.73	3.04	3.53	4.00
Glassdoor management rating	2.92	0.50	2.62	2.92	3.21
Glassdoor culture rating	3.30	0.55	2.98	3.33	3.66
Glassdoor rating dispersion	1.18	0.21	1.08	1.18	1.28
New hire–Democrat	1.30	4.18	0.00	0.00	1.00
Leaver–Democrat	1.37	4.37	0.00	0.00	1.00
Net hire–Democrat	-0.07	3.03	0.00	0.00	0.00
New hire–Republican	0.38	1.27	0.00	0.00	0.00
Leaver–Republican	0.60	1.87	0.00	0.00	0.00
Net hire–Republican	-0.22	1.36	0.00	0.00	0.00
Patents	137.04	532.31	0.00	6.00	65.00
Patents/Employee	4.47	11.95	0.00	0.23	3.59
Citations	176.97	1032.51	0.00	0.56	48.85
Originality	0.45	0.16	0.35	0.45	0.54
Generality	0.32	0.21	0.18	0.30	0.43
% underrepresented inventors	0.21	0.28	0.00	0.00	0.41
TDC1	4144.75	5638.95	1937.45	2956.66	4820.56
Tobin's Q	2.46	1.65	1.46	1.98	2.84



**Table 2. CEO activism**

Panel A presents the list of activist keywords, stratified by category, that we use to identify instances of CEO activism. Panel B presents several examples of CEO activism. Panel C presents the distribution of activist CEOs based on the number of events they engage in throughout our sample period. Panel D presents the distribution of CEO activism over time.

**Panel A: Activist keywords**

Category	Keywords
Diversity	discrimination, ethnicity, glass ceiling, harassment, inclusion, racial, religion, gay marriage, homosexual, lesbian, LGBT, same-sex
Environment	clean air, clean water, environment, pollution, renewable, carbon tax, climate change, global warming, land conservation, Paris accord
Politics	debt ceiling, Democrat, fiscal cliff, government shutdown, Republican, tariffs, taxes, Brexit, Clinton, Obama, travel ban, Trump
Other	dreamers, equal pay, healthcare, human rights, indigenous people, Nazi, pay gap, poverty, prison, violence, war, abortion, gun, immigration, Obamacare, refugee, white supremacists, #keepfamilies together.

**Panel B: Examples of CEO activism**

CEO, Company	Keyword	Headline/Tweet	Date	Source
Howard Schultz, Starbucks	Gay Marriage	Starbucks CEO Holds His Ground on Gay Marriage	03/28/13	CNN.com
Rami Rahim, Juniper Networks	Discrimination	I support the greater business community in taking a stand against discrimination of any kind	08/16/04	Twitter
Kevin Plank, Under Armour	Climate change	“Climate Change is Real”: Under Armour Kevin Plank Unhappy with Trump’s Paris Withdrawal	06/02/17	Washington Post.com
Andrew Anagnost, Autodesk	Climate change	Climate change is no longer under debate. Developing impactful solutions starts with investing in policy, says Autodesk CEO @andrew_anagnost	11/23/19	Twitter
Marc Benioff, Salesforce	Taxes	Salesforce's Marc Benioff backs higher taxes, renews critique of capitalism	11/21/19	Finance.yahoo.com
Wilmot Hastings Jr, Netflix	Trump	Hey @realdonaldtrump, I'm an American Muslim and I already carry a special id badge. Where's yours?	11/19/15	Twitter
John Mackey, Whole Foods	Obamacare	Whole Foods CEO John Mackey Calling Obamacare Fascist is Tip of the Iceberg	01/18/13	The Guardian.com
Chuck Robins, Cisco	Immigration	Must end cruel policy of separating accompanied minors from their parents, simply un-American. We need policies that reflect our values and do what’s right for society	06/19/18	Twitter



**Panel C. Activist CEOs**

	<b>Number of activist CEOs</b>	<b>Percentage of activist CEOs</b>
1 activism event	45	23.7%
Between 2 and 5 activism events	72	37.9%
Between 6 and 10 activism events	35	18.4%
Between 11 and 29 activism events	33	17.4%
30 or more activism events	5	2.6%

**Panel D. Activism by time period**

	<b>Full Sample</b>		<b>Excluding outlier CEOs</b>	
	<b>Average percentage of firms with at least one activism event</b>	<b>Average number of CEOs engaging in activism</b>	<b>Average percentage of firms with at least one activism event</b>	<b>Average number of CEOs engaging in activism</b>
	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
2011–2013	2.1%	9	1.6%	7
2014–2016	6.1%	25	5.3%	21
2017–2019	25.8%	97	24.9%	92



### Table 3. Glassdoor reviews

Panel A presents descriptive statistics of the overall company ratings given by Glassdoor contributors, based on data that has been aggregated to the firm-year level. We separately report statistics for firms without CEO activism, firms with CEO activism in the period prior to the firm's first activism event, and firms with CEO activism in the period after the firm's first activism event. Panel B presents the overall company ratings given by Glassdoor contributors in the 30 days before and in the 30 days after CEO activism events, based on review-level data. The asterisks in Panel B indicate the differences in means and medians between the pre-activism and post-activism periods, based on *t*-tests and Wilcoxon rank-sum tests, respectively. The top rows in Panel B use the full sample of CEO activism events. The bottom rows use only activism events that are classified as vivid, i.e., those that stand out to a greater degree. Details about the vivid classification procedure can be found in Appendix A.3. \*, \*\*, \*\*\* denotes significance at 0.10, 0.05, 0.01 levels, respectively.

#### Panel A: Distribution of overall ratings by activism

	N	Mean	Standard deviation	25 <sup>th</sup> percentile	Median	75 <sup>th</sup> percentile
	(1)	(2)	(3)	(4)	(5)	(6)
Never activist firms	1,902	3.25	0.52	2.93	3.27	3.58
Activist firms, pre-activism	794	3.42	0.42	3.17	3.42	3.67
Activist firms, post-activism	452	3.59	0.39	3.40	3.61	3.85

#### Panel B: Glassdoor reviews around activism events

	N	Mean	Median
	(1)	(2)	(3)
<b>Full sample</b>			
30-days prior to an activism event	79,593	3.687	4.000
30-days after an activism event	77,528	3.697	4.000
Difference		0.010*	0.000*
<b>Vivid activism</b>			
30-days prior to an activism event	11,105	3.756	4.000
30-days after an activism event	11,288	3.802	4.000
Difference		0.046***	0.000***



**Table 4. Employee satisfaction – baseline analysis**

This table presents estimates from ordinary least squares estimations. The dependent variable in Columns 1 and 4 is the yearly average employee ratings of the overall company. The dependent variable in Column 2 (3) is the yearly average employee rating from reviewers located in Democrat (Republican) states. *# of activism events* equals the number of CEO activism events that the firm's CEO engaged in the previous year. *# of activism events–liberal/neutral/conservative* equals the number of liberally/neutrally/conservatively leaning CEO activism events that the firm's CEO engaged in the previous year. *# of activism events–aligned (misaligned)* equals the number of CEO activism events that the firm's CEO engaged in the previous year, wherein the ideological tilt of the activist stance was aligned (misaligned) with the ideological tilt of the firm's employees. All regressions control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in Appendix C. *T*-statistics are shown in parentheses. Standard errors are adjusted for heteroskedasticity (White, 1980) and are clustered by firm. \*, \*\*, \*\*\* denotes significance at 0.10, 0.05, 0.01 levels, respectively.

	Overall rating	Overall rating - Democrat	Overall rating - Republican	Overall rating
	(1)	(2)	(3)	(4)
# of activism events	0.015*** (3.69)			
# of activism events–liberal		0.034** (2.51)	0.019 (1.35)	
# of activism events–neutral		-0.020 (-0.66)	-0.010 (-0.29)	
# of activism events–conservative		-0.005 (-0.06)	0.117 (0.95)	
# of activism events–aligned				0.019*** (2.92)
# of activism events–misaligned				0.007 (0.48)
Ln(Number of Glassdoor reviews)	0.005 (0.27)	-0.031 (-1.37)	-0.003 (-0.13)	0.005 (0.28)
Ln(Firm size)	0.073*** (3.72)	0.056* (1.90)	0.005 (0.13)	0.073*** (3.72)
Stock return	0.089*** (3.12)	0.112** (2.42)	0.109** (2.22)	0.089*** (3.12)
ROA	0.111 (0.90)	-0.093 (-0.29)	0.068 (0.27)	0.110 (0.89)
Asset tangibility	0.042 (0.42)	0.034 (0.24)	0.038 (0.28)	0.042 (0.43)
Leverage	-0.685*** (-3.99)	-0.771*** (-3.57)	-0.508** (-2.05)	-0.686*** (-4.00)
R&D/Sales	0.500*** (3.13)	0.415*** (2.70)	0.658*** (3.05)	0.500*** (3.13)
Stock volatility	2.158 (1.10)	3.871 (1.25)	-7.537** (-2.05)	2.157 (1.10)
HHI	0.245 (0.70)	0.395 (0.51)	0.534 (0.92)	0.241 (0.69)
Sales growth	-0.014 (-0.22)	0.103 (1.03)	0.023 (0.22)	-0.013 (-0.21)
Cash/Assets	0.296*** (2.67)	0.405*** (2.73)	0.485*** (2.64)	0.295*** (2.67)



**Table 4 (continued)**

	Overall rating	Overall rating - Democrat	Overall rating - Republican	Overall rating
	(1)	(2)	(3)	(4)
CSR index	0.016*** (4.98)	0.023*** (5.10)	0.009* (1.82)	0.016*** (4.96)
Fortune's 100 best company dummy	0.229*** (4.96)	0.267*** (5.08)	0.348*** (5.96)	0.230*** (4.99)
Employee-related negative event dummy	-0.048** (-2.28)	-0.017 (-0.52)	-0.056* (-1.83)	-0.048** (-2.28)
SG&A/employees	0.141 (1.19)	-0.149 (-0.56)	0.474*** (3.31)	0.140 (1.18)
High-paying firm	0.087** (2.53)	0.121*** (2.65)	0.133** (2.55)	0.087** (2.54)
Corporate culture	0.000 (0.06)	-0.002 (-0.64)	0.005 (1.54)	0.000 (0.04)
CEO–employee alignment	0.066 (1.60)	0.104* (1.83)	-0.003 (-0.04)	0.066 (1.59)
Board independence	-0.202 (-1.28)	-0.342* (-1.72)	-0.660*** (-3.15)	-0.203 (-1.29)
Ln(Board size)	0.143* (1.73)	0.003 (0.03)	0.192* (1.72)	0.144* (1.74)
CEO celebrity	0.005 (0.02)	0.509 (1.30)	-0.554 (-0.52)	0.006 (0.02)
CEO narcissism	-0.002 (-0.81)	-0.002 (-0.59)	-0.004 (-1.13)	-0.002 (-0.82)
CEO/Chair duality	0.028 (1.07)	0.037 (0.92)	0.090** (2.23)	0.028 (1.08)
Ln (CEO tenure)	0.021 (1.57)	0.015 (0.72)	0.054** (2.50)	0.022 (1.58)
CEO age	-0.001 (-0.56)	-0.001 (-0.47)	-0.003 (-0.85)	-0.001 (-0.57)
CEO gender	0.118*** (2.65)	0.219*** (3.18)	0.109 (1.15)	0.119*** (2.67)
CEO democratic leaning	-0.111 (-1.61)	-0.194* (-1.84)	-0.025 (-0.25)	-0.111 (-1.61)
CEO founder	0.135** (2.29)	0.209*** (3.05)	-0.022 (-0.24)	0.136** (2.29)
CEO ownership	-0.006* (-1.88)	-0.006 (-1.55)	-0.002 (-0.44)	-0.006* (-1.89)
Year and industry fixed effects	Yes	Yes	Yes	Yes
Number of observations	3,148	2,751	2,608	3,148
Adjusted R-squared	0.292	0.148	0.166	0.292



**Table 5. Glassdoor ratings–cross-sectional variation**

This table presents estimates from ordinary least squares estimations. The dependent variables in Columns 1–3 of Panel A are the yearly average employee ratings of the top management, corporate culture, and rating dispersion, respectively. The dependent variable in Panels B and C is the yearly average employee ratings of the overall company. In Panel A, *# of activism events–aligned (misaligned)* equals the number of CEO activism events that the firm’s CEO engaged in the previous year, wherein the ideological tilt of the activist stance was aligned (misaligned) with the ideological tilt of the firm’s employees. In Panel B, *# of activism events–aligned (diversity/pay equality)* captures public stances that are more likely to be directly relevant to the workforce, i.e., activism on diversity and pay equality topics. *# of activism events–aligned (non-diversity/pay equality)* captures the rest of activism events, i.e., public stances related to the environment, politics, and the rest of other social issues. *# of activism events–aligned (diversity/pay equality–firm-specific)* reflects the company’s current or future efforts related to increasing diversity and pay equality among their workforce. *# of activism events–aligned (diversity/pay equality–general stance)* reflects general advocacy stances on topics related to diversity and pay equality. In Panel C, *# of activism events–aligned (founder CEO)/# of activism events–aligned (non-founder CEO)* reflects activism by founder/non-founder CEOs. *# of activism events–aligned (high CEO ownership)/# of activism events–aligned (low CEO ownership)* captures activism of CEOs with above/at or below-sample median stock ownership. *# of activism events–aligned (reactive)/# of activism events–aligned (pro-active)* captures activism events that are likely/not likely made in response to external criticism or pressures. All regressions control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in Appendix C. *T*-statistics are shown in parentheses. Standard errors are adjusted for heteroskedasticity (White, 1980) and are clustered by firm. \*, \*\*, \*\*\* denotes significance at 0.10, 0.05, 0.01 levels, respectively.

**Panel A: Glassdoor ratings - components**

	Top management	Culture	Rating dispersion
	(1)	(2)	(3)
# of activism events–aligned	0.025*** (3.20)	0.024** (2.44)	-0.005* (-1.81)
# of activism events–misaligned	0.004 (0.24)	0.021 (1.01)	-0.005 (-0.85)
Ln(Number of Glassdoor reviews)	-0.010 (-0.55)	0.029 (1.54)	0.000 (0.02)
Ln(Firm size)	0.054*** (2.73)	0.046* (1.94)	-0.018** (-2.16)
Stock return	0.108*** (3.61)	0.066** (2.09)	0.007 (0.45)
ROA	0.092 (0.67)	0.198 (1.32)	-0.097 (-1.56)
Asset tangibility	-0.006 (-0.06)	-0.033 (-0.27)	0.007 (0.19)
Leverage	-0.692*** (-4.04)	-0.683*** (-3.44)	0.039 (0.63)
R&D/Sales	0.394*** (3.27)	0.753*** (4.55)	-0.126*** (-2.77)
Stock volatility	0.546 (0.25)	1.601 (0.66)	-0.845 (-0.95)
HHI	0.072 (0.20)	0.379 (0.81)	0.190 (1.14)
Other firm and CEO controls	Yes	Yes	Yes
Year and industry fixed effects	Yes	Yes	Yes
Number of observations	3,144	2,801	3,108
Adjusted R-squared	0.187	0.258	0.109



**Panel B: Topic heterogeneity**

	Overall rating		
	(1)	(2)	(3)
# of activism events–aligned (diversity/pay equality)	0.046** (2.33)		
# of activism events–aligned (diversity/pay equality –firm-specific)		0.083** (2.10)	
# of activism events–aligned (diversity/pay equality–general stance)		0.043* (1.89)	
# of activism events–aligned (general stance only)			0.019*** (2.77)
# of activism events–aligned (non-diversity/pay equality)	0.004 (0.34)	0.004 (0.38)	
# of activism events–misaligned	0.008 (0.60)	0.008 (0.58)	
# of activism events–misaligned (general stance only)			0.006 (0.41)
Ln(Number of Glassdoor reviews)	0.004 (0.25)	0.004 (0.25)	0.005 (0.28)
Ln(Firm size)	0.074*** (3.73)	0.073*** (3.72)	0.074*** (3.75)
Stock return	0.089*** (3.11)	0.089*** (3.12)	0.089*** (3.11)
ROA	0.111 (0.90)	0.113 (0.91)	0.109 (0.89)
Asset tangibility	0.041 (0.42)	0.042 (0.42)	0.042 (0.43)
Leverage	-0.684*** (-3.98)	-0.683*** (-3.97)	-0.688*** (-4.01)
R&D/Sales	0.500*** (3.13)	0.500*** (3.12)	0.501*** (3.13)
Stock volatility	2.120 (1.08)	2.128 (1.09)	2.156 (1.10)
HHI	0.238 (0.68)	0.241 (0.69)	0.237 (0.68)
Other firm and CEO controls	Yes	Yes	Yes
Year and industry fixed effects	Yes	Yes	Yes
Number of observations	3,148	3,148	3,148
Adjusted R-squared	0.292	0.292	0.291



**Panel C: Personal activism vs. corporate activism**

	Overall rating		
	(1)	(2)	(3)
# of activism events–aligned (founder CEO)	0.039** (2.49)		
# of activism events–aligned (non-founder CEO)	0.016** (2.42)		
# of activism events–aligned (high CEO ownership)		0.030*** (3.33)	
# of activism events–aligned (low CEO ownership)		0.014* (1.91)	
# of activism events–aligned (pro-active)			0.032* (1.82)
# of activism events–aligned (reactive)			0.016*** (2.65)
# of activism events–misaligned	0.003 (0.18)	0.006 (0.43)	0.007 (0.50)
Ln(Number of Glassdoor reviews)	0.005 (0.29)	0.005 (0.29)	0.005 (0.28)
Ln(Firm size)	0.074*** (3.74)	0.074*** (3.74)	0.073*** (3.71)
Stock return	0.089*** (3.12)	0.090*** (3.13)	0.089*** (3.12)
ROA	0.109 (0.88)	0.112 (0.90)	0.109 (0.89)
Asset tangibility	0.041 (0.41)	0.042 (0.42)	0.042 (0.43)
Leverage	-0.685*** (-3.99)	-0.685*** (-3.99)	-0.685*** (-4.00)
R&D/Sales	0.498*** (3.12)	0.499*** (3.13)	0.500*** (3.13)
Stock volatility	2.139 (1.09)	2.125 (1.08)	2.144 (1.10)
HHI	0.242 (0.69)	0.244 (0.70)	0.247 (0.71)
Other firm and CEO controls	Yes	Yes	Yes
Year and industry fixed effects	Yes	Yes	Yes
Number of observations	3,148	3,148	3,148
Adjusted R-squared	0.292	0.292	0.292



**Table 6. Endogeneity concerns**

This table presents estimates from ordinary least squares estimations. Panel A uses employee review-level data and presents the overall Glassdoor ratings for the quarter before and after CEO turnover years. Panel B presents estimates from an employee review-level regression, which includes firm fixed effects. The dependent variable in Panel B is the employee ratings of the overall company. The dependent variables in Panels C and D are the yearly average employee ratings of the overall company. Panels C and D use firm-year level data. Panel C presents estimations wherein we omit/account for outliers, by removing the firms with the most prolific CEO activists (Column 1), removing firms with the most and least prolific CEO activists (Column 2), or winsorizing the *# of activism events* variable (Column 3). In Panel D, Columns 1 and 2 employ an entropy-balanced sample, Column 3 includes the control *Ever activism*, which equals one for firms that have a CEO that engages in activism at any point in time in our sample period, and zero otherwise. *# of activism events-aligned (misaligned)* equals the number of CEO activism events that the firm's CEO engaged in the previous year, wherein the ideological tilt of the activist stance was aligned (misaligned) with the ideological tilt of the firm's employees. All regressions in Panels C and D control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in Appendix C. *T*-statistics are shown in parentheses. Standard errors are adjusted for heteroskedasticity (White, 1980) and are clustered by firm. \*, \*\*, \*\*\* denotes significance at 0.10, 0.05, 0.01 levels, respectively.

**Panel A: Glassdoor reviews around CEO turnovers**

	N	Mean	Median
	(1)	(2)	(3)
<b><i>Non-activist CEO to right away activist CEO (i.e., engaging in activism in the year of appointment) turnovers</i></b>			
Last quarter prior to the year of CEO turnover	2,524	3.422	4.000
First quarter after the year of CEO turnover	2,931	3.575	4.000
Difference		0.153***	0.000***
<b><i>Non-activist CEO to non-activist CEO turnovers</i></b>			
Last quarter prior to the year of CEO turnover	7,193	3.266	3.000
First quarter after the year of CEO turnover	9,327	3.257	3.000
Difference		-0.009	0.000
<b><i>Non-activist CEO to not yet activist CEO (i.e., engaging in activism only after the year of appointment) turnovers</i></b>			
Last quarter prior to the year of CEO turnover	4,447	3.398	4.000
First quarter after the year of CEO turnover	5,635	3.395	4.000
Difference		-0.003	0.000

**Panel B: Comparison of right away activist and non-activist/not yet activist CEO appointments**

	Overall rating			
	(1)	(2)	(3)	(4)
Activist x Post-turnover	0.146*** (3.90)	0.074* (1.87)	0.158*** (3.32)	0.240* (1.71)
Post-turnover	0.033* (1.78)	0.104*** (4.34)	0.020 (0.56)	-0.062 (-0.45)
Activist	-	-	-	-
Firm fixed effects	Yes	Yes	Yes	Yes
Adjusted R <sup>2</sup>	0.11	0.09	0.08	0.10
Number of observations	21,975	15,537	9,303	5,795



**Panel C: Outliers**

	Overall rating		
	(1)	(2)	(3)
# of activism events–aligned, drop the most prolific	0.021** (2.03)		
# of activism events–aligned, drop the most & least prolific		0.022** (2.22)	
# of activism events–aligned, winsorized at 2.5%			0.047** (2.09)
# of activism events–misaligned, drop the most prolific	0.008 (0.50)		
# of activism events–misaligned, drop the most & least prolific		0.007 (0.48)	
# of activism events–misaligned, winsorized at 2.5%			0.056 (1.55)
Ln(Number of Glassdoor reviews)	0.004 (0.25)	0.005 (0.27)	0.004 (0.23)
Ln(Firm size)	0.068*** (3.37)	0.070*** (3.41)	0.072*** (3.70)
Stock return	0.088*** (3.04)	0.083*** (2.84)	0.089*** (3.13)
ROA	0.098 (0.80)	0.133 (1.02)	0.114 (0.92)
Asset tangibility	0.046 (0.47)	0.059 (0.57)	0.042 (0.43)
Leverage	-0.670*** (-3.89)	-0.702*** (-4.00)	-0.683*** (-4.00)
R&D/Sales	0.493*** (3.11)	0.502*** (3.15)	0.495*** (3.12)
Stock volatility	1.891 (0.96)	1.740 (0.88)	2.175 (1.11)
HHI	0.228 (0.65)	0.282 (0.76)	0.282 (0.81)
Other firm and CEO controls	Yes	Yes	Yes
Year and industry fixed effects	Yes	Yes	Yes
Number of observations	3,112	2,901	3,148
Adjusted R-squared	0.282	0.285	0.292



**Panel D: Other robustness tests**

	Overall rating		
	(1)	(2)	(3)
# of activism events–aligned	0.019** (2.46)		0.018*** (2.88)
# of activism events–aligned, drop the most prolific		0.033*** (3.00)	
# of activism events–misaligned	0.004 (0.38)		-0.001 (-0.04)
# of activism events–misaligned, drop the most prolific		0.007 (0.56)	
Ever activism			0.095*** (3.12)
Ln(Number of Glassdoor reviews)	0.004 (0.17)	0.009 (0.39)	0.003 (0.19)
Ln(Firm size)	0.053* (1.82)	0.036 (1.06)	0.057*** (2.80)
Stock return	0.125*** (3.87)	0.116*** (3.71)	0.084*** (2.95)
ROA	0.547** (2.12)	0.465* (1.70)	0.100 (0.83)
Asset tangibility	-0.190 (-1.12)	-0.161 (-0.93)	0.050 (0.51)
Leverage	-0.872*** (-3.79)	-0.807*** (-3.59)	-0.653*** (-3.81)
R&D/Sales	0.287** (2.24)	0.238* (1.74)	0.457*** (2.85)
Stock volatility	4.722 (1.42)	3.143 (0.93)	1.747 (0.89)
HHI	0.921 (0.90)	1.055 (1.05)	0.265 (0.76)
Other firm and CEO controls	Yes	Yes	Yes
Year and industry fixed effects	Yes	Yes	Yes
Number of observations	3,148	3,112	3,148
Adjusted R-squared	0.451	0.432	0.297



**Table 7. Inventor relocation**

This table presents estimates from ordinary least squares estimations. In Column 1 (4), the dependent variable is the number of a firm's newly hired Democrat (Republican) inventors in a given year. In Column 2 (5), the dependent variable is the number of a firm's Democrat (Republican) inventors who leave for other firms in a given year. In Column 3 (6), the dependent variable is the difference between the number of newly hired Democrat (Republican) inventors and the number of leaving Democrat (Republican) inventors. *# of activism events–liberal/neutral/conservative* equals the number of liberally/neutrally/conservatively leaning CEO activism events that the firm's CEO engaged in the previous year. All regressions control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in Appendix C. *T*-statistics are shown in parentheses. Standard errors are adjusted for heteroskedasticity (White, 1980) and are clustered by firm. \*, \*\*, \*\*\* denotes significance at 0.10, 0.05, 0.01 levels, respectively.

	Democrat			Republican		
	New hires	Leavers	Net hires	New hires	Leavers	Net hires
	(1)	(2)	(3)	(4)	(5)	(6)
# of activism events–liberal	0.541** (2.14)	0.229 (1.28)	0.312** (2.00)	0.116 (1.57)	0.113* (1.71)	0.004 (0.07)
# of activism events–neutral	-0.480 (-0.98)	-0.144 (-0.36)	-0.335 (-0.99)	-0.043 (-0.31)	-0.030 (-0.21)	-0.014 (-0.16)
# of activism events–conservative	0.404 (0.46)	1.386 (1.05)	-0.983 (-0.55)	-0.019 (-0.04)	0.266 (0.62)	-0.285 (-0.57)
Ln(Firm size)	1.333*** (4.29)	1.439*** (4.45)	-0.105 (-0.61)	0.359*** (5.33)	0.608*** (5.56)	-0.250*** (-3.53)
Stock return	-0.083 (-0.55)	-0.260* (-1.82)	0.177 (1.40)	-0.047 (-1.09)	-0.084 (-1.29)	0.037 (0.74)
ROA	2.132 (1.33)	3.004* (1.80)	-0.873 (-1.05)	0.985** (2.00)	1.460** (2.17)	-0.475 (-1.49)
Asset tangibility	-1.218 (-1.56)	-0.788 (-1.07)	-0.430 (-0.94)	-0.476* (-1.65)	-0.359 (-0.94)	-0.117 (-0.48)
Leverage	-2.756** (-2.02)	-3.023** (-2.51)	0.267 (0.37)	-0.484 (-1.17)	-0.853 (-1.63)	0.368 (1.32)
R&D/Sales	3.455** (2.51)	4.803** (2.51)	-1.349 (-1.57)	1.025*** (2.82)	1.781*** (2.81)	-0.756** (-2.35)
Stock volatility	35.892** (2.38)	42.282*** (2.64)	-6.389 (-0.67)	9.257** (1.98)	16.984** (2.12)	-7.727 (-1.46)
HHI	-3.592 (-1.09)	-4.105* (-1.79)	0.513 (0.16)	0.744 (0.71)	-0.590 (-0.63)	1.334 (1.17)
Other firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes
Year and industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	3,570	3,570	3,570	3,570	3,570	3,570
Adjusted R-squared	0.279	0.291	0.059	0.243	0.281	0.109



**Table 8. Inventor productivity**

This table compares the inventor-level productivity metrics between the newly hired inventors and incumbent (leaving) inventors in firms with and without CEO activism in Panel A (Panel B). It presents the median number of total patents, total citations, average originality, and average generality for the newly hired inventors, incumbent inventors, and leaving inventors. For firms with CEO activism, newly hired inventors include inventors hired during post-CEO activism period. Variable definitions are in Appendix C. Differences in medians between newly hired inventors and incumbent/leaving inventors are based on the Wilcoxon test. Differences in medians between inventors in firms with and without CEO activism are based on the Wilcoxon test. Differences in median differences between newly hired inventors and incumbent/leaving inventors in firms with and without CEO activism are derived from quantile regressions, wherein total patents/total citations/average originality/average generality is regressed on a new hire indicator, a CEO activist firm indicator, and the interaction between the new hire and CEO activism indicators. Significance for differences in median differences is based on *t*-stats on the interaction variable between the new hire indicator and CEO activist firm indicator. \*, \*\*, \*\*\* denotes significance at 0.10, 0.05, 0.01 levels, respectively.

**Panel A: Newly hired vs. incumbent inventors**

	<b>Incumbent inventors</b>	<b>Newly hired inventors</b>	<b>Difference in medians</b>
<i>Firms with CEO activism</i>			
Total # of patents	5.21	10.71	5.49***
Total # of citations	1.73	4.65	2.92***
Average patent originality	0.44	0.43	-0.01
Average patent generality	0.32	0.31	-0.01
<i>Firms without CEO activism</i>			
Total # of patents	6.66	9.19	2.54***
Total # of citations	2.41	4.08	1.67***
Average patent originality	0.42	0.42	0.00
Average patent generality	0.30	0.31	0.01
<i>Differences in medians between firms with and without CEO activism</i>			
Total # of patents	-1.44***	1.51***	2.96***
Total # of citations	-0.67***	0.57***	1.25***
Average patent originality	0.02***	0.01**	-0.01
Average patent generality	0.02*	0.01	-0.02

**Panel B: Newly hired vs. leaving inventors**

	<b>Leaving inventors</b>	<b>Newly hired inventors</b>	<b>Difference in medians</b>
<i>Firms with CEO activism</i>			
Total # of patents	10.11	10.71	0.60**
Total # of citations	4.41	4.65	0.24**
Average patent originality	0.43	0.43	0.01
Average patent generality	0.29	0.31	0.02**
<i>Firms without CEO activism</i>			
Total # of patents	9.34	9.19	-0.15
Total # of citations	3.83	4.08	0.25
Average patent originality	0.43	0.42	-0.01**
Average patent generality	0.31	0.31	0.00
<i>Differences in medians between firms with and without CEO activism</i>			
Total # of patents	0.76***	1.51***	0.75**
Total # of citations	0.59***	0.57***	-0.02
Average patent originality	0.00	0.01**	0.01
Average patent generality	-0.01	0.00	0.01



**Table 9. Innovation**

This table presents estimates from ordinary least squares estimations. The dependent variables in Columns 1–5 are firm-year level values of: the number of patents, the number of patents per employee, the number of patent citations, patent originality, and patent generality, respectively. The dependent variables in Columns 1–3 have been transformed using the inverse hyperbolic sine transformation. *# of activism events–aligned (misaligned)* equals the number of CEO activism events that the firm’s CEO engaged in the previous year, wherein the ideological tilt of the activist stance was aligned (misaligned) with the ideological tilt of the firm’s employees. All regressions control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in Appendix C. *T*-statistics are shown in parentheses. Standard errors are adjusted for heteroskedasticity (White, 1980) and are clustered by firm. \*, \*\*, \*\*\* denotes significance at 0.10, 0.05, 0.01 levels, respectively.

	Patents	Patents/ employee	Citations	Originality	Generality
	(1)	(2)	(3)	(4)	(5)
# of activism events–aligned	0.152** (2.02)	0.079*** (2.90)	0.096* (1.81)	0.006** (2.07)	-0.003 (-0.42)
# of activism events–misaligned	0.069 (0.74)	-0.005 (-0.14)	0.044 (0.48)	0.007 (1.28)	0.027 (1.47)
Ln(Firm size)	0.828*** (8.45)	0.189*** (3.76)	0.885*** (8.77)	-0.016** (-2.46)	-0.014 (-1.61)
Stock return	-0.098 (-1.35)	-0.037 (-0.97)	-0.114 (-1.50)	-0.007 (-0.61)	0.015 (0.84)
ROA	1.826** (2.16)	0.874** (2.09)	1.656** (2.07)	-0.148** (-1.98)	-0.048 (-0.49)
Asset tangibility	-0.791 (-1.45)	-0.374 (-1.47)	-0.475 (-0.96)	0.006 (0.11)	-0.088 (-1.49)
Leverage	-2.654*** (-3.63)	-0.678* (-1.96)	-2.706*** (-3.65)	0.029 (0.45)	0.038 (0.41)
R&D/Sales	3.956*** (3.19)	3.277*** (3.42)	4.116*** (3.57)	-0.088** (-2.19)	-0.004 (-0.09)
Stock volatility	14.693 (1.54)	14.701*** (2.61)	20.962** (2.20)	-0.758 (-0.84)	-2.145* (-1.72)
HHI	-1.458 (-1.24)	-0.939 (-1.27)	-0.767 (-0.59)	0.134 (1.24)	-0.200 (-1.10)
Other firm and CEO controls	Yes	Yes	Yes	Yes	Yes
Year and industry fixed effects	Yes	Yes	Yes	Yes	Yes
Number of observations	3,405	3,405	3,405	2,141	1,718
Adjusted R-squared	0.609	0.597	0.575	0.199	0.114



**Table 10. Credibility of CEO activism**

This table presents estimates from ordinary least squares estimations, using an executive-level dataset of executives with less than or equal to two years of tenure. In Column 1, the dependent variable is the percent of newly hired inventors that are either female or non-white. The dependent variable in Column 2 is the natural logarithm of one plus an executive's total compensation (TDC1). *# of activism events–diversity/pay equality* equals the number of CEO activism events that the firm's CEO engaged in the previous year, wherein the topic of focus was diversity/pay equality. *Female dummy* equals one if the executive is a female, and zero otherwise. The regression in Column 1 (Column 2) controls for year and 48 Fama-French industry (firm) fixed effects and includes a constant (not shown). Variable definitions are in Appendix C. *T*-statistics are shown in parentheses. Standard errors are adjusted for heteroskedasticity (White, 1980) and are clustered by firm (executive) in Column 1 (Column 2). \*, \*\*, \*\*\* denotes significance at 0.10, 0.05, 0.01 levels, respectively.

	Under- represented inventors (1)	Ln (1+TDC1) (2)
# of activism events–diversity	0.033** (1.97)	
# of activism events–pay equality		-0.988*** (-3.48)
# of activism events–pay equality × Female dummy		0.554** (2.56)
Female dummy		-0.170*** (-3.22)
# of activism events–non-diversity	0.002 (0.37)	
# of activism events–non-pay equality		-0.014 (-0.71)
Ln(Firm size)	0.046*** (4.95)	0.115 (0.95)
Stock return	-0.012 (-1.06)	0.095 (1.17)
ROA	0.178** (2.22)	0.041 (0.25)
Asset tangibility	-0.027 (-0.57)	-0.095 (-0.12)
Leverage	-0.288*** (-4.63)	0.001 (0.00)
R&D/Sales	0.347*** (2.59)	0.053 (0.34)
Stock volatility	2.011** (2.00)	0.128 (0.02)
HHI	0.098 (0.60)	0.944 (0.82)
Other firm and CEO controls	Yes	Yes
Executive characteristics	No	Yes
Year and industry fixed effects	Yes	No
Year and firm fixed effects	No	Yes
Number of observations	3,570	1,062
Adjusted R-squared	0.301	0.507



**Table 11. Path analysis**

This table summarizes the path analysis estimates of the relation between CEO activism and Tobin's Q using two paths: employee satisfaction and innovation. *p* indicates path coefficients and *r* indicates (Pearson) correlation coefficients. # of activism events–aligned (misaligned) equals the number of CEO activism events that the firm's CEO engaged in the previous year, wherein the ideological tilt of the activist stance was aligned (misaligned) with the ideological tilt of the firm's employees. Variable definitions are in Appendix C. *T*-statistics are shown in parentheses. \*, \*\*, \*\*\* denotes significance at 0.10, 0.05, 0.01 levels, respectively.

	Path= Satisfaction (1)	Path= Innovation (2)
<b>Total Effect</b>		
<i>r</i> (# of activism events–aligned, Tobin's Q)	0.092** (2.49)	0.092** (2.49)
<i>r</i> (# of activism events–misaligned, Tobin's Q)	-0.009 (-0.10)	-0.009 (-0.10)
<b>Direct Path</b>		
<i>p</i> (# of activism events–aligned, Tobin's Q)	0.076** (2.03)	0.076** (2.03)
<i>p</i> (# of activism events–misaligned, Tobin's Q)	-0.018 (-0.20)	-0.018 (-0.20)
Percentage (aligned activism)	82.7%	82.7%
<b>Mediated Path</b>		
<i>p</i> (# of activism events–aligned, Path)	0.020*** (3.10)	0.159** (2.02)
<i>p</i> (# of activism events–misaligned, Path)	0.010 (0.72)	0.091 (0.97)
<i>p</i> (Path, Tobin's Q)	0.223*** (3.25)	0.072*** (3.17)
<i>p</i> (# of activism events–aligned, Path) × <i>p</i> (Path, Tobin's Q)	0.004** (2.16)	0.011* (1.69)
<i>p</i> (# of activism events–misaligned, Path) × <i>p</i> (Path, Tobin's Q)	0.002 (0.70)	0.007 (0.90)
Percentage (aligned activism)	4.9%	12.4%
Firm and CEO controls	Yes	Yes
Year and industry fixed effects	Yes	Yes
Number of observations	3,538	
Akaike's information criterion (AIC)	26,179	



## **Appendix A: CEO activism**

### **A1. Identifying CEO activism events**

To identify CEO activism events, we search news articles from Google News and tweets data from Twitter for a combination of activism keywords and CEO/firm name. We restrict the query results to be within the tenure years for each CEO. For example, Tim Cook was promoted to be the CEO of Apple in August of 2011. To search for his stance on climate change, we search for “Tim Cook + climate change”, “Tim Cook + Apple + climate change”, “Cook + climate change”, “Cook + Apple + climate change”, “Apple + CEO + climate change”, “Apple + chief + climate change”, “Apple + executive + climate change” from August 1, 2011 to December 31, 2019. We remove duplicate news articles and tweets, keeping the earliest one. Each news story and tweet is then manually reviewed by three research assistants, who rated each event on a 1 (definitely not activism) to 5 (definitely activism) scale. We then take the mean of the RAs’ classifications and only keep events with an average score of three or higher.<sup>30</sup>

Although we adopt the term “CEO activism,” our sample includes both: (i) activism events that are likely to be expressions of the CEO’s personal beliefs and (ii) activism events that are more ambiguous as to whether they articulate a personal belief or represent a firm’s broader public relations strategy. Our definition also includes activism events regardless of whether they are related or unrelated to the firm’s business operations, as CEOs may describe seemingly peripheral issues as integrally important to their firms and as it can be difficult to distinguish between “core” and “tangential” topics (Hambrick and Wowak, 2021). Lastly, our sample includes activism events regardless of whether they are accompanied by an action or not.

### **A.2 Ideological leaning of the event**

The RAs labeled each activism event as capturing either a liberal, neutral, or conservative ideological stance. Stances are classified as neutral if they are not obviously liberal-leaning or conservative-leaning. These often include activist stances that are non-partisan in nature (e.g., fighting third-world poverty, providing clean drinking water). To aggregate RAs’ responses, we classified an event as liberally leaning if all RAs labeled it as liberal, and we classified it as conservatively leaning if all RAs labeled it as

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<sup>30</sup> Our results are robust if we impose a higher cut-off point.



conservative. If there were any disagreements in the labels, or if all RAs labeled the event as neutral, we classified the event as neutral. In the table below, we provide examples of activism events with different ideological leanings.

Score	Example
1 (Liberal)	I stand with #Dreamers (Twitter, 9/6/17, Rami Rahim, Juniper Networks.)
2 (Neutral)	Instead of punting on a budget because of party divisiveness, we should be working together to get the job done - not for Republicans or Democrats - but for every single citizen of the United States (Twitter, 3/27/19, Kevin Johnson, Starbucks)
3 (Conservative)	Netflix CEO Intended to Boost Charter Schools in Donations to Anti-Abortion Legislators (CNN.com, 6/3/19, Reed Hastings, Netflix)

### A.3 Vividness of the activism event

The RAs also labeled the vividness of each event to capture the degree to which the statements/actions stand out. They were told that a highly vivid statement/action is one that is exceedingly counter-normative and/or seemingly very risky, whereas non-vivid statements/actions elicit little attention and are rather innocuous. In the table below, we provide examples of activism events with different vividness scores.

Score	Example
1 (not vivid)	in honor of dr. king, let's aspire to a world where grace and tolerance and inclusion are valued again. (Twitter, 1/16/17, Devin Wenig, Ebay)
2 (somewhat vivid)	I'm in NYC today and it fills me with great #pride to see the Manhattan store celebrating in a big way. We've come so far and still have a ways to go to ensure #lgbtq rights are protected in workplaces and communities everywhere (Twitter, 6/1/19, Sasan Goodarzi, Intuit)
3 (very vivid)	Microsoft to Trump: You're going to have to go through us to deport Dreamers who work here (CNBC.com, 09/05/17, Microsoft)



## Appendix B: Examples of Glassdoor free-response comments

Company	Date	Main Text Free-Response Comments
Accenture	05/11/2019	Awesome Diversity and Inclusion Programs
Spectrum Pharm.	08/16/2014	Great diversity and work-space environment; however, work/life balance is very poor within some functional groups
Company	Date	“Pros” Free-Response Comments
Paramount	11/11/2014	Nice co-workers; strong values; strong social activism
Lowes	04/08/2015	A surprisingly great environment for LGBT Individuals and a diverse workplace. I found Lowe's treated such workers with respect.
Equinix	10/12/2020	Great people. Awesome work-life balance. Job security. Good team of immigration lawyers. Cultural diversity. No sign of discrimination based on color, race, religion, or gender
Company	Date	“Cons” Free-Response Comments
Apple	03/16/2018	Very liberal environment Managers and coworkers always making negative comments about President and conservatives Even Tim Cook sends company-wide emails about him trying to convince trump to change his mind on certain things.
Mettler-Toledo	08/06/2019	Good old boys club. Womens' opinions mean nothing, but an utter annoyance to management. Literally impossible to shatter the glass ceiling. Not a feasible working environment for women in any state of their career. ZERO work/life balance especially with women who have children. WARNING.
Oracle	01/31/2017	While the leaders of other major tech employers choose to withhold judgement and support of Trump's discriminatory, devise and dangerous agenda - our leader, Safra Catz, decided to immediately appease him. This position is not only wrong but is hurting employee morale. In fact, the head of our most strategic initiative - Cloud - resigned in protest.



## Appendix C: Variable definitions

Variable	Definitions
<b>Panel A: Dependent variables</b>	
<i>Overall rating</i>	Annual average employee ratings of the overall company from Glassdoor.com.
<i>Overall rating–Dem. (Rep.)</i>	Annual average employee ratings of the overall company from Glassdoor.com given by employees located in Democrat (Republican) states.
<i>Top management</i>	Annual average employee ratings of the top management from Glassdoor.com.
<i>Culture</i>	Annual average employee ratings of the corporate culture from Glassdoor.com.
<i>Rating dispersion</i>	Standard deviation of employee ratings of the overall company from Glassdoor.com.
<i>New hire–Dem. (Rep.)</i>	The number of a firm’s newly hired Democrat (Republican) inventors in a given year.
<i>Leaver–Dem. (Rep.)</i>	The number of a firm’s Democrat (Republican) inventors who leave for other firms in a given year.
<i>Net hire–Dem. (Rep.)</i>	The difference between the number of newly hired Democrat (Republican) inventors and the number of leaving Democrat (Republican) inventors.
<i>Patents</i>	The number of patent applications filed in a given year.
<i>Patents/employee</i>	The number of patent applications filed in a given year divided by the number of employees.
<i>Citations</i>	Total citations per patent filed in a given year.
<i>Originality</i>	Herfindahl index of cited patents, following Trajtenberg et al. (1997)
<i>Generality</i>	Herfindahl index of citing patents, following Trajtenberg et al. (1997)
<i>Underrepresented inventors</i>	The percentage of newly hired inventors in a given year that are female or non-white.
<i>TDC1</i>	An executive’s total compensation.
<i>Tobin’s Q</i>	Market value of assets divided by book value of assets. Market value of assets is book value of total assets minus book value of equity plus market value of equity.
<b>Panel B: Firm characteristics</b>	
<i># of activism events</i>	The number of unique activism events during the given year.
<i># of activism events–aligned (misaligned)</i>	We classify activism events as aligned if: i) an activism event has a liberal leaning and the company’s workforce is democratically leaning, i.e., the aggregate employee base has democratic leaning equal to or above 0.5; or ii) an activism event has a conservative leaning and the company’s workforce is republican leaning, i.e., the aggregate employee base has democratic leaning below 0.5. The rest of the activism events are classified as misaligned. Employee democratic leaning is defined below under <i>CEO-employee alignment</i> variable.
<i>Number of Glassdoor reviews</i>	The number of employee ratings of the overall company from Glassdoor.com during the given year.
<i>Firm size</i>	Book value of total assets.
<i>Stock return</i>	Buy-and-hold abnormal return (BHAR) for the twelve months ending at the fiscal year-end. The market index is the CRSP value-weighted return.
<i>ROA</i>	Operating income before depreciation, scaled by book value of total assets.



Appendix C: Variable definitions (*continued*)

<b>Panel B: Firm characteristics (<i>continued</i>)</b>	
<i>Asset tangibility</i>	Net property, plant, and equipment divided by total assets.
<i>Leverage</i>	Book value of debt divided by market value of total assets.
<i>R&amp;D/Sales</i>	Research and development expense, scaled by sales.
<i>Stock volatility</i>	The standard deviation of daily stock returns over the fiscal year.
<i>HHI</i>	Herfindahl-Hirschman index of 4-digit SIC industry, based on sales.
<i>Sales growth</i>	Percent change in sales
<i>Cash/Assets</i>	Cash, scaled by total assets.
<i>CSR index</i>	Sum of all of the CSR strengths minus all of the CSR concerns, obtained from KLD Research & Analytics.
<i>Fortune's 100 best company dummy</i>	Indicator variable that equals one if the firm is included in the Fortune's 100 best company list during a given year, zero otherwise.
<i>Employee-related negative event dummy</i>	Indicator variable that equals one if in a given year a firm experiences: i) a labor-related class-action lawsuit; ii) a labor-related violation; or iii) an employee strike, zero otherwise. Employee-related lawsuits are from the Audit Analytics Litigation database and involve violations in any of the following categories: i) employment law; ii) labor law; iii) Fair Labor Standard Act; iv) Americans with disabilities – employment; v) civil rights – jobs; vi) collective action; vii) labor-management relations; and viii) multi-district litigation. We also manually crosscheck a random sample of cases from each category with “Justia dockets and filings,” an online US federal court database to verify that we are capturing labor-related disputes. Employee-related violations are collected from the Corporate Research Project of Good Job First's Violation Tracker and include only labor-related violations (e.g., failing to maintain a safe workplace, underpaying workers, underreporting workers' hours). Employee strikes data are from CapitalIQ and are obtained by searching for “strike” in the description of labor-related announcements, which is verified against Google News.
<i>SG&amp;A/Employees</i>	Selling, general, and administrative expense, scaled by the number of employees.
<i>High-paying firm</i>	Indicator variable that equals one if a firm's median employee pay is above the sample median value in two of the three disclosure years, based on 2017–2019 fiscal year-end proxy statements.
<i>Corporate culture</i>	Average of the five corporate cultural values of innovation, integrity, quality, respect, and teamwork, constructed following Li et al. (2021)



Appendix C: Variable definitions (*continued*)

<b>Panel B: Firm characteristics (<i>continued</i>)</b>	
<i>CEO-employee alignment</i>	Indicator variable that equals one if democratic leaning for the CEO and employees is above 0.5 (both democratic leaning) or below 0.5 (both republican leaning), zero otherwise. Employee democratic leaning is the value-weighted average of democratic leaning, with the number of employees serving as weights. For employees located at the firm's headquarters we use the fraction of voters that voted in support of the Democrat candidate in the county of the firm's headquarters in the most recent election. For the rest of the employees, we use the fraction of voters that voted in support of the Democrat candidate in the given state in the most recent election. State-level employment data is obtained from Infogroup. For companies with missing Infogroup data, we use the fraction of voters that voted in support of the Democrat candidate in the county of the firm's headquarters in the most recent election. See <i>CEO democratic leaning</i> for definition of CEO's leaning.
<i>Board independence</i>	Percent of directors who are unaffiliated with the firm beyond their directorship.
<i>Board size</i>	Number of directors on the board.
<b>Panel C: CEO characteristics</b>	
<i>Celebrity status</i>	Number of non-activism news articles and tweets featuring a company or CEO during a given year, scaled by total assets.
<i>Narcissism</i>	The relative total pay of the CEO to the next-highest paid executive.
<i>CEO/Chair duality</i>	Indicator variable that equals one if the CEO is also the Chair of the board, zero otherwise.
<i>Tenure</i>	Number of years in the position of CEO.
<i>Age</i>	CEO's age as reported in BoardEx.
<i>Gender</i>	Dummy variable that equals one if the CEO is male, zero otherwise.
<i>CEO democratic leaning</i>	The percentage of contributions to Democrats relative to total contributions to both Democrats and Republicans, based on hand-collected data from the Federal Election Committee. If no campaign contributions are found for the CEO, <i>CEO democratic leaning</i> is set to 0.5, which indicates political neutrality and corresponds to a CEO who has given the same amount to Republicans and Democrats (e.g., Hong and Kostovetsky, 2012; Di Giuli and Kostoevsky, 2014; Hutton et al., 2015).
<i>CEO founder</i>	Dummy variable that equals one if the CEO is the founder, zero otherwise. Founders are identified based on the CEO's title and data from CapitalIQ.
<i>CEO ownership</i>	Percentage of stock owned by the CEO.



## Appendix D: Additional robustness tests

This section describes several additional tests we conduct to mitigate endogeneity concerns, i.e., a placebo test, an instrumental variables estimation, and ITCV.

### D1. Placebo test

To conduct a placebo test, we generate a random activism events variable, *# of activism events–placebo*, which is constructed to mirror the distribution of the true *# of activism events* variable. We then estimate the relationship between employee satisfaction and CEO activism using the *# of activism events–placebo* variable instead of the actual *# of activism events* variable. If higher employee satisfaction for firms with activist CEOs stems from unobserved differences between firms with and without activist CEOs, then the placebo test should roughly replicate the findings in Table 4. As shown in Column 1 of Table D1, our earlier results cannot be replicated when we use a variable that randomly generates numbers of activism events for each firm-year, as the coefficient on *# of activism events–placebo* is insignificant, while the remaining control variables retain effects consistent with the main analyses. This analysis supports our primary inferences that aligned CEO activism is associated with higher employee satisfaction.

### D2. Instrumental variables estimation

We also employ an instrumental variables estimation, which replaces the endogenous choice of CEO activism with its predicted value. Our instrument, which captures directors' prior exposure to CEO activism, is based on Mkrtchyan et al. (2023) and Hambrick and Wowak (2021). Specifically, we conjecture that the experience directors gain by being exposed to CEO activism in other firms may influence their acceptance of CEO activism within the focal firm, so these directors may be less likely to discourage such behavior. Hence, we expect the number of directors on the board with prior exposure to CEO activism to be positively related to the likelihood of CEO activism at the focal firm.<sup>31</sup>

In addition to being correlated with the endogenous variable, the instrument should satisfy the exclusion restriction, that is, it should not directly impact employee satisfaction. Whereas it is impossible to be certain that any instrument satisfies the exclusion restriction, we take two steps to improve the likelihood that our instrument is valid. First, we restrict our measure to include only directors who were

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<sup>31</sup> Our results are robust if we restrict our instrument to only include CEO activism events that generated an either positive or insignificant market response at other firms, as directors are most likely to be receptive of CEO activism if the activism events they were exposed to previously resulted in non-negative market reactions.



already serving on the focal firm's board at the time of the CEO activism event in the other firm. This addresses the reverse causality concern in which these directors could be selected onto the focal firm's board because of their exposure to activist CEOs. Second, we only include directors' exposure to CEO activism that occurred in the year immediately preceding the year of the activism event in the focal firm (i.e.,  $t - 1$ ). Doing so allows us to capture directors' exposure to activism per se, rather than time-invariant director characteristics, and reduces the possibility that individual director characteristics might be affecting our estimates.

The results of the first-stage estimation are reported in Column 2 of Table D1 and show that our instrument is significantly related to the likelihood of CEO activism. Furthermore, the Kleibergen-Paap test rejects the null of underidentification ( $p$ -value  $< 0.01$ ) and the Cragg-Donald Wald  $F$ -statistic for weak instruments is 72.97, which rejects the null hypothesis that our instrument is weak. The first-stage results also provide insights regarding some of the determinants of CEO activism. We find that the CEOs of larger firms and those with more R&D spending are more likely to engage in activism. Similarly, CEO celebrity status and CEO democratic leaning are positively associated with CEO activism (untabulated). These findings align with those in Mkrtchyan et al. (2023), who provide a comprehensive discussion about the determinants of CEO activism. We report the second-stage regression in Column 3 of Table D1, in which we include the fitted value of CEO activism from the first stage as an explanatory variable. The results show that the coefficient on the predicted value of CEO activism remains positive and significant at the 5% level.<sup>32</sup>

### D.3. Impact threshold for a confounding variable

Lastly, we assess how severe the possible endogeneity problem must be to invalidate the inferences from our OLS estimations by calculating the impact threshold for a confounding variable (ITCV) (Frank, 2000; Larcker and Rusticus, 2010). The ITCV is the lowest product of the two correlations (the partial correlation between the dependent variable and the confounding variable, and the partial correlation between the predictor of interest and the confounding variable) that could render the coefficient statistically

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<sup>32</sup> The magnitude of the coefficient on predicted # of activism events in our instrumental variables estimation in Column 3 is about nine times larger than the coefficient on # of activism events from the OLS estimation in Column 1 in Table 4. As discussed in Jiang (2017), a potential explanation for this common phenomenon is that the 2SLS coefficient measures a local average treatment effect that may be larger than the population average treatment effect. Thus, the larger 2SLS coefficient could be because the firms that are most sensitive to our instruments happen to also have a larger sensitivity of employee responses to CEO activism.



insignificant. The larger the ITCV, the more robust the OLS results are to omitted variables concerns. Our results suggest that to invalidate our inferences, 43.47% of our estimated effect would have to be due to bias. Whereas there is no absolute standard for impact thresholds, we conjecture that it is very unlikely that such a large share of our estimate stems from bias.

Moreover, we estimate an ITCV of 0.028 for the *# of activism events* regressor, which implies that the partial correlations between CEO activism and overall Glassdoor ratings with a confounding omitted variable would have to be about 0.168 to overturn our results. To put this into perspective, we compute a benchmark for the magnitude of likely correlations involving the unobserved confounding variable by estimating the impact for each independent variable. We observe that firm size, number of Glassdoor reviews, culture, and SG&A expense have the largest ITCVs among control variables of 0.037, 0.032, 0.030, and 0.021 respectively. This implies that in order to invalidate our OLS results, any unobserved confounding variable must be more highly correlated with the dependent variable and *# of activism events* than any of our control variables. Assuming that we have a reasonable set of control variables, the ITCV for *# of activism events* appears large enough to suggest that our OLS results are not likely driven by a correlated omitted variable.



**Table D1. Additional robustness checks**

This table presents estimates from ordinary least squares estimations. The dependent variable in Columns 1 and 3 is the yearly average employee ratings of the overall company. The dependent variable in Column 2 is *# of activism events*, which equals the number of CEO activism events that the firm's CEO engaged. *# of activism events-placebo* equals the randomly assigned number of CEO activism events that the firm's CEO engaged in the previous year. The variable is constructed to mirror the distribution of true activism events in the sample. Column 2 is the first stage of a 2SLS model in which the number of activism events is instrumented using a board's prior exposure to CEO activism, which equals the number of directors with prior exposure to CEO activism. Column 3 reports the results of the second stage estimation. All regressions control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in the Appendix C. *T*-statistics are shown in parentheses. Standard errors are adjusted for heteroskedasticity (White, 1980) and are clustered by firm. \*, \*\*, \*\*\* denotes significance at 0.10, 0.05, 0.01 levels, respectively.

	Overall rating	1 <sup>st</sup> stage: # of activisms	2 <sup>nd</sup> stage: Overall rating
	(1)	(2)	(3)
# of activism events–placebo	0.005 (0.71)		
# of activism events			0.129** (2.40)
Board activism exposure		0.348*** (3.21)	
Ln(Number of Glassdoor reviews)	0.005 (0.32)	0.032 (1.00)	-0.001 (-0.03)
Ln(Firm size)	0.080*** (4.06)	0.340*** (2.70)	0.028 (1.20)
Stock return	0.089*** (3.13)	0.037 (0.63)	0.084*** (2.91)
ROA	0.120 (0.95)	0.409 (0.87)	0.058 (0.48)
Asset tangibility	0.044 (0.45)	0.063 (0.31)	0.027 (0.28)
Leverage	-0.694*** (-4.05)	-0.510** (-2.11)	-0.620*** (-3.58)
R&D/Sales	0.512*** (3.15)	0.534** (2.08)	0.436*** (2.90)
Stock volatility	2.107 (1.07)	4.377 (1.10)	1.912 (0.98)
HHI	0.255 (0.72)	0.845 (0.45)	0.191 (0.51)
Other firm and CEO controls	Yes	Yes	Yes
Year and industry fixed effects	Yes	Yes	Yes
Number of observations	3,148	3,148	3,148
Adjusted R-squared	0.291	-	0.214