

CEO Activism and Firm Value

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Abstract

We investigate the impact of CEO activism, the increasingly common practice of CEOs speaking out on social and political issues, on firm value. CEO activism may be beneficial for shareholders, as it can bolster firms' relationships with customers and employees. Alternatively, CEO activism may be detrimental if it alienates stakeholders with opposing views. Consistent with the former, we find that CEO activism results in a positive market reaction and higher valuations. These results can be explained by increased employee productivity and innovation, suggesting that CEO activism may improve corporate reputation in labor markets. Additionally, activist CEOs benefit from more future directorships.

Keywords: CEO Activism, firm value, productivity, innovation.

JEL Classification Numbers: G34

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1. Introduction

Over the last decade, business leaders have increasingly engaged in CEO activism, i.e., the practice of speaking out on hot-button social and political issues. Examples of CEO activism include, Tim Cook (Apple) and Marc Benioff (Salesforce) expressing their views in support of LGBTQ rights; Satya Nadella (Microsoft) and Mark Zuckerberg (Facebook) on immigration; Bob Iger (Walt Disney) and Howard Schultz (Starbucks) on gun control; and Kevin Plank (Under Armour) on climate change.¹ While this behavior may appear to be at odds with a CEO's traditional role as a value-maximizing agent of the shareholders, survey and experimental evidence suggests that CEO activism may be the result of market forces and the demands of customers, employees, and other stakeholders. For instance, Weber Shandwick and KRC Research (2018) find that a large percentage of Millennials believe that CEOs have a responsibility to speak out on social and political issues.²

Yet, the consequences of CEO activism are ex ante unclear. On the one hand, public statements made by CEOs may have no bearing on firms' stakeholders and may be simply perceived as toothless "cheap talk." On the other hand, they could engender either positive or negative reactions from different stakeholder groups. For instance, CEOs who resigned from President Trump's economic council were widely praised (Chatterji and Toffel (2018)). Whereas Nike's share price fell in after-market trading following its controversial ad campaign featuring Colin Kaepernick, even though Nike posted double-digit earnings and revenue growth during the fiscal first quarter (CNBC, 9/25/2018). In this paper, we explore how CEO activism impacts firm performance.

To this end, we propose two hypotheses. The *alignment hypothesis* conjectures that CEOs engage in activism because they believe that doing so can forge bonds with important stakeholders (i.e.,

¹ See Appendix A for more examples of CEO Activism.

² Other survey and experimental data suggesting that stakeholders expect corporate executives to be involved in conversations and debates about social issues include Sorkin (2018), Larcker, Miles, Tayan, and Wright-Violich (2018), Chatterji and Toffel (2019), and Korschun, Aggarwal, Rafliieian and Swain (2019).

employees and customers) and, hence, is in the interest of the shareholders. To understand why CEO activism may matter for employees, we draw upon the social identity and self-determination theories. The social identity theory contends that people categorize themselves with an organization to which they feel a sense of belonging and self-definition (Tajfel (1974), Tajfel and Turner (1985, 1986)). When employees identify with the company, they are likely to become psychologically attached and committed to their organizations, which results in numerous corporate benefits, such as reduced attrition, improved recruitment, and increased employee morale, loyalty, and job satisfaction (Dutton, Dukerich, and Harquail (1994); Lee, Lee, and Lum (2008)). Similarly, the self-determination theory (Deci and Ryan (1985, 2008), Gagné and Deci (2005)) suggests that factors facilitating the fulfillment of employees' need for relatedness (i.e., the feeling of being close to others) can have a positive impact on employees' intrinsic motivation and other work-related outcomes. If the CEO's proclamations on social and political issues evoke positive responses from employees, including higher identification with the company and agreement with the company's values, employees may be more willing to direct their behaviors towards activities that are in line with the goals and value of their firms. Therefore, CEO activism may solidify the company's values and culture and boost the productivity of their employees.

Similarly, CEO activism may have a positive impact on customers, as it may increase customer identification with the company. The more customers identify with a company, the more positively they will perceive it and the more loyal they will become to the company (Bhattacharya and Sen (2003), Maignan and Ferrell (2001)). If CEO activism builds "brand equity," consumers who value CEO activism may support such firms by buying more of their products and services. Hence, the *alignment hypothesis* predicts that the public stances CEOs take on social issues, whether genuine or not, may improve firm value via a positive impact on employees and/or customers.

In contrast, the *misalignment hypothesis* suggests that CEOs may engage in activism to promote their personal beliefs, regardless of the consequences for shareholders. In such cases, investors may

perceive CEO activism negatively if they do not feel the CEO's role should include voicing their advocacy views. Consistent with this, survey evidence suggests that 52% of Americans think that executives should avoid taking a public stance on issues unrelated to their business (Weber Shandwick and KRC Research (2018)). Shareholders may also react to CEO activism negatively if they think activism will alienate a significant portion of the company's stakeholders. For instance, stakeholders might change their willingness to be involved with the firm if the CEO takes a stance that is opposite their own or that is extreme enough to raise concern and uncertainty about firm's future performance. Some examples of companies facing backlash from employees and customers include Dick's Sporting Goods, Goya, Under Armour, CrossFit, Oracle and Facebook.³ Hence, the *misalignment hypothesis* predicts that CEO activism will have a detrimental effect on firm value.

To test these hypotheses, we build a novel dataset of news articles and tweets from 2010–2019 in which CEOs of S&P 500 companies speak out on social and political issues.⁴ Using this data, we document that 38% of CEOs in our sample take a public stance at least once. More importantly, our data reveal an upward trend in the rate of CEO activism, from 5% in 2010 to 56% in 2019, suggesting that CEO activism is becoming more prevalent and more acceptable by society. Among the most popular topics addressed by CEOs are: sustainability, diversity, LGBTQ rights, and education. We observe that CEO activism is more frequent in industries producing consumer durable and non-durable goods (e.g., cars, household appliances, food, apparel, and toys) and less frequent in the energy sector.

³ Dick's Sporting Goods' CEO's controversial choice to stop selling assault-style weapons and take other steps to limit firearms sales prompted backlash from gun-owning customers, pro-gun lawmakers, and the National Rifle Association (The Washington Post, 5/31/2019). People have boycotted Goya and Under Armour after their CEOs praised President Trump. Under Armour's stock was downgraded as one analyst wondered whether the CEO's remarks would "make it nearly impossible to effectively build a cool urban lifestyle brand in the foreseeable future." (Chatterji and Toffel (2018), CNN, 7/10/2020). Reebok and hundreds of gyms cut ties with CrossFit after founder Greg Glassman's tweet and comments about George Floyd's killing (WSJ, 6/10/2020). Oracle's CEO had been put on the spot when a group of workers from that company launched a petition urging their employer to join numerous other companies in opposing President Trump's immigration ban (Chatterji and Toffel (2018)). Mark Zuckerberg has faced backlash among Facebook employees over his refusal to take action over controversial posts by President Trump (Forbes, 6/2/2020).

⁴ See Section 2 and Appendix B for a full list of the keywords used in our searchers.

We start our analysis by investigating the impact of CEO activism on firm value using announcement returns surrounding CEO activism. One advantage of analyzing announcement returns is that they are less likely to be driven by omitted firm or CEO characteristics. We find that, on average, the market responds positively to tweets and news articles that publicize a CEO's stance on social and political issues. The three- to seven-day cumulative abnormal returns are especially large and positively significant when CEOs speak out on topics related to diversity (median returns range from 0.13% to 0.30%) and are insignificant when CEOs speak out on topics related to the environment. To gain further insights as to when CEO activism might be perceived favorably by investors, we examine cross-sectional variation in the market response along three dimensions: industry competitiveness, human capital intensity, and shareholders' pro-social preferences. We find that the response to CEO activism is stronger among: i) firms in highly competitive industries, wherein CEOs may use activism to help their firm stand out and attract/retain customers/employees; ii) firms with high levels of human capital intensity, where the leaders of firms may speak out in an effort to engender greater effort from their workforce and draw in talented employees; and iii) firms whose shareholders have stronger pro-social preferences, as CEOs may engage in activism on the specific topics they know their shareholders will appreciate. These findings provide the first empirical evidence that market participants react positively to CEO activism, which is consistent with the *alignment hypothesis*.

We then proceed to test our two competing hypotheses using firms' market-to-book ratios as an alternative measure of firm value. In line with the positive market reaction, we estimate a strong, positive relation between CEO activism and a market-to-book ratio. Although this result holds even after controlling for a host of firm and CEO attributes (e.g., firm size, performance, CEO visibility, overconfidence, age, and political leaning), it needs to be interpreted with caution as activist CEOs and/or the firms they lead could be self-selected based on unobservable characteristics that can explain higher valuations. To address such concerns, we re-estimate the relationship between CEO activism and

market-to-book ratio using an entropy-balanced sample, which is a generalization of propensity score matching that adjusts for random and systematic inequalities in the variable distributions between control and treatment groups. We continue to observe that CEO activism is positively related to firm value. In addition, to further curb concerns about endogeneity, we use data on the number of laws related to LGBTQ workers that are proposed and passed in a given state as an instrument for a CEO's likelihood of engaging in CEO activism. Whereas anecdotal evidence suggests that such laws may spur CEO activism, it is not likely that these laws would have a direct effect on firm value given the relatively low proportion of LGBTQ employees in the workforce and the fact that we capture laws that may affect a firm's LGBTQ workforce both positively and negatively. We continue to estimate a positive and significant relation between CEO activism and firm value when using this instrumental variables approach, which ameliorates the concern that our findings are driven by omitted variable bias.

To understand the mechanisms underlying the sustained increase in corporate performance among firms with activist CEOs, we consider the relation between CEO activism and (1) employee-related outcomes (i.e., the labor-market channel) and (2) customer-related outcomes (i.e., the product-market channel). Consistent with the idea that CEO activism may lead to increased employee morale and heightened productivity, we find that firms with activist CEOs experience a subsequent increase in sales per employee, total factor productivity, and innovation (R&D/Sales, patent filings, and patent market value). We also observe that CEO activism is negatively associated with the probability of being named as a defendant in a major employee-related lawsuit. These results are consistent with the *alignment hypothesis* and provide evidence in support of the notion that CEO activism is positively associated with increased employee productivity. Our results regarding the product-market channel, however, are inconclusive, as we observe a positive effect of CEO activism on sales growth in the baseline specification, but not in the instrumental variable model.

To shed more light on which of these two channels contributes to firm value, we conduct a randomized controlled trial experiment, which provides direct evidence on how potential employees and customers respond to CEO activism. Specifically, we exogenously expose some, but not all, experiment participants to CEO activism. We find that participants acting as prospective job-seekers are significantly more likely to accept a job offer from a company with a CEO that regularly engages in CEO activism than from a company with a CEO who avoids speaking out on social and political issues. In contrast, prospective customers do not change their purchasing decisions based on the differential activism behaviors of companies' CEOs. This experimental finding supports our empirical results, which suggest that the labor-market channel, rather than the product-market channel, links CEO activism to firm value

Finally, we consider some of the consequences that CEO activism may have directly for the CEO. Specifically, we analyze whether CEO activism impacts a CEO's likelihood of being forced out of the company and whether activism affects a CEO's outside directorship opportunities. Using multiple proxies for forced CEO turnover, we estimate a strong, negative relation between CEO activism and involuntary turnover likelihood. Additionally, we estimate a positive relation between CEO activism and future outside directorship opportunities. These results suggest that shareholders vis-a-vis the board of directors are not likely to punish CEOs who are outspoken on social and political issues. If anything, the evidence is consistent with CEOs benefiting from their activism efforts in the form of sustained and future job security.

This paper makes several important contributions. First, we contribute to the relatively new literature on CEO activism. Chatterji and Toffel (2019) and Korschun et al. (2019) use experiments to study consumers' response to CEO activism and find mixed results in terms of whether consumers change their behavior if their views differ from the CEO's. Durney, Johnson, Sinha, and Young (2020) perform a controlled experiment and show that retail investors respond negatively to CEO activism on

gun control if their views differ from the CEO's. Whereas experimental studies offer some useful insights, they often induce artificial awareness of CEO activism and, hence, the effect of CEO activism on actual stakeholder behavior may not be fully captured. We contribute to this area by providing the first large-scale empirical evidence on the impact of CEO activism on firm value and by documenting actual shareholder responses to CEO activism. Furthermore, instead of focusing on one social issue or one constituency, our unique dataset allows us to examine CEO activism on a broad range of topics (i.e., providing a more complete picture of CEO activism) and analyze how CEO activism impacts multiple stakeholders (e.g., investors, customers, employees, and the CEOs themselves). Additionally, the richness of our data allows us to identify instances wherein CEO activism may be particularly impactful.

Second, our findings provide new insights to the decades-long conversation about the CEO's role as an agent of shareholders and the debate on whether companies should have a higher purpose beyond maximizing shareholder value. In this respect, our paper is related to the literature on corporate social responsibility and socially responsible investing (e.g., Giuli and Kostovetsky (2014), Hartzmark and Sussman (2019), Krueger, Sautner, and Starks (2019), Pan, Pikulina, Siegel, and Wang (2019)). Our results of a positive market reaction to CEO activism complement other studies showing the increasing trend of socially responsible investing and suggest that the role of CEOs has evolved over time to include activism behaviors that would have been deemed inappropriate only a few years ago. Our paper also expands upon the research on corporate social responsibility by providing novel evidence suggesting that CEO activism could be another channel through which companies can build loyalty among like-minded employees and improve their reputation in relation to competing firms. Furthermore, by documenting a positive employee response to CEO activism, our findings provide a new explanation for why some firms are more innovative than others.

Lastly, we contribute to the broad literature on the role of CEOs in shaping corporate culture. Most executives view culture as one of the top three factors that affect their firm's value, yet, it is

notoriously hard to measure (e.g. Graham, Grennan, Harvey, Rajgopal (2016, 2017)). In this paper, we use CEO activism events—visible, high-profile, and easy-to-measure CEO actions in which CEOs communicate to stakeholders where they stand on social and political issues—as manifestations of corporate values and culture. Building on previous research that highlights the role of social media in communicating with stakeholders (e.g., Jung, Naughton, Tahoun, and Wang (2018), Chen, Hwang and Liu (2019)), our evidence suggests that CEOs’ direct communications with investors and employees about their principles can contribute to value creation and help promote a good corporate image.

2. Sample and variables

Our sample includes all firms that were part of the S&P 500 at any point between 2010 and 2019, excluding utilities and financials.⁵ We identify the characteristics of the CEOs of these firms using data from BoardEx, which provides information on the CEO’s age, tenure, and directorships. We obtain annual accounting information from Compustat and stock return data from CRSP. The data availability requirements led to a final sample of 3,828 firm-year observations for 461 firms. We present the descriptive statistics of firm characteristics in Panel A of Table 1. The median firm in our sample has book assets of \$9.53 billion, a market-to-book ratio of 1.94, and ROA of 15%.

We construct our measure of CEO activism using news articles from Google News search, which provides a continuous and relatively comprehensive archive of articles from thousands of publishers and magazines. We supplement news articles with CEO tweets data from Twitter, as an increasing number of CEOs and firms register for Twitter accounts and share their posts. Appendix B provides a detailed description of our data collection and data cleaning process. Our main variable of interest, *# of activist events*, is the annual count of unique news articles and tweets that capture CEO

⁵ Our empirical results are similar if we include financials and utilities.

events. It is important to note that our measure includes activism events regardless of whether they are related or unrelated to the firm's business operations.⁶

Panel B of Table 1 reports the annual distribution of CEO activism events. For the overall sample period, 21% of firm-year observations contain at least one CEO activism event. The frequency of CEO activism has increased from 5% in 2010 to 57% in 2019. Panel C of Table 1 breaks down our sample by industry. We observe that CEOs operating in industries that are closer to consumers, e.g., those producing durable goods (cars, TV, furniture, household appliances) and non-durable goods (apparel, tobacco, toys), are more likely to speak up with 34% and 28% of CEOs engaging in activism, respectively. We observe that CEOs in oil, mines, construction, machinery, and airplanes industries are the least likely (16%-17%) to take public stances on social and political issues. Panel D of Table 1 presents how CEO activism is distributed across geographical regions. We note that CEOs of firms located in the southern regions are less likely to engage in activism, whereas CEOs in the western part are more likely to voice their opinions.

We also explore whether activism events cluster around corporate events. To this end, we compare the timing of activism events and earnings announcements. We extract earnings announcement dates from Capital IQ from January 2000 to February 2019. We then match each activism event with the nearest earnings announcement and remove activism events after February 2019. We convert matched activism event dates into event time by resetting earnings announcement dates to zero in event time. Figure 1 presents the distribution of activism events relative to earnings announcements. While a small percentage (about 1.6%) of activism events is centered around the 5-day window of earnings announcements, the majority of these events are distributed well before or after earnings announcements, suggesting that activism events do not tend to cluster around earnings announcements.

⁶ Our results are robust if we use a dummy variable that equals one if there is at least one activist event, and zero otherwise, as our independent variable.

Table 2 presents the frequency distribution of our keywords. The most popular topics include issues related to diversity, LGBTQ rights, sustainability, the environment, the Trump administration, and education.

3. CEO Activism and firm value

In this section, we analyze shareholders' reaction to CEO activism. A priori, it is not clear how investors will respond to CEO activism. The *alignment hypothesis* predicts that investors may have a positive view of CEO activism because they subscribe to the views expressed by the CEO and believe that a well-run company should pursue goals beyond simple value maximization. Investors may also react positively to CEO activism if they perceive that CEO activism could maximize profits by helping retain and attract customers and by boosting employee productivity. In contrast, according to the *misalignment hypothesis*, investors may perceive CEO activism negatively, because they believe that CEOs should not act as social/political advocates or because they perceive activism as having an adverse impact on future cash flows and firm value due to the loss of customers, reduction of employee productivity, or selling-off by other investors. Yet, it is also possible that investors may not be aware of or care about CEO activism, or they may perceive it as "cheap talk" and not respond in any significant way. Whereas different investors may subscribe to different points of view, it is not clear which type of investor dominates and thus whether CEO activism is consistent with what investors want on average. Hence, in this section we examine whether investors collectively view CEO activism positively, negatively, or neutrally by focusing on CEO activism announcement returns and market valuations.

3.1. Announcement returns

We start our analysis by examining the announcement returns generated by CEO activism events. We compute cumulative abnormal returns (CARs) by employing a standard market-adjusted return model, where the abnormal return is calculated as the difference between a firm's return and the

value-weighted market (CRSP) index return. We calculate cumulative abnormal returns over a three-day window centered at the announcement date (-1 to +1). For robustness, we also estimate CARs over a five-day window centered at the announcement date (-2 to +2) and a seven-day window using more days prior to and after the announcement date (-3 to +3).

Column 1 of Table 3 presents median and mean announcement returns over the different event windows. We observe positive and statistically significant median and mean announcement returns to CEO activism events across all windows. The median three-day CAR is 0.10% ($p < 0.01$) and the median five-day CAR is 0.17% ($p < 0.01$). The mean announcement returns range from 0.08% to 0.19% over different windows and are significant at the 1% level. The positive effect of CEO activism is economically significant and translates into a \$13–\$28 million gain in shareholder value, based on the median market capitalization of \$12.69 billion. These results demonstrate that, in aggregate, shareholders perceive CEO activism positively.⁷ The results also complement earlier studies that document that investors put a positive value on socially responsible endeavors and the growing importance of socially responsible investing (e.g., Hartzmark and Sussman (2019), Krueger et al. (2019), Pan et al. (2019)).

In Columns 2-5, we analyze the announcement returns separately for activism related to diversity, the environment, politics, and other social issues. We observe a positive median market response to all categories, except activism related to the environment. We also examine whether the market's response varies with the degree of controversy surrounding topics on which CEOs chose to speak out. For instance, speaking in support of education or devoting resources to combat the spread of E.coli may be less controversial and more likely to generate a positive response, whereas the reaction to proclamations about more controversial topics such as gun control, immigration, LGBTQ rights, or

⁷ When we measure the announcement returns to CEO activism by year, we observe a positive effect in eight of the ten years. We do not find that the announcement returns in the second half of the sample are statistically different from the announcement returns in the first half, except that the 7-day announcement returns are slightly higher in the first half.

the Trump administration may be more mixed. To examine this conjecture, we classify our keywords as either more controversial or less controversial (See Appendix B) and compare the market response between these groups. We find a positive market response in both categories with no significant differences between the two sub-samples. We also examine the market reaction to the most controversial topics separately (President Trump, gun control, abortion, and immigration). We find no significant reaction to news/tweets related to the Trump administration. However, we find a positive reaction over 5- and 7-day windows when CEOs speak out on immigration, abortion, and gun control issues. We examine the market reaction to immigration, abortion, and gun control jointly due to small sample sizes.⁸

We also explore whether the market reaction varies with the left- or right-wing orientation of the news source. Here, we rely on Ad Fontes Media to classify news providers into those with a left- and right-wing bias. Whereas we find that a substantially greater proportion of CEO activism events are featured in the left-wing media, the market reaction does not differ between the two groups. Furthermore, to differentiate between cases in which CEO activism may be prompted by a journalist asking CEOs about social/political issues and cases in which CEOs voluntarily initiate such conversations, we compare the market response between news articles and tweets. CEO tweets which are arguably more likely to reflect CEOs' decision to speak up, rather than a prompting from a reporter, and are likely to be free from media bias. We observe no difference in market reaction between news articles and tweets.⁹

⁸ Additionally, we attempt to analyze whether the market response varies with the degree to which a topic is related to a firm's operations. To this end: i) we examine CEO activism in firms operating in the energy sector (Oil, gas, coal extraction and products) and compare market reaction on environmental (more related) and all other (less related) issues. We find no significant market reaction when these firms speak out on environmental topics. However, we document a positive market response when CEOs of such firms take a stance on other social issues; ii) we examine CEO activism for firms with government contracts. We find that only 7% of CEO activism events in these firms is on political (more related) topics and such activism does not generate a significant market reaction; iii) we are unable to examine market reactions to immigration-related CEO activism for firms sponsoring H1B visas due to a small sample size. Overall, these results indicate that our results are not likely to be driven by activism that is directly related to firms' business.

⁹ Our subsequent results are robust to using a CEO activism measure that relies exclusively on CEOs' tweets.

Whereas our findings reflect the aggregate response by the equity market to CEO activism, CEO activism might not be equally valuable in all types of firms. To shed additional light as to when CEO activism may be perceived more favorably, we turn to explore whether the market reaction to CEO activism varies by industry competitiveness, human capital intensity, and shareholder preferences.

Firms in highly competitive industries may face higher risk of losing customers than do firms in concentrated industries whose customers have limited opportunities to change the companies they purchase from. Similarly, employees in competitive industries may be more likely to be competed away and potentially disseminate proprietary information to rivals, thereby hurting firms' competitiveness. Hence, firms that face harsh competition may benefit more from CEO activism, as they have a greater need for a positive public image. To test this conjecture, we use the Herfindahl–Hirschman Index to split our sample firms by the intensity of industry competition using Fama-French 48 industry categories. A firm is considered to operate in a highly-competitive industry if the Herfindahl–Hirschman Index is at or below the sample median, and in a non-competitive industry if the Herfindahl–Hirschman Index is above the sample median. The results are presented in Panel A of Table 4. We observe that the reaction to CEO activism is significantly positive for firms operating in competitive industries over all event windows. However, for firms operating in concentrated industries, the market reactions are significant only over a seven-day window. Furthermore, the market response for firms in competitive industries is significantly higher than the market reaction to CEO activism for firms operating in non-competitive industries. The difference in CARs is significant at the 1% level across all CAR windows.

Next, we examine the market reaction to CEO activism for firms with high versus low human capital intensity. We conjecture that the potential loss of a firm's human capital may be particularly detrimental for firms with high human-capital intensity, which have greater demand for more skillful employees, and therefore, have a greater need to attract and retain talent. We measure the human capital intensity of the firm using the ratio of R&D expenditure to total sales, since R&D-intensive firms are more likely to depend on highly skilled employees and require higher levels of expertise and education.

We define human-capital-intensive firms as those in the top-quartile of R&D expenditure to total sales. Panel B of Table 4 presents the market reactions for the two subsamples based on human-capital intensity. We find that the market reactions are positive for both subsamples, but they are significantly higher for firms with higher human-capital intensity. For example, five-day returns are 0.29% for firms with high human-capital intensity and are 0.13% for firms with low human-capital intensity. The difference between the two coefficients is significant at the 5% level.

Market reactions may also vary with investors' attitudes toward CEO activism. For instance, Pan et al. (2019) find that firms whose shareholders have stronger prosocial preferences experience a more negative market response to high CEO pay ratios. Similarly, investors' prosocial preferences may moderate the market reaction to CEO activism. We follow Pan et al. (2019) by estimating shareholders' prosocial preferences as the ownership-weighted average social norms and policies in shareholders' headquarters states. The results are presented in Panel C of Table 4. We find that the market reactions are positive in both the high and low pro-social preferences subsamples, but firms with stronger investor prosocial preferences experience significantly higher abnormal returns. This finding suggests that certain shareholders may expect corporate leaders to take a public stance on social and political issues and be more likely to purchase the stock of firms with leaders that speak out.¹⁰

Overall, the results in this section show that the market perceives CEO activism favorably, especially for firms in concentrated industries, with high human-capital intensity, and with pro-social investors.

3.2. Tobin's Q

In this section, we supplement our market reaction results with an analysis of firm value, as measured by a firm's market-to-book ratio (i.e., Tobin's q), which is defined as the market value of

¹⁰ For instance, BlackRock CEO Larry Fink in his annual letter calls on company leaders to take a more active role in addressing societal issues ("BlackRock chief Larry Fink tells CEOs to fix society's problems in an increasingly divided world," Business Insider, 1/17/2019).

assets (i.e., book value of assets minus book value of equity plus market value of equity) divided by the book value of assets. Following prior studies (e.g., Myers (1977), Smith and Watts (1992), Yermack (1996)), we control for several firm characteristics that are correlated with firm value. Specifically, we include firm size, corporate diversification (number of reportable business segments), performance (stock return and ROA), asset tangibility, and leverage. All control variables are measured at the year-end prior to the activism event, and all variable definitions are in Appendix D. 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.¹¹

Column 1 of Table 5 presents estimates from a pooled OLS model. Our variable of interest is the number of CEO activism events during year t .¹² The results indicate that CEO activism is associated with a statistically significant increase in Tobin's q . The coefficient implies that each additional CEO activism event increases the average firm value in the current year by 1.3%. Among the control variables, Table 5 shows that firm size is negatively related to Tobin's q , as larger firms are presumably in a more mature stage of their life cycle. Similarly, leverage hinders firm value by potentially increasing the risk of financial distress. On the other hand, measures of profitability (stock return and ROA), and asset tangibility are positively associated with Tobin's q .

The results in Column 1 suggest that the effect of CEO activism on firm value is positive. However, one might be concerned that firms with CEO activism are different from those without CEO activism in other ways that may confound our analysis. For instance, firms with “good” social responsibility profiles may encourage their CEOs to speak up. It is also possible that CEOs who engage in activism have other characteristics that can be correlated with firm value, such as media visibility, overconfidence, or overall quality (Malmendier and Tate (2005, 2009), Fang and Peress (2009)).

¹¹ Our results are robust if we instead double-cluster standard errors by industry and year.

¹² Our results are similar if we measure CEO activism at time $t-1$.

To assuage these concerns, in Column 2 we include several controls that proxy for a firm's overall social responsibility profile. First, we include the Corporate Social Responsibility (CSR) index, obtained from KLD Research & Analytics. KLD uses a proprietary research process to classify the strengths and concerns within six primary categories related to different aspects of social responsibility (Community, Diversity, Employee, Environment, Humanitarian, and Product). Second, we include the firm's Selling, General, and Administrative (SG&A) expenses, as we expect that many programs that a firm may initiate to improve workplace standards would be reflected in additional SG&A expenses (e.g., work-life benefits such as childcare, pollution prevention, or employee health and safety programs). Third, we rely on Fortune's list of "100 Best companies to Work For." This list is based upon an extensive U.S. employee survey that covers a wide spectrum of detailed questions about wages and benefits, worker training, hiring practices, job satisfaction, fairness, and management's credibility. We include an indicator variable that equals one if a firm is included in the Fortune's 100 best companies, zero otherwise. Fourth, we add firm headquarters' democratic leaning, as the Democratic Party platform places more emphasis on issues related to environmental protection, anti-discrimination laws, affirmative action, employee protection, and helping the poor and disadvantaged. Furthermore, survey evidence suggests that 96% of Democrats believe Congress should ensure that companies address social issues, compared to 65% of Republicans (Giuli and Kostoevsky (2014)). We define firm headquarters' democratic leaning as the fraction of voters that voted for Hillary Clinton in the 2016 presidential election. Last, we include shareholders' prosocial preferences, as such shareholders may have incentives to pressure CEOs to become more outspoken on social and political issues.

To isolate CEO activism from other CEO characteristics, we include the following additional controls: CEO visibility, CEO overconfidence, CEO age, CEO tenure with the firm, CEO reputation (proxied by the number of the CEO's directorships to date), and the CEO's democratic leaning. To capture CEO's visibility and overall media exposure, we include the total number of news articles and

tweets featuring the company or the CEO, scaled by total assets. Following Malmendier and Tate (2005) we proxy for CEO overconfidence using the proportion of unexercised exercisable in-the-money options to total compensation. To help gauge the CEO's political orientation, we collect data on political contributions from the Federal Election Committee (FEC) website, which contains the name and employer of the contributor and the dollar value of each contribution. We manually match this data to our sample CEOs. Similar to prior literature, we construct a measure of CEO's democratic leaning, which is the percentage of contributions to Democrats relative to total contributions to both Democrats and Republicans (e.g., Hong and Kostovetsky (2012), Giuli and Kostovetsky (2014)).¹³ We also introduce several commonly-used proxies for corporate governance, such as CEO's equity incentives, institutional ownership, CEO/Chair duality, board size, board independence, and board busyness to capture potential agency conflicts. In Column 2, we observe that although the magnitude of the coefficient on CEO activism drops from 1.3% to 0.9% after including the additional controls, it remains positive and significant at the 1% level.

Whereas control variables in Column 2 address many of the potential differences between firms with and without CEO activism that may confound our analysis, some may still persist and bias our results. For example, corporate culture may affect both the decision to speak up on social issues and firm value. To improve the comparability between firms and ensure that firms with and without CEO activism are similar ex-ante, in Column 3, we re-run our analysis using entropy balancing to assemble a control sample. Compared to other matching methods, entropy balancing is more flexible because it allows observation weights to vary smoothly, thus retaining larger samples and improving efficiency. This procedure is a generalization of propensity score matching and weights control sample units to

¹³ It is possible that CEOs may engage in activism to signal their political affiliation and potentially benefit from their alliance with the government. We conduct two analyses to explore this possibility: i) we read a random sample of news articles related to the President Trump and observe that only 10% of the news make statements in support of the President, 15% are neutral, and the rest express no support; ii) we estimated a probit regression in which the dependent variable equals one if the government is a customer in a given year, zero otherwise. We do not find evidence to suggest that CEO activism increases the likelihood of obtaining government contracts.

achieve covariate balance, adjusting for random and systematic inequalities in the variable distributions between the treatment and control groups (Hainmueller (2012)). The covariates that we use to balance the treatment group (firms with CEO activism) and control group (firms without CEO activism) are the same as those in Column 2. We then re-estimate the relationship between CEO activism and firm value using the entropy-balanced data to produce the results displayed in Column 3 of Table 5. The coefficient on *# of activism events* is slightly lower compared to that in Column 2, but it is still positive and significant at the 5% level.

To further alleviate the concern that unobservable characteristics drive both CEO activism and firm value, we employ an instrumental variables approach that allows us to overcome omitted variable bias by replacing the endogenous choice of CEO activism with its predicted value. We rely on the exogenous variation in annual state laws related to LGBTQ workers as our instrument. Due to the lack of explicit, comprehensive civil rights protections for LGBTQ workers at the federal level, the rights of LGBTQ workers and their families vary depending on which state they live in. Hence, over the last decade many states have passed multiple bills related to LGBTQ workers at various points of time. Examples of such laws include bills pertaining to marriage equality, other relationship recognition, anti-discrimination, hate crimes, transgender healthcare, school anti-bullying, and parenting.

We use data assembled by the Human Rights Campaign, which provides a comprehensive annual state-by-state review of laws and policies that affect LGBTQ individuals, and construct the instrument as the cumulative number of bills related to LGBTQ people passed by the state of firms' headquarters in a given year. We conjecture that the deliberation and passage of such bills may spur CEOs to take a public stance on issues related to diversity and inclusion. Anecdotal evidence supports this conjecture.¹⁴ Given that issues related to diversity represent a large share of CEO activism events in our sample, this instrument is likely to satisfy the relevance requirement.

¹⁴ For instance, in response to North Carolina's bathroom law, Schulman canceled PayPal's plans for a new global operations center in Charlotte and many other CEOs followed suit. Similarly, in response to Indiana's Religious

In addition to being correlated with the endogenous variable, the instrument should satisfy the exclusion restriction, that is, it should not directly impact firm value. A potential concern with our instrument is that the proposal, and ultimate passage, of bills related to LGBTQ workers might have a direct impact on employees' productivity and, hence, firm value. Here, it is important to note that as we construct our instrument, we include bills that are both favorable and unfavorable to LGBTQ workers ("good bills" and "bad bills", as classified by the HRC), which alleviates this concern.^{15, 16} In addition, a 2017 Gallup poll concluded that only 4.5% of adult Americans identified as LGBTQ, suggesting that a direct effect of such laws on the overall workforce productivity is probably small. Our instrument, thus, captures the amount of attention state legislatures give to issues related to diversity, which is likely to influence the activism of CEOs without directly affecting an individual firm's value.

The results of the first-stage estimation are reported in Column 4 of Table 5 and show that our instrument is significantly related to the likelihood of CEO activism. Furthermore, the Cragg-Donald Wald *F*-statistic for weak instruments is 89.28, which rejects the null hypothesis that the instrument is weak. Column 4 shows that CEOs of larger firms are more likely to use their position to take a stance on social or political issues. Similarly, SG&A expense positively predicts the likelihood of CEO activism, suggesting that firms may engage in CEO activism as a part of employee-friendly practices to attract talented employees and to meet employee expectations around company values. Among observable CEO characteristics, we note that younger and more visible CEOs are more likely to engage in activism. We report the second-stage regression in Column 5 of Table 5, in which we include the

Freedom Restoration Act, which some viewed as anti-LGBTQ, Bill Oesterle cancelled Angie's list's planned expansion in Indianapolis (Chatterji and Toffel (2018)).

¹⁵ To proxy for the number of unfavorable LGBTQ worker laws passed, we rely on the number of unfavorable bills introduced each year, as the Human Rights Campaign does not report how many of unfavorable bills actually passed.

¹⁶ An example of a "good bill," as defined by the HRC, is non-discrimination laws in matters that concern employment, housing, or education. An example of a "bad bill," as defined by the HRC, is laws that prohibit transgender people from receiving the appropriate ID. On average, states pass 1.1 "good bills" and propose 2.4 "bad bills" per year, with the average number of "good bills" ("bad bills") ranging from 0.5 (1.7) to 1.8 (4.7). States with the highest total number of "good bills" passed by the end of our sample period are California (155 "good laws"), Illinois (38 "good laws"), and Nevada (34 "good laws"); states with the highest total number of "bad bills" proposed are Tennessee (117 "bad bills"), Oklahoma (92 "bad bills"), and Texas (86 "bad bills").

fitted value of CEO activism from the first stage as an explanatory variable. The results show that after accounting for potentially omitted variables, the coefficient on the predicted value of CEO activism remains positive and significant at the 5% level.

The magnitude of the coefficient of our instrumental variable estimation is roughly six times larger than that from the OLS estimation. 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 instrument happen to also have a larger sensitivity of firm value to CEO activism. Consistent with this, we find that the relation between CEO activism and firm value is stronger for firms in states with a lot of attention towards diversity and inclusion. Though our OLS and IV results, along with the significant and large CEO activism announcement returns, collectively suggest that CEO activism has a positive effect on firm value, we recognize that we cannot completely rule out the possibility that our results may be biased by omitted variables.

4. Channels

The previous section documented that CEO activism has a significant, positive effect on firm value. Our hypotheses attribute this effect to activism's potential impact on employees (labor-market channel) and on customers (product-market channel). In this section, we provide empirical evidence on these two channels.

4.1. Labor-market channel

Prior work emphasizes the importance of human capital in creating firm value, noting that workforce-related soft assets including employee know-how, corporate culture, and interpersonal relationships are significant value drivers (Pfeffer (1995), Zingales (2000)). The *alignment hypothesis* conjectures that CEO activism may enhance corporate culture as it proclaims and embraces missions

and goals that are beyond making money. These visible public statements may enhance a firm's reputation in the labor market and generate positive attention from both current and prospective employees. Social identity and self-determination theories suggest that employees will be proud to identify with organizations that have a positive external reputation, as the degree to which employees identify with a company is based on how much others admire the company (Ashforth and Mael (1989), Dutton et al. (1994), Smidts, Pruyn, and Riel (2001), Bartels, Pruyn, De Jong, and Joustra (2007)).

In addition to increasing employees' attachment to their firms, CEO activism may improve their intrinsic motivation if employees recognize that they share the same social values as their firm. Because commonly shared corporate social norms and employee loyalty can constrain employee moral hazard (Guiso, Sapienza, and Zingales (2015)), firms with CEO activism may be associated with stronger employee morale and lower employee turnover. Additionally, a number of studies have found that intrinsic motivation is a primary pre-requisite of employee creativity (Amabile, Conti, Coon, Lazenby, and Herron (1996), Oldham and Cummings (1996), Gagné and Deci (2005)). If CEO activism increases employees' intrinsic motivation by promoting a positive work environment and by increasing employees' feelings of pride about their company, it may encourage positive risk-taking behavior, motivate employees to seek novel ideas, and lead to higher employee productivity and innovation. Alternatively, the *misalignment hypothesis* predicts that CEO activism may reduce employee productivity as views expressed by the CEO might not accord with employees' own views. In such cases, CEO activism may result in dissatisfied workers who disagree with the CEO's stance on social issues and role as an activist. Such reactions would likely lead to higher employee turnover, lower productivity, and less innovation.

We test these hypotheses in Table 6. In Column 1, we examine the relationship between CEO activism and employee turnover, with employee growth as the dependent variable. The coefficient on # of activism events is positive and significant at the 10% level, indicating that CEO activism might make

the firm a more attractive employer, leading to better employee retention and recruitment outcomes. We next turn to examine the impact of CEO activism on productivity more directly. We focus on employee productivity in Column 2 and firm-level total factor productivity in Column 3. Our measure of employee productivity is the natural log of sales per employee. Mean and median sales per employee are \$678,000 and \$369,000, respectively. We measure total factor productivity using residuals from industry-specific regressions of revenue on the number of employees, fixed assets, and year fixed effects. Column 2 shows that CEO activism has a significant, positive effect on employee productivity. Similarly, CEO activism is positively related with total factor productivity, as shown by a positive and significant coefficient in Column 3. In Columns 4 to 6, we present the results from the second stage of a 2SLS model in which we instrument for CEO activism using the same instrument described earlier. We continue to observe a positive relationship between CEO activism and both employee productivity and total factor productivity. These results are consistent with the arguments advanced by the *alignment* hypothesis, suggesting that CEO activism can have a positive effect on a company's culture and its ability to retain and motivate employees.

In Panel A of Table 7 we examine the effect of CEO activism on innovation as another measure of employee productivity. Following the prior literature, we construct several measures of firm-level innovation. To measure the overall quantity of innovation, we use R&D expense scaled by total sales (Column 1), the natural logarithm of one plus the number of patents granted to each firm by the U.S. Patent and Trademark Office (in Column 2), and the natural logarithm of one plus the number of patents per employee (in Column 3). To capture the quality and economic value of innovation, we use the natural logarithm of one plus the dollar value of patents (in Column 4) and the natural logarithm of one plus the number of citations received by patents (in Column 5). All patent-related data is obtained from Noah Stoffman's website (Kogan, Papanikolaou, Seru and Stoffman (2017)).¹⁷ Since patent issues may

¹⁷ See Noah Stoffman's website at <https://kelley.iu.edu/nstoffma/>.

occur several years after the actual innovations took place, we examine the effect of CEO activism on our patent-based innovation variables measured at time $t+2$.¹⁸ In Column 5, our sample ends in 2016 to account for the lag in citations. Each regression includes the same set of controls as used in our prior analyses.

As Column 1 shows, firms with more CEO activism events are associated with higher investment in R&D. Additionally, the results from Columns 2 and 3 indicate that CEO activism stimulates a greater volume of innovation output, as such firms receive more patents and have higher patents per employee. The coefficient in Column 3 implies that an additional CEO activism event is associated with a 7.5% increase in the average patents per employee measure (based on a mean value of 0.32). The result in Column 4 further indicates that the economic quality of these patents is higher, as the market value of the patents is significantly positively related to *# of activist events*. We do not, however, estimate a significant relation between CEO activism and citation counts in Column 5.¹⁹ In Panel B of Table 7, we present the results from the second stage of 2SLS model. Here, we observe a positive relationship between CEO activism and all measures of innovation, including citation counts.

As another test of how CEO activism may solidify relationships between the firm and employees, we analyze the link between CEO activism and the likelihood of being named as a defendant in an employee-related class-action lawsuit. To identify such lawsuits, we rely on Audit Analytics Litigation database and select class-action lawsuits involving 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.²⁰ The dependent variable is a dummy that is equal to one if a company

¹⁸ Our results are robust if we estimate innovation outcomes at $t+3$.

¹⁹ The innovation literature often uses poisson, tobit, and negative binominal empirical models, which account for censoring at zero, since true innovation output is unobserved for firms with no patents. We re-estimate our baseline models using these methods and verify that our results are robust to these different estimation techniques.

²⁰ 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.

is a defendant in an employee-related class-action lawsuit during the year, and zero otherwise. The results in Table 8 show that CEO activism helps avert labor-related lawsuits, reducing the likelihood of the negative publicity associated with such lawsuits that could tarnish a firm's reputation among current/prospective employees.

Taken together, the tests described in this section suggest that CEO activism may boost employees' identification with the company and increase the incentive for employees to engage in relationship-specific investments, generating more innovation output and increasing employee and firm-level productivity. These results are consistent with the arguments in the *alignment hypothesis* that higher firm value for companies with CEO activism may be attributed to the positive impact of CEO activism on employees.

4.2. Product-market channel

The *alignment hypothesis* predicts that consumers may view CEO activism positively, if they believe that companies should pursue broader goals than simple wealth maximization. A recent poll shows that consumers expect CEOs to proactively take a stance on social issues. For instance, 84% of consumers expect CEOs to be involved in conversations and policy debates on social issues and 56% said they have no respect for CEOs who remain silent on important issues (Sorkin (2018)). If CEO activism creates the impression that the firm has attributes or characteristics that are consistent with the values of consumers (e.g., being civic minded and compassionate), it may generate positive perceptions about the company and induce customers to develop a sense of connection with the company. Prior research shows that consumers' feelings of identification with the company may result in higher consumer satisfaction and loyalty (Maignan and Ferrell (2001), Bhattacharya and Sen (2003)). Hence, the "brand equity" effect induced by CEO activism may increase the sales of such companies, as customers who welcome CEO activism might support such firms by purchasing the company's products and services.

On the other hand, the *misalignment hypothesis* suggests that CEO activism may have an opposite effect on customers. Views expressed by CEOs might put the firm in a negative spotlight, antagonize customers, and steer consumers away from using the company's goods and services. Supporting this notion, in a Weber Shandwick survey 40% of respondents said they would be more likely to purchase from a company if they agreed with the CEO's position, but 45% said they'd be less likely to if they disagreed with the CEO's view. Furthermore, disagreements with CEO activism may provoke boycotts, which may further hurt a firm's reputation and product market performance. Hence, under this hypothesis, CEO activism would lead to a decrease in sales, especially if the stance taken by the CEO is misaligned with the stance of most customers.

We test the impact of CEO activism on customers by examining how sales growth varies with CEO activism. Table 9 presents the results. The dependent variable is sales growth. Column 1 presents estimates from the ordinary least squares estimation, whereas Column 2 shows results of the second stage regression from the 2SLS model. In Column 1, we observe that the coefficient on the *# of activism events* is positive and significant at the 1% level, suggesting that CEO activism is viewed favorably by consumers and is rewarded with higher sales. However, this finding should be interpreted with caution, as we do not observe a similar positive effect of CEO activism on customers based on the 2SLS results presented in Column 2. Among the control variables, we document that firms that are larger and those with better performance have higher sales growth. Additionally, firms that are more visible to the public via news coverage or being included in Fortune's 100 best companies list also experience higher sales growth.

5. Lab experiment

To shed further light on the role of the labor and product market channels in linking CEO activism to increased firm value, we conducted a randomized controlled trial experiment. An experimental setting allows us to randomly expose some, but not all, of a company's stakeholders

to CEO activism behaviors. In doing so, we are able to precisely identify the extent to which various stakeholders react to CEO activism.²¹

We recruited our experiment participants from Amazon Mechanical Turk. Adhering to the current best practices, we recruited only high-quality participants, leading to a sample of over 500 subjects (see Appendix C for details). We randomly assigned half of our participants (N = 254) to assume the role of a job-seeker who was deciding whether to accept a job offer from Company A or one of its competitors. Another half of the participants (N = 254) were asked to assume the role of a customer who was deciding whether to purchase a new, hi-tech television from Company A or one of its competitors.

After being told their role, each participant was then randomly placed into one of three treatment cells that varied the type of CEO activism information given to the participant. One third of the participants were told “Over the last few years, Company A has provided its investors with an **annual return of 8%**, which is similar to the returns generated by an **average company**,” but they were not given any information about CEO activism. Another third was given the same information about Company A's past stock return performance *and* they were told “Recently, it has become more common for business leaders to take a public stance on social issues such as 2nd Amendment rights, LGBTQ+ rights, and climate change. **The CEO of Company A regularly takes a public stance on these and other social issues.**” The last third was given the same information about Company A's past stock return performance *and* they were told “Recently, it has become more common for business leaders to take a public stance on social issues such as 2nd

²¹ The experiment was approved by Tulane University's IRB office, reference number 2020-1075.

Amendment rights, LGBTQ+ rights, and climate change. **The CEO of Company A avoids taking a public stance on these and other social issues.**²²

After being given information about Company A, job-seekers were asked if they were more likely to accept a job offer from Company A or one of its competitors, and prospective customers were asked if they were more likely to purchase a television from Company A or one of its competitors. Participants responded using a 100-point slider scale that was anchored at 50, “Indifferent between the two companies,” and ranged from 0, “Much more likely to [choose] one of its competitors,” to 100, “Much more likely to [choose] Company A.” The average responses of each group of participants are presented in Table 10. Among job-seekers, the average response of those who were given no information about CEO activism was 58.5 and the average response of those who were told the CEO regularly takes a public stance on social issues was 62.2. Both of these are significantly different than the “indifferent” response of 50 ($p < 0.01$). The difference of 3.7 between these two responses is not statistically significant ($p = 0.224$). The average response of those who were told the CEO avoids taking a public stance was 49.4, which is not significantly different from indifference at 50 ($p = 0.824$). The 12.8-point difference in average response between job-seekers in the CEO takes a stance group and those in the CEO avoids taking a stance group is statistically significant ($p < 0.01$) and represents nearly a standard deviation change in response relative to the baseline response behavior of job-seekers who were given no information about CEO activism. These results suggest that job-seekers are significantly more likely to accept a job offer from a company when they are told the Company’s CEO regularly takes a public stance on social issues than when they are told the CEO avoids taking a stance.

²² To ensure our results are not confounded by imbalances in observable characteristics across the different treatment cells, we perform balance tests, which are reported in Appendix C that shows balance on almost all observable characteristics across the participants in each treatment cell.

The response patterns of prospective customers are quite different from those of job-seekers. As shown in Table 10, across all three CEO activism information groups, the average responses are between 57.5 and 57.9. The p-values of the three different pairwise difference-in-means comparisons are all above 0.900, suggesting that the purchasing decisions of prospective customers are not affected at all by different information about a company's CEO activism behavior. While the responses of 57.5 and 57.9 are significantly different from indifference at 50 ($p < 0.01$), we can reasonably infer that this preference to purchase a television from Company A is driven solely by the information about Company A's stock return history. The relative indifference towards information about CEO activism by prospective customers stands in sharp contrast to the highly significant difference in responses observed among job-seekers. That job-seekers appear to value CEO activism much more than prospective customers suggests that our empirical results are likely driven more by the labor-market channel than by the product-market channel.

After each participant made their decision as to whether they were more likely to choose Company A or one of its competitors, we presented them with five statements to gauge their attitude towards CEO activism and we asked them to indicate whether they agreed or disagreed with each statement (with a response of 1 indicating "Strongly disagree," a response of 7 indicating "Strongly agree," and a response of 4 indicating "Neither disagree nor agree"). The responses to these statements, reported in Panel B of Table 10, allow us to shed further light on the possible mechanisms that drive our empirical findings of a positive relation between CEO activism and firm value. Among both job-seekers and prospective customers, the statement with the greatest average agreeance, and the only statement with agreeance that is significantly different than indifference across all three treatment cells, is that about employees quitting their jobs when there is

misalignment between their stance on social issues and that of their company's CEO.²³ While several of the other statements have significant levels of agreement within certain treatment cells and in aggregate, the average level of agreement to this 'reasonable for employees to quit' statement is significantly larger than the average levels of agreement to any of the other four statements ($p < 0.01$). Thus, our experimental design highlights the importance of CEO activism as a tool to attract new employees and retain that human capital.

Taken together, the results of our randomized control trial provide strong evidence that employees react to the social activism behaviors of their company's CEO. Employees care both that CEOs choose to take a public stance, as opposed to staying silent on social issues, and they care that their views are aligned with those of their leaders. These results support the *alignment hypothesis*, as we find that hypothetical job-seekers are more likely to pursue employment in a company whose leaders engage in CEO activism than in a company whose CEO avoids it, and companies are more likely to retain an employee when the stance the CEO takes on social issues aligns with the opinions of the employee.

6. CEO turnover and director labor market

Finally, we examine the consequences of CEO activism for the CEOs themselves by estimating how boards of directors react to CEO activism along two dimensions: their decision to retain the CEO (i.e., CEO tenure) and their decision to appoint CEOs to the board (i.e., future opportunities in the director labor market). If boards perceive CEO activism as value-enhancing, then CEOs who take a public stance may have longer tenure and will face a lower likelihood of being fired. Alternatively, if boards view CEO activism negatively, they might be more likely to fire the CEO.

²³ The exact wording of this question and the other experimental questions are provided in Appendix C.

Columns 1 and 2 of Table 11 present estimates from a probit estimation in which the dependent variable equals one if the CEO was forced out and zero otherwise. In Column 1, we define CEO turnover as forced if the CEO was younger than 60 years old at the time of departure. In Column 2, we define turnover as forced based on data collected from news articles and CapitalIQ. The results show that the coefficient on *# of activist events* is significantly negative at the 1% level, suggesting that CEOs who take a public stance are less likely to be fired. Among other firm characteristics, we observe that good performance reduces the probability of being fired, illustrating the expected turnover-performance sensitivity (Weisbach (1988), Fich and Shivdasani (2006)). In contrast, SG&A expense and a Fortune 100 firm dummy are positively associated with the probability of turnover.

As an alternative way to examine the relationship between CEO activism and CEO turnover, we focus on a cross-section of CEO turnover events in Column 3. Here, we rely on a proportional hazard model (Cox (1972)) that explicitly addresses the right-censoring of our data (i.e., the inability to observe CEO turnovers beyond 2019). In the hazard model, the dependent variable is the time to turnover (i.e., the number of years between the CEO's appointment and their termination date). For the cases without a CEO turnover, the time is measured as the number of years between the CEO's appointment and the last year in which the firm appears in BoardEx. A negative coefficient indicates a negative marginal impact on the hazard and, therefore, longer executive tenure. Similar to our earlier results, Column 3 shows that CEOs who engage in activism tend to have longer tenures after the activism event.

Next, we examine whether CEO activism is rewarded in the director labor market. The director labor market plays an important role in a chief executive officer's incentives, as CEO actions that are consistent with shareholder interests are rewarded with additional subsequent board seats, whereas actions that affect shareholder wealth negatively lead to fewer directorships (Kaplan and Reishus (1990), Gilson (1990), Shivdasani (1993), Brickley, Linck, and Coles (1999), Coles and Hoi (2003), Harford and Schonlau (2013)). If the director labor market views CEO activism positively, then we should see that CEOs who speak up on hot-button social and political issues would be invited to sit on

more boards. Alternatively, if such actions are perceived negatively and activist CEOs are perceived as a riskier-bet, we would observe fewer subsequent directorships for such CEOs.

We examine these predictions in Table 12 by estimating an ordered logit regression, which takes into account the ordinal nature of our dependent variable. The dependent variable in year t is the number of directorships held by the CEO two years following an activism event ($t+2$), which ranges from zero to four board seats. CEOs with more than four board seats are coded as having four seats. Our results are similar, if we do not impose this restriction. We include control variables similar to the ones used in our prior analysis. Given that the same CEOs appear in our data multiple times, we cluster standard errors by CEO.

Table 12 shows that engaging in CEO activism significantly increases the number of directorships held by a CEO in the next two years. This result indicates that the labor market views activism positively and that CEOs may personally benefit from speaking up. Consistent with the prior literature, we also document that firm performance and past directorships are positively related to the number of future board seats held by the CEO.

7. Conclusion

Until recently, corporate leaders rarely plunged into thorny social and political discussions. However, this has changed quite rapidly over the last decade, as CEOs have begun speaking out on social and political issues that affect other stakeholders such as employees, their communities, and the environment. As CEOs begin to more actively engage in CEO activism, it is important to understand whether such actions are beneficial for the shareholders.

We develop two hypotheses to investigate these questions. The *alignment hypothesis* conjectures that CEO activism will be perceived positively by a firm's stakeholders and benefit firm value because CEO activism may improve corporate culture and help attract like-minded employees and customers. In contrast, the *misalignment hypothesis* argues that CEO activism might be offensive

to customers, employees, or other stakeholders who hold opposing views or do not perceive CEO advocacy as appropriate. In such cases, CEO activism would lead to negative firm outcomes.

We find that the market perceives CEO activism positively, especially when firms operate in more competitive, human-intensive industries or when shareholders have stronger pro-social preferences. Consistent with the positive market response, we observe that firms with CEO activism enjoy higher market valuations, which supports the *alignment hypothesis*. Our further tests show that this effect is attributable to the positive impact of CEO activism on employees, as we find that firms with CEO activism experience better employee retention, increased productivity, more innovation, and a lower likelihood of employee-related litigation. These findings are further supported by the results of a controlled experiment. Additionally, we find evidence that boards of directors view CEO activism favorably, as they reward activist CEOs with a reduced likelihood of turnover and more future directorships.

Overall, we show that CEO activism is becoming more acceptable in society writ large. Whereas conventional wisdom suggests that managers should abstain from commenting on contentious political or social topics, our empirical analysis shows that CEO activism may help firms bolster the identification that their stakeholders, and especially their employees, have with the company. Therefore, our study demonstrates that CEO activism can be an effective way for companies to stay competitive and improve a corporation's reputation in the labor market.

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Appendix A: Examples of CEO activism

CEO & Company	Keyword	Title	Date	Source
<i>Diversity</i>				
Hans Vestberg, Verizon	LGBT	Proud V Teamer #LGBTQ ally!	10/11/19	Twitter
Gavin Hattersley, Molson Coors	LGBT	Our hearts are with the LGBT community in Orlando.	6/14/16	Twitter
Marc Benioff, Salesforce	LGBT	Salesforce CEO Marc Benioff: 'Anti-LGBT' Bills Are 'Anti-Business'	3/31/16	Time
Tim Cook, Apple	LGBT	Apple CEO Tim Cook tells LGBT youth: 'You are a gift to the world'	7/31/18	PinkNews
Warren Buffett, Berkshire Hathaway	discrimination	Warren Buffett: Discrimination for sexual orientation is 'wrong'	4/3/15	CNN
Tim Cook, Apple	discrimination	Apple, Facebook, and Google CEOs unite in opposition to Texas discrimination	5/29/17	The Verge
Mark Hurd, Oracle	discrimination	oracle has never and will never endorse discrimination. diversity makes us better	3/25/16	Twitter
Rami Rahim, Juniper Networks	discrimination	I support the greater business community in taking a stand against discrimination of any kind	4/8/16	Twitter
Dan Schulman, Paypal	diversity	The CEOs of PayPal and SAP Say That Diversity Is Non-Negotiable	10/16/18	Fortune
Dion Weisler, HP	diversity	HP's CEO Tells Vendors Make Diversity A Priority, Or Else You Can't Do Business With Us	6/14/18	Fortune
Adena Friedman, Nasdaq	diversity	3 ways to be a #diversity role model by @wittenberganka	9/29/16	Twitter
Tom Hill, Vulcan Materials	diversity	Vulcan Materials CEO Pledges to Advance Diversity and Inclusion in the Workplace	6/20/19	PR newswire
<i>Environment</i>				
Kevin Plank, Under Armour	climate change	Climate change is real!: Under Armour Kevin Plank unhappy with Trump's Paris withdrawal	6/2/17	Washington Post
Tom Hayes, Tyson Foods	sustainability	sustainability is about operating responsibly and finding solutions that will last	2/21/17	Twitter
Arnold Donald, Carnival	sustainability	Carnival Cruise CEO Says Sustainability Is 'High Priority'	9/18/19	Cheddar
Lorenzo Simonelli, Baker Hughes	sustainability	What we do and how we do it is getting increasingly important. safety and sustainability is priority #1 and the license to operate. it has to include human rights and ethical code of conduct	4/17/18	Twitter

Appendix A: Examples of CEO activism (*continued*)

CEO & Company	Keyword	Title	Date	Source
<i>Political</i>				
Jeff Bezos, Amazon	Trump	Jeff Bezos suggests sending Donald Trump into space	12/7/15	Business Insider
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
Andrew Anagnost, Autodesk	Trump	trump told rust belt voters he'd fight to bring back their factory work. automation makes that nearly impossible	12/8/16	Twitter
Warren Buffett, Berkshire Hathaway	Trump	Warren Buffett on President-elect Trump: 'He deserves everybody's respect'	11/11/16	CNN
John Ferriola, Nucor	Trump	Nucor CEO to stay on Trump council after Merck leader resigns	8/14/17	Charlotte observer
Chuck Robbins, Cisco	tariffs	Cisco CEO Warns Higher Tariffs Will Force Companies to Cut R&D	1/17/19	Bloomberg
Mary Barra, GM	tariffs	Trump's tariffs will lead to job losses, warns General Motors CEO	7/2/18	NBC News
<i>Other</i>				
Mark Parker, Nike	immigration	Nike CEO Mark Parker Slams Trump's Muslim Immigration Ban	1/30/17	Highsnobiety
Meg Whitman, HP	immigration	we need illegal immigration reform in ca. no amnesty. i promise to be tough as nails on illegal immigration	5/18/10	Twitter
Brad Smith, Intuit	immigration	immigration doesn't just provide opportunity for immigrants, it provides opportunity for us all.	10/29/19	Twitter
Satya Nadella, Microsoft	immigration	Microsoft's Nadella: Trump administration policy separating children from families is 'abhorrent'	6/20/18	CNBC
Mark Zuckerberg, Facebook	immigration	Zuckerberg immigration group launches 2016 reform blitz	12/01/15	Politico
Bob Iger, Walt Disney	gun	by not acting to stop gun violence, we are failing our children and failing our country	5/19/18	Twitter
Howard Schultz, Starbucks	gun	Starbucks CEO says guns not welcome in stores	9/18/13	USA Today
Ajay Banga, Mastercard	gun	Mastercard CEO Says It's Not the Company's Place to Limit gun sales	5/7/19	Bloomberg

Appendix A: Examples of CEO activism (*continued*)

CEO & Company	Keyword	Title	Date	Source
<i>Other</i>				
Safra Catz, Oracle	education	Oracle's Safra Catz calls for diversity, STEM education focus	8/27/14	Silicon Valley Business Journal
Tim Cook, Apple	education	Tim Cook and Malala Yousafzai team up to fight for girls' education	1/22/18	Mashable
Tim Cook, Apple	disease	Apple expanding its health expertise to managing disease, reportedly now has 50 doctors on staff	12/22/18	9To5Mac
Doug McMillon, Walmart	disease	Walmart is going to use blockchain to stop the spread of E. coli and other diseases in lettuce	9/24/18	CNBC

Appendix B. Data construction

We build a web scraper using Python to extract news from Google News. Following the method described in Coscia and Rios (2012), we apply the following set of rules when collecting news articles: (1) we perform several searches for each S&P 500 CEO with different query term schemes: <“first name AND last name AND keyword” >, <“first name AND last name AND firm name AND keyword”>, <“last name AND keyword”>, <“last name AND firm name AND keyword”>, <“firm name AND CEO AND keyword”>, <“ firm name AND chief AND keyword”>, <“ firm name AND executive AND keyword”>; (2) we restrict the query results to be within the tenure years for each CEO, and we limit all search results to be before December 31, 2019. For example, Tim Cook is promoted to be the CEO of Apple in 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 Jan 1, 2011 to December 31, 2019.

Our keyword list is based on keywords used in Larcker et al. (2018), which we augment with several terms from ProCon.org website that provides a rather comprehensive list of controversial social issues. In addition, we use Google Trends, which analyzes search queries in Google and converts the search volume into numeric index, to verify that most of our keywords have relatively stable trends over our sample period. See the full list of keywords in Table B1 below.

We then extract the news article titles, date information, and the link to the article from these queries and further require each article to contain all the query words in the title.²⁴ We obtain 9,788 keyword-date news events in total. We then manually review the news articles to parse out irrelevant ones, e.g., such as “social media” captured in a search containing the string “social.” As the same news

²⁴ We include articles featuring either the CEO or the firm in the headlines, as any statements CEOs make are typically associated with their companies and vice versa. Furthermore, many articles that feature a firm in the headlines mention the CEO in the article itself. Our results are robust if we focus exclusively on articles that reference the CEO in the headlines.

can be published in different media channels, we further remove duplicate news articles, keeping the earliest one. This step yields 4,739 unique keyword-date news events.

To extract data from Twitter, we manually identify sample CEOs' and firms' Twitter accounts. We search for each CEO and firm name in Twitter and keep a record of the usernames. As multiple users can share the same screen name, we collect usernames that are verified by Twitter. We adopt another Python web scraper to extract all the tweets posted and retweets shared by sample CEOs and firms. Each tweet needs to contain the keyword we identified to be included in the sample. To remove irrelevant observations, we manually review each tweet. We then aggregate our news and tweets data and further remove events that occur on the same day. Our final sample consists of 8,847 activism events.

Table B1: List of keywords

Category	Keyword
Diversity	<p><i>Less Controversial:</i> diversity, ethnicity, racial, discrimination, harassment, sexual</p> <p><i>More Controversial:</i> #metoo, gay marriage, gender equality, glass ceiling, homosexual, inclusion, lesbian, LGBT, pride parade, religion, same-sex, transgender</p>
Environment	<p><i>Less Controversial:</i> clean air, clean water, environment, pollution, renewable, sustainability, environment</p> <p><i>More Controversial:</i> climate change, global warming, Paris accord, carbon tax, land conservation</p>
Political	<p><i>Less Controversial:</i> budget sequestration, cap-and-trade legislation, debt ceiling, fiscal cliff, foreign trade, government shutdown, NAFTA, politics, sanctions, tariffs, taxes</p> <p><i>More Controversial:</i> Clinton, Obama, Trump, Romney, travel ban, republican, democrat, Brexit, Bush, Gore, Kerry, McCain</p>
Other	<p><i>Less Controversial:</i> dreamers, indigenous people, ad, advertisement, advocate, disease, education, healthcare, homelessness, military, poverty, prison, public policy, social, terrorism, veterans, violence, war</p> <p><i>More Controversial:</i> #keepfamilies together, human rights, immigration, refugee, white supremacists, pay gap, progressive, income inequality, Obamacare, equal pay, Charlottesville, @AMarch4OurLives, boycott, Nazis, controversial, abortion, gun</p>

Appendix C. Experiment Details

To qualify for the study, participants had to complete a screening survey, which asked them about their demographic characteristics, understanding of corporate decision-making, loyalty to particular product brands, and opinions about corporate culture and manager-employee relationships. Among the individuals who completed the screening survey—answering every question and correctly answering the attention check question at the end of the survey—600 were invited to participate in the randomized controlled trial as either job-seekers or prospective customers. Of these 600, 508 chose to participate in the experiment (a participation rate of 85%).

Screening Survey: We paid participants \$0.75 for completing the screening survey. This survey had an expected completion time of 5 min (i.e., estimated hourly wage of \$9.00). To be included in the screening survey, workers had to be located in the United States and they had to have completed over 100 HITs with an aggregate approval rating of over 95%. Our sample included only CloudResearch Approved Participants. CloudResearch vets participants, and only those who passed their attention and engagement measures were allowed to participate in our experiment. In addition, we block suspicious geocode locations, we block duplicates IP addresses, and we verify each worker's country and state location.

Experiment Survey: We paid participants \$0.30 for completing the experiment survey. This survey had an expected completion time of 2 min (i.e., estimated hourly wage of \$9.00). Only workers who correctly answered the attention/quality check question at the end of the screening survey were invited back to participate in the experiment survey. Both the screening survey and the experiment survey were administered through Qualtrics.

Balance Tests: Using information gathered in the screening survey, we perform balance tests across the different treatment cells, which we report in Table C1. We find evidence of balance across all three CEO activism treatment cells among job-seekers in all demographic characteristic responses,

nine out of ten personal experience/opinion responses, and three out of four investment metric responses. Similarly, we find evidence of balance across all three groups of prospective customers in all demographic characteristic responses, all personal experience/opinion responses, and three out of four investment metric responses. Our main experimental results are robust when we control for participants' responses to the screening survey questions. These additional tests confirm that the results of our experiment are not driven by imbalance in the composition of participants across the treatment cells.

Survey Questions: Figures C1 and C2 present screenshots of the questions that participants were asked in the screening and experiment surveys, respectively. These figures show the exact wording and answer options that were displayed to the participants.

Table C1. Balance Across Treatment Cells

This table presents responses to the screening survey questions. Exact question wording is provided in Figure C1. The rightmost column present p-values from the test that the three coefficients are jointly equal.

Panel A: Job-Seekers

	No Added Info	CEO Regularly Takes a Stance	CEO Avoids Taking a Stance	H0: Joint Equality (p-value)
Screening Question	(1)	(2)	(3)	(4)
Demographics				
Age	38.7	40.8	40.9	0.382
Education (Years)	15.0	14.8	15.4	0.242
Male	0.45	0.51	0.60	0.152
Experience (HITs)	6,616	6,109	5,686	0.330
Experience (Years)	1.67	1.66	1.69	0.980
Income Importance	3.29	3.21	3.13	0.708
Experiences/Opinions				
Experience Investing	3.40	3.39	3.99	0.022**
Future Investing	4.04	3.96	4.07	0.847
Informed on Business	3.27	3.33	3.54	0.391
Enjoy Business News	3.24	3.18	3.48	0.279
Customer Reviews	4.52	4.46	4.47	0.814
Brand Loyalty	3.48	3.52	3.67	0.478
Manager Respect	4.46	4.59	4.45	0.340
Corporate Culture	4.46	4.45	4.53	0.758
Liberal/Progressive	3.85	3.59	3.65	0.477
CEO Actions	4.37	4.52	4.38	0.427
Investment Metrics				
Stock Return History	44.1	47.8	48.1	0.337
Operational Strategy	32.8	27.2	29.8	0.048**
CEO Activism	14.3	14.3	12.0	0.340
CEO Compensation	8.8	10.7	10.1	0.454
Number of Participants	84	85	85	

Panel B: Prospective Customers

Screening Question	No Added Info (1)	CEO Regularly Takes a Stance (2)	CEO Avoids Taking a Stance (3)	H0: Joint Equality (p-value) (4)
Demographics				
Age	39.0	39.8	39.9	0.898
Education (Years)	15.2	15.2	15.9	0.709
Male	0.57	0.58	0.55	0.923
Experience (HITs)	5,407	5,771	5,770	0.794
Experience (Years)	1.66	1.62	1.50	0.647
Income Importance	3.08	3.14	3.12	0.952
Experiences/Opinions				
Experience Investing	3.55	3.47	3.63	0.817
Future Investing	3.72	3.88	4.00	0.318
Informed on Business	3.33	3.48	3.45	0.702
Enjoy Business News	3.34	3.42	3.53	0.574
Customer Reviews	4.49	4.51	4.34	0.272
Brand Loyalty	3.28	3.56	3.48	0.190
Manager Respect	4.35	4.42	4.27	0.395
Corporate Culture	4.43	4.54	4.49	0.620
Liberal/Progressive	3.86	3.39	3.63	0.120
CEO Actions	4.36	4.34	4.40	0.906
Investment Metrics				
Stock Return History	43.9	45.2	43.7	0.873
Operational Strategy	30.5	30.8	28.6	0.605
CEO Activism	13.5	14.2	14.1	0.938
CEO Compensation	12.1	9.8	13.6	0.089*
Number of Participants	83	85	86	

Figure C1. Screening Survey Question

These figures show the questions that were presented to participants during the screening survey.

<p>What is your age?</p> <input type="radio"/> Under 18 <input type="radio"/> 18 - 24 <input type="radio"/> 25 - 34 <input type="radio"/> 35 - 44 <input type="radio"/> 45 - 54 <input type="radio"/> 55 - 64 <input type="radio"/> 65 - 74 <input type="radio"/> 75 - 84 <input type="radio"/> 85 or older	<p>What gender do you identify with?</p> <input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Non-binary <input type="radio"/> Prefer not to say	<p>How many years have you been accepting and completing HITs on Mturk?</p> <input type="radio"/> 0 - 1 <input type="radio"/> 1 - 2 <input type="radio"/> 2 - 3 <input type="radio"/> Greater than 3
<p>What is your education level?</p> <input type="radio"/> Less than high school <input type="radio"/> High school graduate <input type="radio"/> Some college <input type="radio"/> 2-year degree <input type="radio"/> 4-year degree <input type="radio"/> Masters degree <input type="radio"/> Doctorate degree	<p>How many Mturk HITs have you completed?</p> <input type="radio"/> 0 - 50 <input type="radio"/> 51 - 200 <input type="radio"/> 201 - 500 <input type="radio"/> 501 - 1,000 <input type="radio"/> 1,001 - 2,000 <input type="radio"/> 2,001 - 5,000 <input type="radio"/> 5,001 - 10,000 <input type="radio"/> Greater than 10,000	<p>How important is the income you make from Mturk to your financial situation?</p> <input type="radio"/> Extremely important <input type="radio"/> Very important <input type="radio"/> Moderately important <input type="radio"/> Slightly important <input type="radio"/> Not at all important

Please rate your agreement with the following statements about your personal experiences.	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree					
I have invested in the stock market in the past.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	I have several favorite product brands, and I don't like buying substitutes for such items.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I plan to invest in the stock market in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	I believe managers have to work to gain respect and loyalty from their employees.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I stay informed on what is happening in the stock market and business world in general.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	I feel that cultivating a positive corporate culture is an important role of management.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy learning about the decisions and behaviors of large corporations and their CEOs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	I have liberal/progressive views on social issues such as 2nd amendment rights, LGBTQ+ rights, climate change, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I read many customer reviews before buying new products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	I believe CEOs should take into account how their actions affect the broader community-- i.e. customers, employees, etc.-- instead of just focusing on profits.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Assume you have a large amount of money to invest in the stock market. To help you decide which companies to invest in, you are told four things about each company:

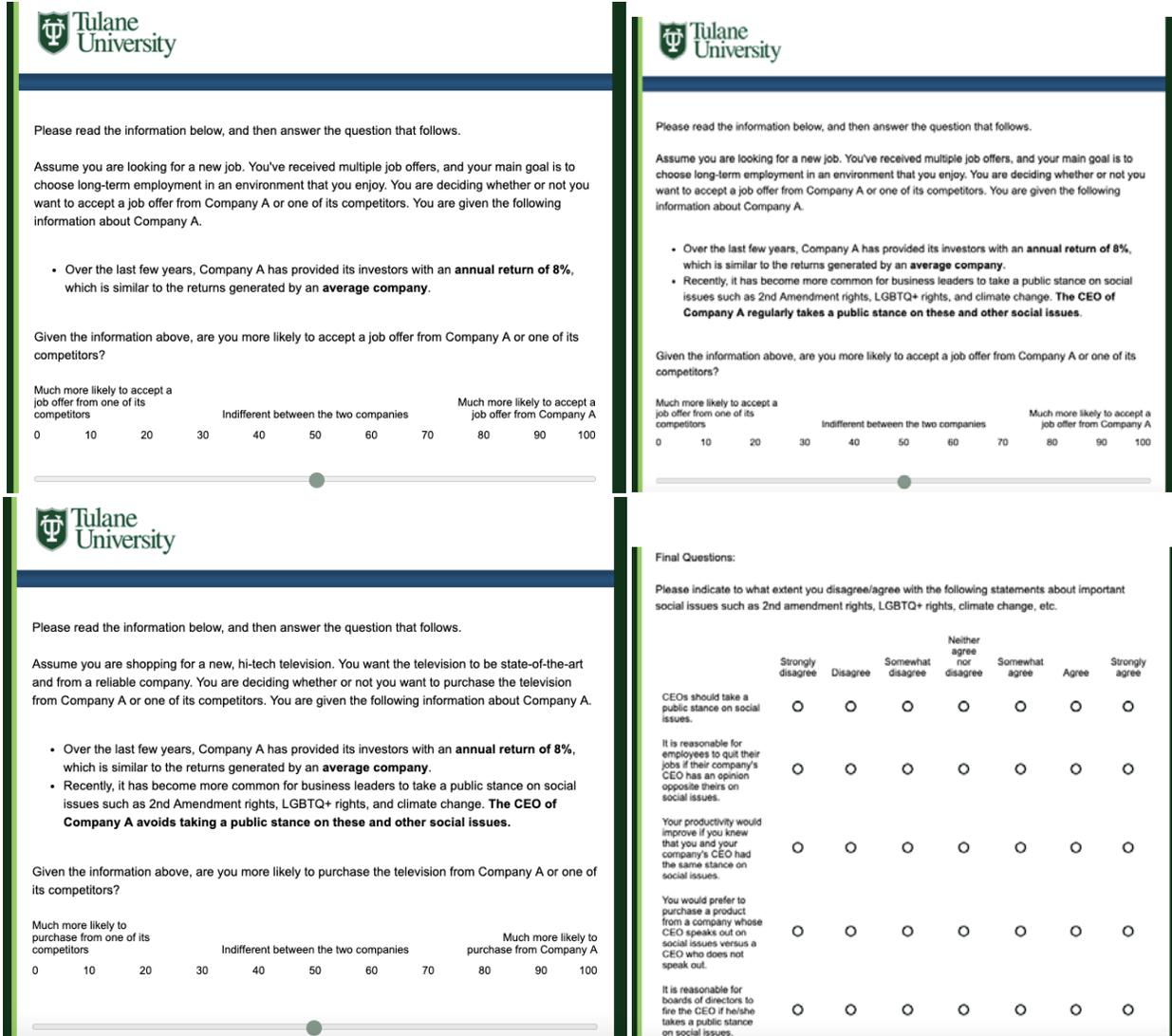
- (1) its stock return history;
- (2) the details of its business model and operational strategy;
- (3) its CEO's stance on social issues such as 2nd amendment rights, LGBTQ+ rights, climate change, etc.;
- (4) the compensation of its CEO.

Please indicate how much weight you would place on each of these four things as you decide which companies you will invest in. (your inputs must sum to 100)

Stock return history	<input type="text" value="0"/>
Details of the business model and operational strategy	<input type="text" value="0"/>
CEO's stance on social issues	<input type="text" value="0"/>
Compensation of the CEO	<input type="text" value="0"/>
Total	<input type="text" value="0"/>

Figure C2. Experiment Survey Question

These figures show the questions that were presented to participants during the experiment survey. Participants were randomly assigned the role of either job-seeker or prospective customer, and then they were placed into one of the three CEO activism information cells. Each only saw one of the six possible permutations of the first question (for brevity, only three of the six permutations are displayed below). The last figure displays the follow-up questions that all participants were asked to answer.



Appendix D: Variable definitions

Variable	Definitions
Panel A: Dependent variables	
<i>Tobin's q</i>	Market value of assets divided over book value of assets. Market value of assets is book value of total assets minus book value of equity plus market value of equity.
<i>Employee growth</i>	Annual rate of growth in employees.
<i>SLE</i>	The natural log of sales per employee.
<i>TFP</i>	Residuals from industry-specific regressions of revenue on the number of employees, fixed assets, and year fixed effects.
<i>R&D/Sales</i>	Research and development expense, scaled by sales.
<i>Patents</i>	The natural log of (1 +) the number of approved patent applications in year $t+2$, using data from Noah Stoffman's website.
<i>Patents/employee</i>	The natural log of (1 +) the number of approved patent applications per employee in year $t+2$, using data from Noah Stoffman's website.
<i>Patent value</i>	The natural logarithm of (1 +) the dollar value of patents, using data from Noah Stoffman's website.
<i>Citations</i>	The natural log of (1 +) citations per patent approved in year $t+2$, using data from Noah Stoffman's website.
<i>Labor-related litigation</i>	Indicator variable that equals one if a company is named as a defendant in a labor-related class-action lawsuit during the period, zero otherwise.
<i>Sales growth</i>	Annual rate of growth in sales.
<i>Forced turnover age <60</i>	Indicator variable that equals one if the outgoing CEO is younger than 60 years old, zero otherwise.
<i>Forced turnover age News</i>	Indicator variable that equals one if the outgoing CEO was forced out based on the information collected from news and CapitalIQ, zero otherwise.
<i>Ln(CEO tenure)</i>	Natural logarithm of the number of years between the CEO appointment and termination date or the last year in which the firm appears in BoardEx.
<i>Future directorships</i>	Cumulative number of new directorships as of year $t+2$.
Panel B: Firm characteristics	
<i>Firm size</i>	Book value of total assets.
<i>Number of segments</i>	Number of operating segments.
<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.
<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>CSR index</i>	Sum of all of the CSR strengths minus all of the CSR concerns.
<i>SG&A expense</i>	Selling, general, and administrative expense.

Appendix D: Variable definitions (*continued*)

Panel B: Firm characteristics (continued)	
<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>HQ's democratic leaning</i>	The fraction of voters that voted in support of the Democratic candidate, Clinton, in the 2016 presidential election.
<i>Shareholders' prosocial preferences</i>	The holdings-weighted average of state-based Local Prosocial Culture of institutional and retail investors, following Pan et al. (2019). Institutional investors are assigned Local Prosocial Culture in their headquarters states and retail investors are assigned Local Prosocial Culture in firm's headquarters state. Local Prosocial Culture is defined as the first principal component of four state-level variables: (i) the fraction of residents favoring increasing the minimum wage; ii) minimum wage; iii) difference between maximum and minimum personal income tax rates; iv) fraction of voters supporting the Democratic candidate in 2016 presidential election).
Panel C: CEO characteristics	
<i>Visibility</i>	Number of news articles and tweets featuring a company or CEO during a given year, scaled by total assets.
<i>Overconfidence</i>	Estimated value of in-the-money unexercised exercisable options, scaled by total compensation.
<i>Age</i>	CEO's age as reported in BoardEx.
<i>Tenure</i>	Number of years in the role of CEO.
<i>Number of boards to date</i>	Cumulative number of external directorships held by an executive.
<i>CEO's democratic leaning</i>	The percentage of contributions to Democrats relative to total contributions to both Democrats and Republicans.
Panel D: Corporate governance controls	
<i>Equity incentives</i>	The dollar sensitivity of CEO firm-specific wealth (option and stockholdings) to 1% change in the firm's stock price.
<i>Institutional ownership</i>	Percent of shares held by institutional investors.
<i>CEO/Chair duality</i>	Indicator variable that equals one if the CEO is also the Chair of the board, zero otherwise.
<i>Board size</i>	Number of directors on the board.
<i>% independent directors</i>	Percentage of directors who are unaffiliated with the firm beyond their directorship.
<i>% busy directors</i>	Percent of independent directors who serve on three or more boards.

Figure 1. Descriptive statistics

This figure compares the timing of activism events and earnings announcements. We extract earnings announcement dates from Capital IQ from January 2000 to February 2019. We then match each activism event with the nearest earnings announcement and remove activism events after February 2019. We convert matched activism event dates into event time by resetting earnings announcement dates to zero in event time. This figure then presents the distribution of activism events relative to earnings announcements.

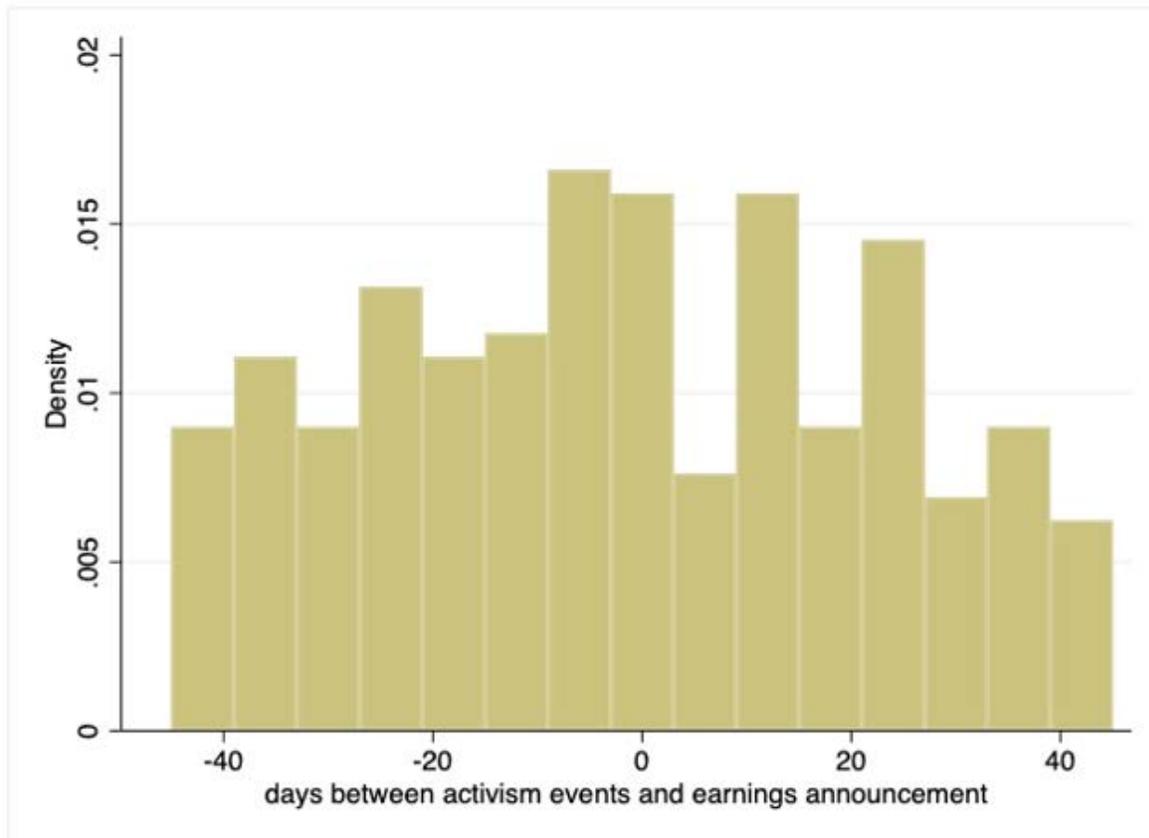


Table 1. Descriptive statistics

Panel A of this table presents descriptive statistics, based on a sample of 461 firms over the period 2010–2019 (3,828 firm-year observations). Panel B reports the number of CEOs engaging in activism stratified by year. Panel C reports the number of CEOs engaging in CEO activism, stratified by 12 Fama–French industry categories. Variable definitions are given in the Appendix D.

Panel A: Firm characteristics

	Mean	25 th percentile	Median	75 th percentile
	(2)	(3)	(4)	(5)
<i>Firm characteristics</i>				
Firm size (in billions)	25.84	4.73	9.53	23.27
Stock return	0.04	-0.14	0.01	0.18
Market-to-book	2.38	1.43	1.94	2.78
ROA	0.16	0.11	0.15	0.20
Asset tangibility	0.25	0.09	0.17	0.35
Sales growth	0.06	0.00	0.05	0.12
R&D/Sales	0.05	0.00	0.01	0.06
Leverage	0.16	0.07	0.13	0.21
<i>Board characteristics</i>				
CEO/Chairman duality	0.49	0.00	1.00	1.00
Board size	10.54	9.00	11.00	12.00
Board independence	0.83	0.80	0.88	0.91
Busy board dummy	0.24	0.00	0.00	0.00
<i>CEO activism</i>				
CEO activism dummy	0.21	0.00	0.00	0.00
CEO activism – news dummy	0.18	0.00	0.00	0.00
CEO activism – tweets dummy	0.09	0.00	0.00	0.00
# of activism events	2.82	0.00	0.00	0.00

Panel B: Activist CEOs by Year

	Percentage of Activist CEOs
2010	5%
2011	5%
2012	8%
2013	10%
2014	11%
2015	18%
2016	28%
2017	36%
2018	45%
2019	57%
Full sample	21%

Panel C. Activist CEOs by industry

	Percentage of Activist CEOs
Food, tobacco, textiles, apparel, leather, and toys	28%
Cars, TV's, furniture, and household appliances	34%
Machinery, trucks, planes, paper, and commercial printing	17%
Oil, gas, coal extraction and products	16%
Chemicals and applied products	19%
Computers, software, and electronic equipment	22%
Telephone and television transmission	18%
Utilities	-
Wholesale, retail, and some services	25%
Healthcare, medical equipment, and drugs	19%
Financials	-
Mines, construction, building materials, transportation, and entertainment	16%
Full sample	21%

Panel D. Activist CEOs by geographical region

	Percentage of Activist CEOs
Midwest	22%
Northeast	20%
Southeast	16%
Southwest	13%
West	28%
Full sample	21%

Table 2. Keyword distribution by categories

This table presents the number and proportion of the five most frequent keywords by category, based on a sample of 8,847 activism events over the period 2010–2019.

Keyword	N	% of category
<i>Diversity</i>		
Diversity	852	38.67
LGBT	376	17.07
Inclusion	333	15.12
Discrimination	220	9.99
Harassment	73	3.31
<i>Environment</i>		
Sustainability	907	52.76
Environment	392	22.80
Renewable	115	6.69
Climate change	107	6.22
Pollution	101	5.88
<i>Political</i>		
Trump	306	33.77
Brexit	125	13.80
Tariffs	98	10.82
Taxes	94	10.38
Politics	62	6.84
<i>Other</i>		
Disease	854	21.25
Education	783	19.48
Veterans	479	11.92
Military	384	9.55
Social	284	7.07

Table 3. Cumulative Announcement Returns

This table presents median and mean announcement returns for CEO activism, based on a sample of 8,847 activist events over the period 2010-2019. Column (1) presents the announcement returns for the full sample, Columns (2)-(5) show announcement returns for sub-samples of activism events related to diversity, the environment, politics, and other social issues. Asterisks indicate the differences from zero, based on signed rank tests and t-tests. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively.

	Full sample N=8,847 (1)	Diversity N=2,203 (2)	Environment N=1,719 (3)	Politics N=906 (4)	Other social N=4,019 (5)
Median:					
CAR [-1:1]	0.10% ***	0.13% ***	0.07%	0.21% ***	0.09% **
CAR [-2:2]	0.17% ***	0.24% ***	0.07%	0.20% **	0.16% **
CAR [-3:3]	0.22% ***	0.30% ***	0.17%	0.13%	0.23% ***
Mean:					
CAR [-1:1]	0.08% ***	0.15% ***	0.04%	0.18% *	0.03%
CAR [-2:2]	0.12% ***	0.30% ***	0.01%	0.24% *	0.04%
CAR [-3:3]	0.19% ***	0.42% ***	0.07%	0.21%	0.10% *

Table 4. Cumulative Announcement Returns – Cross-sectional variation

This table presents median announcement returns for CEO activism, based on a sample of 8,847 activist events over the period 2010-2019. Panel A stratifies firms by HHI, Panel B stratifies firms by human capital intensity, and Panel C stratifies firms by shareholders' prosocial preferences. Firms are classified as having high HHI if they operate in an industry with HHI above the median, otherwise, firms are classified as having low HHI. Firms are classified as high human capital intensity, if R&D/Sales is in top quartile, otherwise, firms are classified as low human capital intensity. Firms are classified as having high shareholders' prosocial preferences if their score is above the median on the prosocial preferences measure, otherwise firms are classified as having low shareholders' prosocial preferences. Asterisks indicate the differences from zero, based on signed rank tests and *t*-tests. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively.

Panel A: Industry competitiveness

	Highly competitive (Low HHI)	Low competitive (High HHI)	Difference
	(1)	(2)	(3)
CAR [-1:1]	0.15%***	0.06%	0.08%***
CAR [-2:2]	0.24%***	0.09%	0.15%***
CAR [-3:1]	0.28%***	0.15%**	0.13%***

Panel B: Human capital intensity

	High Capital Intensity	Low Capital Intensity	Difference
	(1)	(2)	(3)
CAR [-1:1]	0.19%***	0.08%***	0.11%*
CAR [-2:2]	0.29%***	0.13%***	0.16%**
CAR [-3:3]	0.39%***	0.18%***	0.21%**

Panel C: Shareholders' pro-social preferences

	High pro-social preferences	Low pro-social preferences	Difference
	(1)	(2)	(3)
CAR [-1:1]	0.15%***	0.06%**	0.09%
CAR [-2:2]	0.26%***	0.10%**	0.16%*
CAR [-3:1]	0.32%***	0.13%***	0.19%**

Table 5. Firm value

This table presents estimates from ordinary least squares estimations. The dependent variable in all columns but (4) is Tobin's q. The dependent variable in Column 4 is the number of activism events. Column 3 reports the results using an entropy-balanced sample. Column 4 is the first stage of a 2SLS model in which the number of activism events is instrumented using the number of adopted state laws affecting LGBTQ workers. Column 5 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 Appendix D. *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.

	Tobin's Q			1 st stage: #	2 nd stage:
	(1)	(2)	(3)	of activism	Tobin's Q
# of activism events	0.013*** (3.81)	0.009*** (2.74)	0.008** (2.56)		0.058** (2.07)
LGBTQ-related laws passed				0.069*** (3.10)	
Ln(Firm size)	-0.441*** (-7.86)	-0.566*** (-7.18)	-0.729*** (-6.53)	2.224*** (3.42)	-0.675*** (-7.31)
Number of segments	-0.012 (-0.56)	-0.020 (-0.97)	-0.007 (-0.22)	-0.130 (-0.82)	-0.007 (-0.32)
Stock return	0.512*** (4.53)	0.452*** (4.87)	1.162*** (2.84)	0.789 (1.62)	0.405*** (4.14)
ROA	1.802** (2.01)	2.282** (2.49)	6.516*** (5.12)	0.424 (0.14)	2.268*** (2.59)
Asset tangibility	0.567** (2.26)	0.728*** (2.76)	0.054 (0.13)	1.789 (0.85)	0.602** (2.25)
Leverage	-3.445*** (-8.84)	-2.332*** (-6.44)	-1.898*** (-3.41)	-7.968*** (-2.61)	-1.871*** (-4.41)
CSR index		-0.005 (-0.64)	-0.015 (-0.96)	-0.233 (-1.56)	0.005 (0.47)
Ln(SG&A expense)		0.314*** (4.84)	0.431*** (4.30)	1.152** (2.40)	0.247*** (3.33)
Fortune's 100 best company dummy		0.277 (1.59)	0.312 (1.12)	-1.148 (-0.86)	0.290** (2.06)
HQ's Democratic leaning		-0.354 (-0.44)	-0.555 (-0.55)	14.970** (2.10)	-1.273 (-1.29)
Shareholders' prosocial preferences		0.105 (1.33)	0.173 (1.27)	-3.022*** (-3.19)	0.187* (1.85)
<i>CEO characteristics</i>					
Visibility		5.502*** (4.37)	2.844** (1.98)	19.839*** (2.70)	4.505*** (4.34)
CEO overconfidence		0.007 (1.47)	0.015 (1.37)	0.117 (1.29)	0.001 (0.11)
Number of boards to date		-0.017 (-1.04)	0.005 (0.21)	-0.161 (-1.56)	-0.012 (-0.71)
CEO age		-0.008 (-1.32)	-0.014* (-1.73)	-0.161** (-2.04)	0.001 (0.15)
Ln (CEO tenure)		0.051 (1.18)	0.117 (1.43)	0.610 (1.18)	0.019 (0.38)
CEO's Democratic leaning		0.060 (0.33)	0.303 (1.19)	2.104 (1.33)	-0.047 (-0.25)

Table 5. Firm value (continued)

	Tobin's Q			1 st stage: #	2 nd stage:
	(1)	(2)	(3)	of activisms	Tobin's Q
				(4)	(5)
<i>Governance controls</i>					
Ln(CEO's equity incentives)		0.089*** (3.71)	0.070* (1.92)	-0.231 (-1.14)	0.099*** (3.51)
Institutional ownership		-0.200* (-1.80)	-0.148 (-0.68)	-1.810** (-2.19)	-0.116 (-0.94)
CEO/Chair duality		0.124* (1.71)	0.131 (0.92)	1.227 (1.64)	0.072 (0.92)
Ln (Board size)		-0.232 (-1.31)	0.510 (1.46)	-2.138 (-1.15)	-0.082 (-0.41)
% independent directors		-0.785** (-2.19)	0.523 (0.92)	-0.849 (-0.27)	-0.727** (-2.03)
% busy directors		0.038 (0.63)	0.127 (1.45)	-0.863 (-1.38)	0.081 (1.16)
Number of observations	4,023	3,757	3,757	3,757	3,757
Adjusted R-squared	0.432	0.510	0.584	-	0.379
Cragg-Donald Wald F statistic				89.28	

Table 6. Employee productivity

This table presents estimates from ordinary least squares (the second stage of a 2SLS) estimations in Column 1-3 (4-6). The dependent variable in Columns 1 and 4 is employee growth. The dependent variable in Columns 2 and 5 is sales per employee. The dependent variable in Columns 3 and 6 is total factor productivity. All regressions control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in Appendix D. *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.

	OLS			2 nd stage of 2SLS		
	Employee growth	SLE	TFP	Employee growth	SLE	TFP
	(1)	(2)	(3)	(4)	(5)	(6)
# of activism events	0.035* (1.70)	0.004*** (3.44)	0.003*** (3.19)	-0.059 (-0.32)	0.028* (1.80)	0.029** (1.97)
Ln(Firm size)	1.122** (1.99)	0.342*** (5.28)	0.221*** (4.45)	1.340* (1.84)	0.286*** (3.77)	0.162*** (2.90)
Number of segments	-0.681*** (-3.81)	-0.024 (-1.55)	-0.037*** (-3.26)	-0.706*** (-3.73)	-0.018 (-1.07)	-0.030** (-2.41)
Stock return	5.097*** (6.02)	0.112*** (4.43)	0.066*** (2.90)	5.189*** (5.85)	0.088*** (2.68)	0.041 (1.31)
ROA	10.481** (2.41)	0.218 (1.01)	0.012 (0.07)	10.468** (2.43)	0.221 (1.05)	0.016 (0.09)
Asset tangibility	1.298 (0.55)	-0.758*** (-2.92)	-1.364*** (-8.27)	1.541 (0.66)	-0.820*** (-3.13)	-1.429*** (-8.23)
Leverage	-16.451*** (-5.05)	0.159 (0.62)	-0.024 (-0.13)	-17.339*** (-4.54)	0.387 (1.34)	0.214 (0.95)
CSR index	-0.145 (-1.35)	0.003 (0.56)	0.005 (1.10)	-0.165 (-1.33)	0.008 (1.10)	0.011 (1.56)
Ln(SG&A expense)	-2.056*** (-3.66)	-0.201*** (-3.20)	-0.186*** (-4.09)	-1.931*** (-3.13)	-0.233*** (-3.47)	-0.219*** (-4.18)
Fortune's 100 best company dummy	2.226** (2.11)	0.175** (1.98)	0.133** (2.24)	2.199** (2.20)	0.182** (2.21)	0.140** (2.35)
HQ's Democratic leaning	10.325 (1.18)	0.627 (1.06)	0.014 (0.03)	11.217 (1.27)	0.398 (0.62)	-0.225 (-0.44)
Shareholders' prosocial preferences	-0.695 (-0.81)	0.061 (1.14)	0.072* (1.65)	-0.745 (-0.87)	0.074 (1.28)	0.086* (1.81)
CEO and governance controls	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	3,754	3,756	3,756	3,754	3,756	3,756
Adjusted R-squared	0.113	0.621	0.304	0.109	0.532	0.030

Table 7. Innovation

Panel A (B) presents estimates from ordinary least squares (the second stage of 2SLS) estimations. The dependent variables in Columns 1-5 are R&D/Sales, number of patents, patents/employees, patent value, and citations, respectively. All regressions control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in Appendix D. *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: OLS

	R&D/Sales	Patents	Patents/ employee	Patent value	Citations
	(1)	(2)	(3)	(4)	(5)
# of activism events	0.001*** (3.69)	0.036** (2.56)	0.024*** (3.11)	0.052*** (2.65)	0.021 (1.20)
Ln(Firm size)	-0.014*** (-2.85)	0.489*** (3.59)	-0.018 (-0.18)	0.821*** (3.95)	0.551*** (3.77)
Number of segments	-0.004*** (-3.95)	-0.006 (-0.16)	-0.045 (-1.56)	-0.022 (-0.41)	-0.010 (-0.27)
Stock return	0.000 (0.17)	0.110* (1.76)	0.161*** (3.14)	0.175* (1.72)	0.026 (0.27)
ROA	-0.175* (-1.86)	-0.378 (-0.75)	0.298 (0.62)	-1.035 (-1.39)	-1.032* (-1.66)
Asset tangibility	-0.011 (-0.81)	-0.247 (-0.45)	-0.640 (-1.50)	-0.326 (-0.39)	-0.238 (-0.41)
Leverage	-0.094*** (-2.85)	-2.499*** (-3.82)	-0.165 (-0.33)	-5.107*** (-5.59)	-3.054*** (-4.11)
CSR index	0.001* (1.85)	0.078*** (4.55)	0.069*** (4.22)	0.069*** (2.77)	0.071*** (3.52)
Ln(SG&A expense)	0.015*** (4.50)	0.502*** (3.74)	0.093 (0.90)	0.727*** (3.68)	0.484*** (3.57)
Fortune's 100 best company dummy	0.038*** (3.53)	0.267 (1.15)	0.541*** (2.66)	0.189 (0.50)	0.228 (0.81)
HQ's Democratic leaning	-0.047 (-1.04)	-3.309** (-2.31)	0.003 (0.00)	-5.487** (-2.35)	-4.547*** (-2.90)
Shareholders' prosocial preferences	0.018*** (3.52)	0.384*** (2.87)	0.212 (1.56)	0.643*** (3.06)	0.529*** (3.42)
CEO and governance controls	Yes	Yes	Yes	Yes	Yes
Number of observations	3,758	2,903	2,903	2,903	2,613
Adjusted R-squared	0.438	0.645	0.366	0.602	0.609

Panel B: 2nd stage of 2SLS

	R&D/Sales	Patents	Patents/ employee	Patent value	Citations
	(1)	(2)	(3)	(4)	(5)
# of activism events	0.007** (2.43)	0.269** (2.42)	0.234** (2.45)	0.397** (2.45)	0.199** (2.08)
Ln(Firm size)	-0.029*** (-4.05)	0.234 (1.42)	-0.248* (-1.82)	0.444* (1.82)	0.402** (2.50)
Number of segments	-0.003** (-1.98)	0.019 (0.51)	-0.022 (-0.69)	0.014 (0.24)	-0.004 (-0.10)
Stock return	-0.006 (-1.25)	0.153 (1.62)	0.199** (2.50)	0.239* (1.69)	-0.028 (-0.28)
ROA	-0.174* (-1.79)	-0.109 (-0.17)	0.540 (0.92)	-0.638 (-0.66)	-0.868 (-1.40)
Asset tangibility	-0.027 (-1.35)	-0.419 (-0.73)	-0.794* (-1.74)	-0.579 (-0.70)	-0.346 (-0.61)
Leverage	-0.033 (-0.72)	-1.468* (-1.96)	0.763 (1.26)	-3.583*** (-3.32)	-2.454*** (-3.06)
CSR index	0.002** (2.09)	0.087*** (5.58)	0.078*** (4.46)	0.083*** (3.53)	0.078*** (4.08)
Ln(SG&A expense)	0.007 (1.24)	0.398*** (2.90)	-0.001 (-0.01)	0.572*** (2.81)	0.431*** (3.22)
Fortune's 100 best company dummy	0.039*** (3.19)	0.462 (1.52)	0.716*** (2.63)	0.478 (1.05)	0.268 (0.86)
HQ's Democratic leaning	-0.107* (-1.74)	-4.155*** (-2.76)	-0.758 (-0.45)	-6.737*** (-2.80)	-5.228*** (-3.30)
Shareholders' prosocial preferences	0.021*** (3.30)	0.436*** (2.94)	0.258* (1.69)	0.719*** (3.15)	0.573*** (3.62)
CEO and governance controls	Yes	Yes	Yes	Yes	Yes
Number of observations	3,758	2,903	2,903	2,903	2,613
Adjusted R-squared	-	0.438	-	0.404	0.562

Table 8. Employee-related litigation

This table presents estimates from ordinary least squares (the second stage of a 2SLS) estimation in Column 1 (2). The dependent variable is an employee-related litigation dummy that equals one if a firm is named as a defendant in a labor-related class-action lawsuit, zero otherwise. All regressions control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in Appendix D. *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.

	Labor-related litigation	
	OLS	2SLS
	(1)	(2)
# of activism events	-0.020*** (-3.48)	-0.056** (-2.42)
Ln(Firm size)	0.333*** (2.71)	0.266*** (4.36)
Number of segments	0.000 (0.00)	-0.019 (-1.28)
Stock return	-0.074 (-0.69)	-0.052 (-0.55)
ROA	-0.442 (-0.94)	-0.384 (-1.11)
Asset tangibility	-0.039 (-0.08)	-0.009 (-0.04)
Leverage	0.566 (0.91)	0.312 (0.93)
CSR index	0.024 (1.54)	0.029*** (2.93)
Ln(SG&A expense)	0.304** (2.54)	0.447*** (9.22)
Fortune's 100 best company dummy	-0.593** (-2.17)	-0.598*** (-3.93)
HQ's Democratic leaning	-1.778 (-1.35)	-1.688** (-2.42)
Shareholders' prosocial preferences	0.030 (0.25)	0.062 (0.92)
CEO and governance controls	Yes	Yes
Number of observations	3,178	3,178
Pseudo R-squared/Chi-square	0.278	791.10

Table 9. Sales growth

This table presents estimates from ordinary least squares (the second stage of a 2SLS) estimation in Column 1 (2). The dependent variable is sales growth. All regressions control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in Appendix D. *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.

	Sales growth	
	OLS (1)	2SLS (2)
# of activism events	0.001*** (3.11)	0.000 (0.22)
Ln(Firm size)	0.018*** (2.68)	0.018** (2.39)
Number of segments	-0.005** (-2.51)	-0.005** (-2.46)
Stock return	0.087*** (9.15)	0.087*** (9.13)
ROA	-0.092 (-0.97)	-0.092 (-0.99)
Asset tangibility	0.009 (0.41)	0.009 (0.42)
Leverage	-0.124*** (-3.41)	-0.126*** (-3.19)
CSR index	-0.002 (-1.54)	-0.002 (-1.53)
Ln(SG&A expense)	-0.031*** (-4.15)	-0.030*** (-3.99)
Fortune's 100 best company dummy	0.033*** (2.68)	0.033*** (2.72)
HQ's Democratic leaning	0.093 (1.28)	0.094 (1.26)
Shareholders' prosocial preferences	-0.001 (-0.12)	-0.001 (-0.13)
CEO and governance controls	Yes	Yes
Number of observations	3,758	3,758
Adjusted R-squared	0.175	0.174

Table 10. Experiment Results

Panel A of this table presents responses to the question as to whether participants were more likely to accept a job offer from (purchase a hi-tech television from) Company A or one of its competitors. A score of 50 represents indifference between Company A and its competitors. A score of 100 represents that the participant is “Much more likely” to choose Company A, and a score of 0 represents that the participant is “Much more likely” to choose one of its competitors. Columns 4-6 present the difference between the displayed estimates, adjusted for heteroskedasticity. Panel B presents responses to the follow-up questions. Answers ranged from 1, “Strongly Disagree,” to 7, “Strongly Agree,” with 4 labeled, “Neither Disagree nor Agree.” Statistical significance captures the difference between the mean response and 4. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively.

Panel A: Main result

	No Added Info	CEO Regularly Takes a Stance	CEO Avoids Taking a Stance	Difference (1)-(2)	Difference (1)-(3)	Difference (2)-(3)
	(1)	(2)	(3)	(4)	(5)	(6)
Job - seekers	58.5 (N=84)	62.2 (N=85)	49.4 (N=85)	-3.7	9.1***	12.8***
Prospective customers	57.5 (N=83)	57.9 (N=85)	57.5 (N=86)	-0.4	0.0	0.4

Panel B: Follow-up questions

	No Added Info	CEO Regularly Takes a Stance	CEO Avoids Taking a Stance	All participants
	(1)	(2)	(3)	(4)
<i>Job-seekers</i>	N=84	N=85	N=85	N=254
CEOs Should Take a Stand on Social Issues	4.55***	4.29	4.02	4.29***
Reasonable to Quit if Misalignment	4.56**	4.56***	4.73***	4.62***
Productivity Would Improve with Alignment	4.40**	4.21	4.26	4.29***
Prefer to Purchase Products if Alignment	4.37*	4.29	4.07	4.24**
Reasonable for Boards to Fire Activist CEOs	3.71	4.06	3.80	3.86
<i>Prospective Customers</i>	N=83	N=85	N=86	N=254
CEOs Should Take a Stand on Social Issues	4.11	4.42**	4.12	4.22*
Reasonable to Quit if Misalignment	4.48**	4.76***	4.40**	4.55***
Productivity Would Improve with Alignment	4.14	4.34*	4.20	4.23**
Prefer to Purchase Products if Alignment	4.19	4.55**	4.00	4.25**
Reasonable for Boards to Fire Activist CEOs	4.17	4.04	4.06	4.09

Table 11. CEO turnover

This table presents estimates from bivariate probit estimations in Columns 1-2 and Cox proportional hazard model in Column 3. The dependent variable in Columns 1-2 is a dummy that equals one, if the CEO was fired during the year, and zero otherwise. The dependent variable in Column 3 is the natural logarithm of CEO tenure. All regressions control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in Appendix D. *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.

	=1 if forced out		Ln (CEO
	Age <60	News	Tenure)
	(1)	(2)	(3)
# of activism events	-0.752*** (-7.56)	-0.483*** (-3.99)	-0.286** (-2.55)
Ln(Firm size)	-0.069 (-1.04)	-0.068 (-0.83)	0.182** (2.06)
Number of segments	0.014 (0.64)	-0.016 (-0.55)	-0.064** (-2.44)
Stock return	-0.441*** (-3.51)	-0.355 (-1.57)	0.007 (0.04)
ROA	-0.520 (-1.18)	-0.851* (-1.78)	-1.253* (-1.72)
Asset tangibility	0.016 (0.05)	-0.431 (-1.06)	-0.900*** (-3.06)
Leverage	0.308 (0.80)	0.402 (0.83)	0.204 (0.43)
CSR index	-0.001 (-0.11)	0.007 (0.47)	0.007 (0.52)
Ln(SG&A expense)	0.203*** (3.06)	0.222*** (2.79)	-0.074 (-1.03)
Fortune's 100 best company dummy	0.445*** (2.84)	0.258 (1.25)	0.398* (1.65)
HQ's Democratic leaning	0.130 (0.12)	-1.022 (-0.76)	-1.831* (-1.89)
Shareholders' prosocial preferences	-0.013 (-0.13)	0.111 (0.94)	0.192* (1.85)
CEO and governance controls	Yes	Yes	Yes
Number of observations	3,270	3,134	609
Pseudo R-squared	0.121	0.135	0.020

Table 12. CEO board seats

This table presents estimates from an ordered logit model with the dependent variable in year t being the number of outside board seats held by the CEO in year $t+2$. All regressions control for year and 48 Fama-French industry fixed effects and include a constant (not shown). Variable definitions are in Appendix D. 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.

	Future directorships
# of activism events	0.286* (1.88)
Ln(Firm size)	-0.053 (-0.52)
Number of segments	-0.022 (-0.75)
Stock return	0.266** (2.52)
ROA	-0.090 (-0.14)
Asset tangibility	0.236 (0.55)
Leverage	-0.189 (-0.29)
CSR index	-0.010 (-0.65)
Ln(SG&A expense)	-0.067 (-0.66)
Fortune's 100 best company dummy	0.348 (1.38)
HQ's Democratic leaning	0.113 (0.07)
Shareholders' prosocial preferences	-0.019 (-0.13)
CEO and governance controls	Yes
Number of observations	3,769
Pseudo R-squared	0.226