

The causal effect of corporate governance on employee satisfaction

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Abstract

We investigate the causal effect of increasing shareholder rights on employee satisfaction. To ensure causality, we use close shareholder votes on antitakeover provisions included in the Entrenchment Index (E-Index) as exogenous shocks to the corporate governance of a company. A 1-point increase in shareholder rights on the E-Index scale causes a 10% decrease in employee satisfaction. The channels that drive our results are decreases in employees' opinion about firm culture, in their view about the company's CEO, in the number of employees, and in capital expenditures.

JEL CLASSIFICATION

G30, G32, G34

1 | INTRODUCTION

We investigate the effect of stronger shareholder rights on employee satisfaction. We find a 10% decrease in employee satisfaction following shareholder proposals that favor stronger shareholder rights and pass by a small margin compared to proposals that fail by a small margin.

Employee satisfaction is relevant for financial and nonfinancial reasons. From a financial perspective, human capital is an intangible asset. The importance of this asset increased dramatically in the past decades as companies changed from capital-intensive processing of raw materials to the development of highly sophisticated products and services (Zingales, 2000). The competitive advantages of modern products result to a large extent from the creativity of their developers.

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Symtsi et al. (2018) show that 1 additional point on a 5-point scale of employee satisfaction is associated with an abnormal annual stock return of 1.5% and a 0.5% higher return on assets. Edmans (2011) and Goenner (2008) also find positive abnormal long-term returns for companies with high employee satisfaction. Sophisticated long-term investors are aware of the importance of the workforce and urge managers to act accordingly. In his annual letters to chief executive officers (CEOs), Larry Fink, founder and CEO of exchange-traded fund giant BlackRock, criticized companies for underinvesting in skilled workforces (2015¹) and reminded CEOs that “companies must benefit all of their stakeholders, including shareholders, employees” (2018²). Larry Fink is not the only investor interested in employee satisfaction. According to the 2017 Edelman Trust Barometer,³ 69% of investors answered that they care about how a company treats its employees.

In addition to the impact on shareholder value, employee satisfaction is important from a social responsibility perspective. Stress at the workplace causes more than 120,000 deaths per year in the United States and leads to annual costs in excess of \$180 billion (Goh et al., 2015). Furthermore, stakeholders with interests other than the stock price, such as unions, political groups, and employees themselves, prefer higher employee satisfaction.

Employee satisfaction is at the center of political attention. Recent legislative initiatives such as the Accountable Capitalism Act⁴ introduced by US Senator Elizabeth Warren in August 2018 force companies to increase the focus on the well-being of employees. This legislation would weaken shareholder rights (see, e.g., Lipton, 2018) and includes a mandatory shift from shareholder primacy to stakeholder governance, including 40% board representation by employees for large corporations.⁵

Empirical evidence on the relation between corporate governance and employee satisfaction is sparse, caused by limited data on company-specific employee reviews. We overcome this problem by using data provided by Glassdoor, a website where, after creating an account, employees can anonymously review their employer. The information in this data set is relevant for two reasons. First, it allows us to measure the level of employee satisfaction for each company at different points in time. Second, satisfaction scores from Glassdoor are available online. This visibility makes employee satisfaction more important to stakeholders because it attracts or discourages potential employees.

We measure the change in employee satisfaction around quasi-exogenous shocks to the corporate governance of companies. Specifically, we employ a regression discontinuity design (RDD) to examine close votes on shareholder proposals. This methodology allows us to ensure a causal interpretation of the results. As the outcome of a close vote, for example, a proposal that passes with 50.5% or fails with 49.5%, is uncorrelated with firm characteristics and cannot be anticipated, it is akin to an exogenous shock and hence overcomes potential endogeneity issues of cross-sectional regressions. It is possible that other effects occur within the periods we investigate. We assume they are equally likely in both the group where the vote passed and the group where the vote failed. We show that companies with close passed/failed votes do not differ systematically across any dimension.

Our main finding of a decrease in employee satisfaction is robust to different windows around the majority threshold, alternative measures of employee satisfaction, and various periods. The companies with close passed and failed proposals show no significant preexisting differences and we find no discontinuity in the density of votes in favor of shareholder proposals, which could suggest manipulation of votes.

We contribute to the literature in several ways. First, we identify stronger shareholder rights as a source of employee dissatisfaction. This finding is important for long-term investors and stakeholders with nonfinancial interests, such as managers focused on the well-being of their workforce, unions, law makers, and employees themselves.

Second, we extend the list of consequences of stronger shareholder rights. Previous studies mainly focus on quantitative aspects, such as stock prices (Bebchuk et al., 2013; Cuñat et al., 2012; Gompers et al., 2003), equity risk

¹https://www.businessinsider.com/larry-fink-letter-to-ceos-2015-4?r_US&IR_T.

²<https://aips.online/wp-content/uploads/2018/04/Larry-Fink-letter-to-CEOs-2018-BlackRock.pdf>.

³<https://www.edelman.com/trust/2017-trust-barometer>.

⁴<https://www.warren.senate.gov/imo/media/doc/Accountable%20Capitalism%20Act.pdf>.

⁵The stakeholder principal itself is not new, but it is currently not mandatory. See, for example, the Delaware Supreme Court ruling in *Unocal v. Mesa Petroleum* in 1985.

(Ferreira & Laux, 2007), and compensation (Core et al., 1999). Our findings are among the first (see, e.g., Li et al., 2008) to show causal effects of corporate governance on intangible assets, in this case employee satisfaction. A better understanding of the effects on employee satisfaction caused by changes in corporate governance contribute to the current legislative discussions, which focus on the stakeholder principal.

Third, we contribute to the discussion of short-termism among scholars (e.g., Jordan et al., 2016), corporate lawyers (e.g., Lipton, 2017), and politicians (e.g., Warren, 2018). Although short-termism cannot be measured directly, a reduction in employee satisfaction is a symptom of short-termism given the positive long-term financial effects shown by Edmans (2011) and Goenner (2008). The relation among shareholder rights, short-termism, and employee satisfaction is elaborated in more detail in Section 2.

Other studies investigate the relation between corporate governance and characteristics connected to employee satisfaction. Cronqvist et al. (2009) use Swedish data to show that stronger governance leads to lower wages. Liskovich (2016) uses data from the Texas Workforce Commission to show that board destaggerings lead to a replacement of high-wage employees with low-wage employees. Grennan (2019) uses the similarity in written employee reviews to show a decrease in a proxy for corporate culture following stronger shareholder rights.

2 | SHAREHOLDER RIGHTS, EMPLOYEE SATISFACTION, AND SHORT-TERMISM

Our hypothesis is that an increase in shareholder rights causes a decrease in employee satisfaction. Our results confirm this hypothesis and can be understood as an indication for managerial short-termism: Ensuring employee satisfaction requires constant investments but the benefits can be expected only in the long term. Equivalently, short-term savings leading to a decrease in employee satisfaction sacrifice only long-term financial results (“short-termism”).⁶

The idea that stronger shareholder rights create stock market pressure to deliver short-term results, even at the expense of long-term shareholder value, is suggested in previous studies. Stein (1988) introduces the problem of short-termism with a theoretical model. Bertrand and Mullainathan (2003) confirm this problem empirically and find decreasing wages following increased takeover pressure. Garvey and Hanka (1999) show in an empirical study that antitakeover laws increase corporate slack. Jordan et al. (2016) show that dual-class shares, which shield managers from stock market pressure, can help managers implement long-term projects. A survey by Graham et al. (2005) shows that 78% of chief financial officers (CFOs) are willing to sacrifice long-term projects despite a positive net present value to increase short-term earnings. Martin (2015) provides a summary of anecdotal evidence and further references on short-termism in corporate America. Corporate lawyers (e.g., Lipton, 2017) and politicians (e.g., Warren, 2018) observe an ongoing focus of executives and board members on short-term results, which damages the long-term success of companies and the well-being of the economy.

Given a positive relation between employee satisfaction and the long-term success of companies (see, e.g., Edmans, 2011), our results provide additional evidence of a causal relation between stronger shareholder rights and short-termism measured via employee satisfaction. Overall, empirical evidence for this stock-market-driven short-termism is not conclusive and some scholars, such as Roe (2020), question whether economically relevant short-termism exists at all. Others, such as Bebchuk (2013), find no evidence that weaker shareholder rights have positive long-term effects. In their theoretical paper, Marinovic and Varas (2019) suggest a negative relation between stronger shareholder rights and short-termism.

We also find arguments against our hypothesis and in favor of a positive relation between stronger shareholder rights and employee satisfaction. The combination of (1) increasing investments in exchange-traded funds (see, e.g.,

⁶Sageer et al. (2012) investigates the reasons leading to high employee satisfaction including high salaries, clean offices, parking, on-the-job trainings, air conditioning, and so on. All these items are expensive for a company and do not directly lead to measurable firm performance.

Batts, 2018), (2) sufficient resources of institutional investors to investigate and appreciate the value of employee satisfaction as an intangible asset, and (3) institutional investors' influence on CEOs, such as Larry Fink's letter to CEOs, suggests improved employee satisfaction.⁷

Positive and negative effects should be measurable in employee satisfaction immediately after the management expects a change in shareholder rights, even when the actual modification of the charter or bylaws occurs only months later. Assuming the number of antitakeover provisions is reduced, management can mitigate the increasing takeover vulnerability in the coming months with strong financial results. Managers have an incentive to cut costs as soon as possible to achieve such results in the upcoming quarterly reports. This cost cutting, or the expectation thereof, has a negative effect on employees. It is therefore not necessary that the employees themselves fully understand, or even are aware of, the shareholder proposal.

Future research could find additional causes of short-termism and its effect on employee satisfaction. The difficulty is to find quasi-exogenous shocks that force managers to shift from a long-term focus to a short-term focus without affecting employee satisfaction directly. A corporate scandal that requires managers to focus on short-term survival most likely also causes disappointment and frustration in the workforce.

Furthermore, it could be worth investigating whether the observed effect on employee satisfaction varies across companies with different characteristics. Similar to Hauf and Menninger (2017), who use a two-dimensional RDD to show that share prices of companies with high media coverage benefit less from stronger shareholder rights than the share price of companies with low media coverage, it would be interesting to see whether financially unconstrained companies experience the same decrease in employee satisfaction as constrained firms. However, the split across an additional dimension requires a sufficiently large sample size. Compared to other RDD studies, our sample is further constrained because we also require a certain number of Glassdoor reviews around the annual meeting. After a few years, a sufficient amount of data may become available. Accordingly, it could be valuable to understand whether specific provisions in the Governance Index (G-Index) by Gompers et al. (2003) have a greater effect on employee satisfaction than others, similar to Bebchuk et al. (2009), who show that provisions in their Entrenchment Index (E-Index) are relevant for increased stock prices.

3 | METHODOLOGY

3.1 | Quantification of employee satisfaction

Our empirical study is based on employee satisfaction scores (ES) between 1 and 5 assigned by individual employees for their company. For our analysis, we are interested in the change in employee satisfaction (ΔES_i) around annual meeting i . To obtain ΔES_i , we require aggregated measures in employee satisfaction for the company that holds annual meeting i in a specific period before and after the meeting.

We start by defining $\overline{ES}_i(-T, 0)$ as the average employee satisfaction within T months before and $\overline{ES}_i(0, T)$ as the average employee satisfaction within T months after annual meeting i :

$$\overline{ES}_i(-T, 0) = \frac{1}{N_i^-} \sum_{j=1}^{N_i^-} ES_{i,j}(-T, 0) \quad \text{and} \quad \overline{ES}_i(0, T) = \frac{1}{N_i^+} \sum_{j=1}^{N_i^+} ES_{i,j}(0, T), \quad (1)$$

where $ES_{i,j}(-T, 0)$ is the j -th review out of N_i^- total reviews on employee satisfaction for the company with annual meeting i within T months before the annual meeting and $ES_{i,j}(0, T)$ is the j -th review out of N_i^+ total reviews on employee satisfaction for the company with annual meeting i within T months after the annual meeting. We further

⁷Another increasingly influential group affecting shareholder votes with similar analytic resources is proxy advisory firms. For an overview of this industry, see Copland et al. (2018).

compute an employee satisfaction index score $ES_i(-T, 0)$ within T months before and an employee satisfaction index score $ES_i(0, T)$ within T months after annual meeting i . The index score is computed analogous to Equation (1) but uses reviews on employee satisfaction for all US companies in the Glassdoor database within the relevant periods.

We then measure the change in employee satisfaction ΔES_i as the difference between the index-adjusted satisfaction measure within T months after the annual meeting and the index-adjusted satisfaction measure within T months before the annual meeting:

$$\Delta ES_i = \frac{\overline{ES}_i(0, T)}{\overline{ES}_i(0, T)} - \frac{\overline{ES}_i(-T, 0)}{\overline{ES}_i(-T, 0)}. \quad (2)$$

We use a window of $T = 6$ months before and after the annual meeting. We discard annual meetings for which we have fewer than 30 employee satisfaction reviews within the 6 months before and 6 months after the annual meeting. We choose a minimum of 30 reviews and 6-month windows to balance between statistical stability of the employee satisfaction averages and sample size. Our results are robust to using 9-month windows with a minimum of 45 reviews. Using 3-month windows with a minimum of 15 reviews reduces the significance but does not change the direction of our results. Even shorter windows do not leave us with sufficient reviews to perform a reasonable statistical test. Furthermore, the changes in management behavior leading to a drop in ES take time to evolve.

Additionally, we use an absolute instead of relative index adjustment, defined as:

$$\Delta ES_i = \overline{ES}_i(0, T) - \overline{ES}_i(0, T) - (\overline{ES}_i(-T, 0) - \overline{ES}_i(-T, 0)), \quad (3)$$

and ignore the index adjustment altogether, defined as:

$$\Delta ES_i = \overline{ES}_i(0, T) - \overline{ES}_i(-T, 0). \quad (4)$$

Both approaches hardly change our main results.

3.2 | RDD and shareholder proposals

We follow Cuñat et al. (2012) and use close votes on shareholder proposals as exogenous shocks to the governance of a company. This methodology, known as RDD, has several advantages.

First, shareholder proposals concern, by definition, aspects of the corporate governance that are within the control of shareholders. This ensures not only a better understanding of corporate governance but also allows stakeholders to act on our findings. Other aspects of corporate governance, such as the legal environment or institutional ownership, are certainly important but can hardly be influenced by shareholders or managers.

Second, shareholder proposals are not subject to selection bias. The requirements and costs to file a shareholder proposal are low; therefore, all types of shareholders can file a proposal and recommend a course of action for the company. According to regulations,⁸ shareholders can submit a proposal if they own stocks worth \$2000 for at least 1 year and intend to hold their stocks through the date of the meeting. Unless the US Securities and Exchange Commission (SEC) allows otherwise, companies must include all shareholder proposals that comply with the formal requirements in their proxy statement.⁹ The costs for distributing the proposal are borne by the company. Although management proposals have some advantages in our research setting compared to shareholder proposals, they can be placed and strategically withdrawn by management. This managerial power leads to

⁸Title 17 §240.14a-8 of the Code of Federal Regulations (CFR) defines shareholder proposals and the procedure to include the proposal and an accompanying supporting statement in the proxy statement of the shareholder meeting.

⁹The list of potential reasons to exclude a proposal is limited to 13 aspects and can be found in CFR Title 17 §240.14a-8 (i) Question 9.

selection bias for proposals at the annual meeting. Potentially, managers allow proposals in favor of stronger shareholder rights only in times of good economic performance when their job is not at risk.

Third, close votes in favor (forcing variable) of a shareholder proposal induce an exogenous shock to selected aspects of the corporate governance of a company. The voting outcome is a continuous variable between 0% and 100%, but the success of shareholder proposals is a binary variable that jumps at the majority threshold. Although market participants and managers can anticipate the tendency of the vote outcome before the annual meeting, the exact outcome of the votes in favor is revealed only after counting the votes at the annual meeting. A focus on small window sizes around the threshold ensures a surprise element. Although the effect of a proposal that passes with a large margin should be the same as that of a proposal that passes with a small margin, we exclude nonclose votes because we are unable to determine when management became aware of this information.

Fourth, shareholder proposals can contain only a single issue. This aspect of shareholder proposals allows us to accurately classify the change in corporate governance. Other exogenous shocks, such as legal changes, simultaneously introduce several changes, which makes it impossible to isolate the effect of a selected governance characteristic.

Fifth, the RDD is not biased by managers who anticipate the outcome of shareholder proposals and act on those expectations.

We exploit these advantages with employee satisfaction (ES) as the dependent variable. In a nutshell, we measure the changes in employee satisfaction around annual meetings with close votes and compare these changes in two cases: the proposal fails or passes. In formal terms, we define $\Delta ES(v)$ as the change in employee satisfaction, depending on the votes in favor of a close governance-related proposals (v) and the cutoff \bar{v} . In our case, the cutoff is the majority threshold. Because of the binary outcome of the vote, we can write this function as:

$$\begin{aligned}\Delta ES(v) &= \Delta ES^{(Passed)} \quad \text{if } v > \bar{v} \text{ (proposal passed)} \\ \Delta ES(v) &= \Delta ES^{(Failed)} \quad \text{if } v \leq \bar{v} \text{ (proposal failed)}.\end{aligned}\tag{5}$$

We define our variable of interest, τ , as the difference in changes in employee satisfaction for passed and failed proposals:

$$\tau := \Delta ES^{(Passed)} - \Delta ES^{(Failed)}.\tag{6}$$

Empirically, we apply a regression with $\Delta ES(v)$ as the dependent variable and the outcome of the vote as the explanatory variable. In a perfect world, we could estimate the effect τ using a sufficient number of votes within a small margin, for example, $v \in [49.5\%, 50.5\%]$, as these votes provide the best shock. For our smallest sample around the majority threshold ($\pm 3\%$), we use the following regression, which provides a simple and clean way to estimate τ :

$$\Delta ES_i = \alpha + \tau D_i + \epsilon_i,\tag{7}$$

where ΔES_i is the observed change in employee satisfaction following annual meeting i . The intercept α captures the average change in employee satisfaction around all shareholder proposals in our sample, independent of the vote outcome. D_i is a binary variable where $D_i = 1$ if the proposal passed and 0 otherwise. The error term ϵ_i captures changes in employee satisfaction caused by all reasons other than the outcome of the vote, such as the loss of a key customer, the failure of air conditioning, or the announcement of additional employee benefits. These events do not mitigate our effect because they are, on average, the same in companies with shareholder proposals that pass or fail by a small margin. The coefficient τ provides an unbiased estimate of the effect stronger shareholder rights have on employee satisfaction around the majority cutoff, known as the local average treatment effect.

In addition to a window size of $\pm 3\%$ around the majority threshold, we estimate the effect using window sizes of $\pm 5\%$ and $\pm 7\%$ to increase our sample size. For the larger window sizes, we follow Lee and Lemieux (2010) and

add polynomials in Equation (7) to the majority threshold to control for the dependency between the observed change in employee satisfaction and the distance of votes in favor. Vote outcomes with $\bar{v} \pm 5\%$ still have a random component, but managers can better anticipate the outcome in advance, which mitigates the unexpected shock. Without any adjustment, Equation (7) would underestimate the true effect because vote outcomes away from the cutoff can be anticipated better before the annual meeting, lowering the observed effect around the annual meeting itself (Lee & Lemieux, 2010). We extend Equation (7) with a polynomial of degree 1 on both the left and right sides of the cutoff:

$$\Delta ES_i = \alpha + \tau D_i + (1 - D_i) \times \beta^{(Failed)} \times (v_i - \bar{v}) + D_i \times \beta^{(Passed)} \times (v_i - \bar{v}) + \epsilon_i, \quad (8)$$

where $\beta^{(Failed)}$ ($\beta^{(Passed)}$) captures the relation of the distance between votes v to the cutoff \bar{v} and the reaction in employee satisfaction left (right) of the cutoff. The discontinuity effect is captured in τ , as both polynomials equal 0 at the cutoff ($v = \bar{v}$).

According to Lee and Lemieux (2010), three assumptions are required to apply an RDD to close shareholder votes: (1) no systemic differences in characteristics for companies with passed/failed proposals, (2) no precise manipulation of votes, and (3) a sharp cutoff point. We test Assumption (1) by comparing characteristics of companies with failed shareholder proposals to characteristics of companies with passed proposals. The results are provided in Section 4.2. We find that differences in these company characteristics are not statistically significant for our sample of companies with votes close to the cutoff. We ensure Assumption (2) by running the conventional McCrary (2008) density ($p = 0.45$) test, as well as the robust method ($p = 0.98$) suggested by Cattaneo et al. (2018) and find no statistical evidence of precise manipulation.¹⁰ The McCrary tests control for manipulation around the majority cutoff based on the density of the votes in favor of the proposals.

In addition to this result, we are convinced that precise manipulation of voting outcomes is unrealistic for large companies, despite recent findings by Bach and Metzger (2019). Their results suggest the possibility of systemic manipulation of shareholder votes at annual meetings by management. To manipulate the voting outcome, managers first need to anticipate the voting behavior of shareholders accurately. This seems nearly impossible given the large number of private investors and the general inability to forecast close votes. In a second step, managers need to control sufficient votes before the cum voting date of the annual meeting, which is on average 46 days before the annual meeting (see, e.g. Kind & Poltera, 2017). The average company in our sample has a market capitalization above \$25 billion, which implies that managers have to control voting rights corresponding to shares worth more than \$250 million to change the outcome of a proposal from 50.5% to 49.5%.

Although shareholder proposals are not binding, the majority threshold provides a sharp cutoff for the probability of implementation, which ensures Assumption (3).

More than the majority of close, but passed, proposals are implemented or followed by a binding management proposal. The corresponding implemented number for proposals failed by a small margin is below 10% (Ertimur et al., 2010; Kind & Menninger, 2018). Unreported results show that removing passed proposals that have not been implemented from our sample does not change our findings.

Although the RDD described in this section has the disadvantage of uncertain implementation and a small sample size, we consider it to be the best empirical setting to quantify a causal effect of corporate governance on employee satisfaction. Cross-sectional regressions benefit from large sample sizes but potential omitted variables and reversed causality compromise any causal relation.¹¹ The alternative quasi-natural experiment in corporate governance uses changes in antitakeover legislation at the end of the 1980s (see, e.g., Giroud & Mueller, 2010). However, recent papers, including Karpoff and Wittry (2018), question the exogenous shock provided by these

¹⁰We thank Mathias Cattaneo, Michael Jansson, and Xinwei Ma for their code.

¹¹For a discussion of the potential problems of cross-sectional regressions applied in corporate governance, see Cremers et al. (2017).

legal changes because the legal changes were forestalled by court rulings or lobbying efforts of affected companies. In addition, large data sets on employee satisfaction in the 1980s are not available.

4 | DATA

4.1 | Data on employee satisfaction

We use company review data provided by Glassdoor to measure employee satisfaction. Glassdoor was founded in 2007 and is, with around 60 million daily visits (78% of which are US based), the second largest US job and recruitment site after [Indeed.com](https://www.indeed.com).¹²

An emerging body of literature uses employee reviews from Glassdoor. Green et al. (2019) find that employee ratings in Glassdoor incorporate fundamental company information and, as a result, can predict future stock returns. Huang et al. (2020) use Glassdoor data to show that projections made by employees for their companies' business outlook are helpful for predicting future operating performance. Additionally, Hales et al. (2018) find that Glassdoor reviews of employees on firm outlook can predict growth in core income statement information. Other studies use Glassdoor data to investigate causes and effects of job and workplace satisfaction. Huang et al. (2015) show that employees working in family firms have higher job satisfaction. Huang et al. (2017) find that negative workplace ratings are associated with a higher risk assessment of auditors. Finally, Lee et al. (2021) highlight that tax avoidance news has a negative effect on employee perception of firms and managers.

Our main study uses scores on the *Overall Satisfaction* of employees for their company, which is the main criterion that can be rated on the Glassdoor website. The *Overall Satisfaction* scores range from 1 (low satisfaction) to 5 (high satisfaction). The Glassdoor database contains millions of *Overall Satisfaction* reviews on different US companies with 12 to 5982 reviews per day. Figure 1(a) shows a time series of daily average review values in the Glassdoor database and Figure 1(b) shows the time series of the number of reviews on each day.

Although the number of reviews considerably increases during our sample period, the average overall satisfaction increases only slightly through our sample period with several local turning points. For narrow voting outcomes between 45% and 55%, our main study uses 12,171 *Overall Satisfaction* scores.

In addition to *Overall Satisfaction*, employees can rate other criteria. We investigate whether our main result is driven by one of the four criteria, *Culture and Values*, *CEO Opinion*, *Career Opportunities*, and *Compensation and Benefits*.

CEO Opinion is equal to 1 if the employee approves the CEO, 0 if there is no opinion on the CEO, and -1 if the employee disapproves of the CEO. *CEO Opinion*, *Career Opportunities*, and *Compensation and Benefits* can be rated with a score between 1 and 5 (similar to *Overall Satisfaction*). Results are given in Section 5.2.

Glassdoor uses a give-to-get approach for reviews, which requires users to rate their own companies to get information on other companies. Marinescu et al. (2018) show that online reviews resulting from such a model lead to less extreme review disruptions (1 and 5 stars on our scale) compared to a voluntary rating approach. Marinescu et al. (2018) also find a negative bias in give-to-get reviews. However, in our application this is not problematic because the negative bias, if present, applies before and after the shareholder vote and we are only interested in the change in employee satisfaction. Furthermore, the same bias should apply to companies with either a passed or failed shareholder vote.

¹²See <https://www.glassdoor.com/about-us/glassdoor-fastestgrowing-job-site-pushes-2-visited-job-site/>. In unreported results, we find a high correlation between Glassdoor reviews and Indeed reviews for the 20 largest US companies.

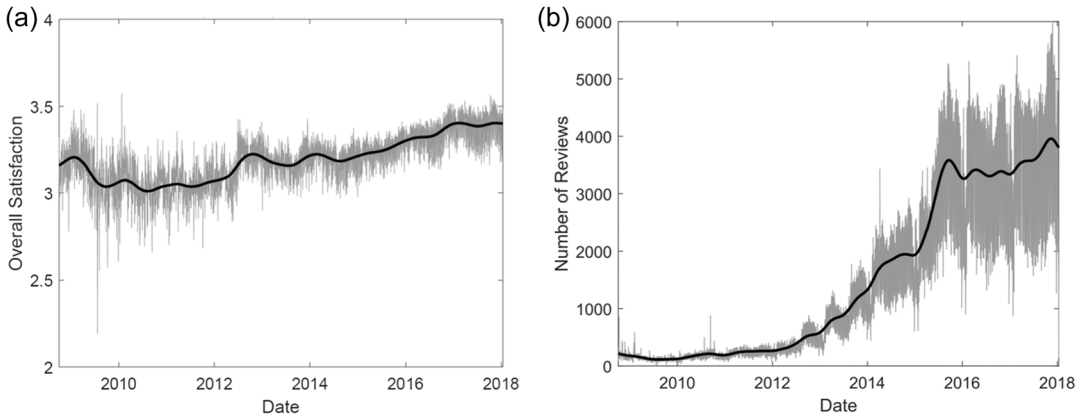


FIGURE 1 Glassdoor employee satisfaction data. This figure shows (a) daily average *Overall Satisfaction* across all companies in the Glassdoor database and (b) daily number of total reviews in the Glassdoor database (in gray). The black line represents a kernel-smoothed function through the data.

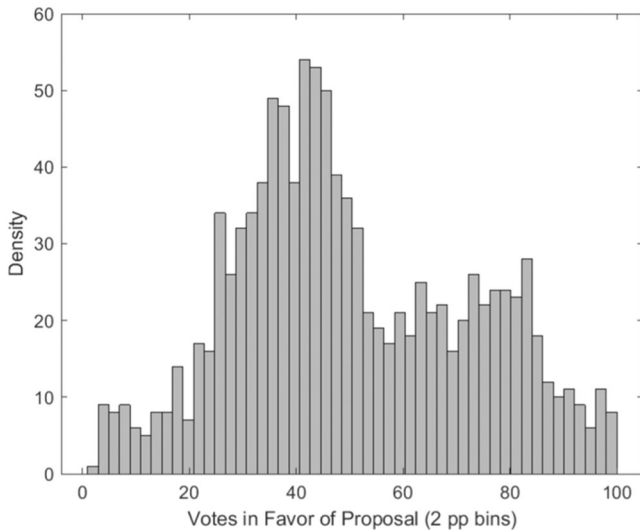


FIGURE 2 Distribution of votes in favor of shareholder proposals. This figure shows the density of votes in favor (in %) of shareholder proposals ($N = 1103$) related to the Governance Index (G-Index; Gompers et al., 2003) in our initial data set.

4.2 | Data on shareholder proposals

Our sample of shareholder proposals covers all companies in the S&P 1500 between January 2008 and December 2017. The data are available on the SEC's EDGAR database and contains a description of the proposal, the date of the annual meeting, and votes in favor of the proposal. Figure 2 shows the density of votes in favor of all governance-related shareholder proposals.

Most proposals do not reach majority support and few proposals have very little support (below 20%) or very high support (above 80%). We only consider shareholder proposals in our empirical study that comply with the following criteria.

First, we limit our data set to ordinary annual general meetings and exclude all proposals at special meetings. This ensures that our results are not driven by effects caused by the unusual circumstances around special meetings. Furthermore, it allows a fair comparison of our results to other papers using the same effect (e.g., Cuñat et al., 2012).

Second, we exclude annual meetings with opposing close-vote outcomes. If two governance proposals are subject to a vote in the same meeting and one fails while the other passes, we cannot separate the effects caused by the individual proposals. We keep proposals if two (the maximum in our sample) close votes both either pass or fail but divide the corresponding change in employee satisfaction by a factor of 2 to adjust for the larger effect caused by two proposals.¹³

Third, we focus only on shareholder proposals that affect the E-Index by Bebchuk et al. (2009).¹⁴ We manually screen all governance-related shareholder proposals and classify each proposal based on whether it is relevant for the E-Index. Each proposal in our final sample potentially changes this index by a value of 1 in favor of stronger shareholder rights. For robustness, we also use the broader G-Index by Gompers et al. (2003), which does not change our findings.¹⁵

Fourth, we focus on close-vote shareholder proposals, that is, proposals that fail or pass by 5 percentage points (p.p.) or less. In addition, we report all results using 3 and 7 p.p. vote windows.

The bandwidth choice for vote windows around the majority threshold is due to the surprise element present only in close votes (see Section 3.2). In addition, companies with proposal outcomes away from the 50% cutoff differ significantly in many aspects other than whether the proposal passed or failed.

Table 1 reports the mean differences in characteristics between companies with passed or failed shareholder proposals using different windows for vote outcomes.¹⁶ All characteristics are measured before the relevant annual meeting. The results show that votes in favor of proposals and, for example, company size and the level of the E-Index are correlated. This correlation can be problematic when using larger window sizes around the threshold: Companies with a high E-Index score move towards the average level of shareholder rights following a passed proposal. In contrast, companies with a low E-Index score move away from the average level of shareholder rights. Moving toward or away from the average level of shareholder rights can have different consequences. Therefore, we focus on close shareholder proposals where companies in the passed vs. failed samples have similar preexisting E-Index scores. Other variables, such as employee satisfaction or research and development (R&D) density, show no clear pattern. We do not observe systematic preexisting differences in company characteristics, including employee satisfaction, between companies with passed and failed proposals in our sample (± 3 , ± 5 , ± 7 p.p.). Systematic preexisting differences would violate the RDD assumption that pass/fail treatments are assigned as good as random.¹⁷

Windows for vote outcomes that are further away from the cutoff, including [30%,40%] versus [60%,70%], show significant differences for multiple company characteristics. Companies with votes further away from the cutoff can also vary in non-measurable items, such as shareholders' satisfaction with managers. A proposal designed to increase shareholder rights at the expense of manager rights should have less support at the annual meeting when shareholders are convinced by the abilities and good intentions of the management. If we include proposals with vote outcomes further away from the cutoff in our sample, we potentially measure changes in employee

¹³Unreported results show that removing annual meetings for which we observe more than one proposal from our sample does not change our findings.

¹⁴The E-Index quantifies the level of shareholder rights by counting whether an anti-takeover provision, such as a staggered board or a poison pill, is implemented (+1) or not (+0). The score varies between 0 for strong shareholder rights and 6 for weak shareholder rights.

¹⁵The six provisions in the E-Index are a subset of the 24 provisions in the G-Index.

¹⁶Figure 3 shows company characteristics depending on the outcome of the vote for the entire sample.

¹⁷In the 3 p.p. window, we see that of the 12 company characteristics, 1 differs significantly at the 10% level. In the 5 p.p. window, we see no statistically significant differences. In the 7 p.p. window, we see 1 company characteristic that differs significantly at the 10% level and 1 at the 5% level. All three of the statistically significant observations are across different company characteristics.

TABLE 1 Preexisting differences and company characteristics.

		Near cutoff (passed vs. failed)			Away from cutoff	
		[47,53]	[45,55]	[43,57]	[35,40] vs. [60,65]	[30,40] vs. [60,70]
Log Total Assets	Mean passed	10.225	10.145	10.127	9.395	9.383
	N	43	64	78	57	105
	Mean failed	10.363	10.343	10.342	10.867	10.783
	N	59	112	163	120	211
	Difference mean	-0.138	-0.198	-0.215	-1.472***	-1.400***
Capital Expenditures/ Total Assets	Mean passed	0.046	0.045	0.046	0.063	0.056
	N	42	60	72	56	102
	Mean failed	0.041	0.040	0.040	0.042	0.044
	N	57	109	157	115	202
	Difference mean	0.005	0.005	0.006	0.021**	0.012**
Log EBIT	Mean passed	6.988	6.866	6.976	6.421	6.187
	N	43	64	78	57	105
	Mean failed	7.170	7.350	7.424	7.919	7.700
	N	59	112	163	120	211
	Difference mean	-0.182	-0.484	-0.448	-1.498***	-1.513***
Log EBITDA	Mean passed	7.987	7.835	7.826	6.957	6.901
	N	43	63	76	57	102
	Mean failed	7.787	7.839	7.926	8.434	8.343
	N	59	111	162	118	207
	Difference mean	0.200	-0.004	-0.100	-1.477***	-1.442***
EBIT/Total Assets	Mean passed	0.090	0.086	0.088	0.091	0.090
	N	43	64	78	57	105
	Mean failed	0.099	0.108	0.108	0.094	0.094
	N	59	112	163	120	211
	Difference mean	-0.009	-0.022	-0.020*	-0.003	-0.004
Log Number of Employees	Mean passed	3.682	3.343	3.317	2.737	2.639
	N	43	64	78	57	105
	Mean failed	3.462	3.524	3.616	3.930	4.006
	N	59	112	163	120	211
	Difference mean	0.220	-0.181	-0.299	-1.193***	-1.367***
Log Sales	Mean passed	9.802	9.550	9.530	8.819	8.758
	N	43	64	78	57	105

(Continues)

TABLE 1 (Continued)

		Near cutoff (passed vs. failed)			Away from cutoff	
		[47,53]	[45,55]	[43,57]	[35,40] vs. [60,65]	[30,40] vs. [60,70]
	Mean failed	9.617	9.694	9.758	10.136	10.163
	<i>N</i>	59	112	163	120	211
	Difference mean	0.185	-0.144	-0.228	-1.317***	-1.405***
R&D/Total Assets	Mean passed	0.038	0.042	0.039	0.053	0.041
	<i>N</i>	22	32	36	26	41
	Mean failed	0.035	0.033	0.032	0.049	0.047
	<i>N</i>	26	52	74	59	109
	Difference mean	0.003	0.009	0.007	0.004	-0.006
Log Net Income	Mean passed	5.722	5.523	5.520	5.132	4.868
	<i>N</i>	43	64	78	57	105
	Mean failed	5.580	6.113	6.322	6.799	6.652
	<i>N</i>	59	112	163	120	211
	Difference mean	0.142	-0.590	-0.802	-1.667***	-1.784***
Employee Satisfaction	Mean passed	3.206	3.191	3.208	3.534	3.583
	<i>N</i>	19	25	28	11	19
	Mean failed	3.162	3.197	3.230	3.336	3.334
	<i>N</i>	25	49	77	58	115
	Difference mean	0.044	-0.006	-0.022	0.198	0.249**
Log Number of Reviews	Mean passed	4.194	4.248	4.195	3.217	3.025
	<i>N</i>	19	25	28	11	19
	Mean failed	4.694	4.624	4.725	5.082	5.025
	<i>N</i>	25	49	77	58	115
	Difference mean	-0.500	-0.376	-0.530**	-1.865***	-2.000***
E-Index Level	Mean passed	1.735	1.951	2.129	3.200	3.225
	<i>N</i>	40	57	68	39	72
	Mean failed	2.381	2.308	2.243	1.404	1.514
	<i>N</i>	52	98	144	120	190
	Difference mean	-0.646*	-0.357	-0.114	1.696***	1.711***

Note: This table shows means of several company characteristics for companies that passed or failed within different margins. *N* describes the number of observations in the sample of companies with passed/failed proposals.

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

TABLE 2 Change in employee satisfaction: Base case.

	Panel A: E-Index			Panel B: G-Index		
	(1)	(2)	(3)	(4)	(5)	(6)
τ	-0.08*	-0.15**	-0.16***	-0.05**	-0.07*	-0.04
	(-2.05)	(-2.07)	(-2.98)	(-2.11)	(-1.87)	(-0.98)
α	0.03	0.04	0.01	0.03*	0.04*	0.02
	(1.18)	(1.30)	(0.43)	(1.81)	(1.85)	(1.02)
Poly. degree	0	1	1	0	1	1
Window size (in p.p.)	± 3	± 5	± 7	± 3	± 5	± 7
No. of months (T)	6	6	6	6	6	6
Min. no. of reviews	30	30	30	30	30	30
Economic adjustment	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.151	0.051	0.155	0.083	0.026	-0.009
Annual meeting obs.	19	35	48	39	67	91
No. of observed reviews	5005	12,171	18,233	17,587	27,420	41,729

Note: This table shows the effect of stronger shareholder rights included in the Entrenchment Index (E-Index) of Bebchuk et al. (2009) and the Governance Index (G-Index) of Gompers et al. (2003) on employee satisfaction. We adjust employee satisfaction for average employee satisfaction in the United States during the same period. All effects are obtained using a regression discontinuity design (RDD) applied to close votes on shareholder proposals at annual meetings. The treatment effect, τ , represents the difference between changes (before and after) in employee satisfaction of companies with passed and failed proposals. The intercept α captures the average change in employee satisfaction around all shareholder proposals in our sample, independent of the vote outcome. "Poly. degree" describes the degree of the polynomials used in the RDD. "Window size (in p.p.) $\pm W$ " specifies that proposals with votes in favor within W percentage points around the majority threshold are considered in the estimation. "No. of months" describes the time frame before and after the annual meeting to estimate the change in employee satisfaction. "Min. no. of reviews" defines the minimum number of employee reviews required to be included in our sample. "Economic adjustment" specifies whether the changes in employee satisfaction are adjusted for nationwide changes in employee satisfaction. The t-values are in parentheses.

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

satisfaction caused by other differences in the sample such as company size and not by whether the proposal passed or failed.

5 | RESULTS

5.1 | Corporate governance and employee satisfaction

Table 2 reports the relative change in employee satisfaction, as computed in Equation (2), for passed proposals compared to the relative change following failed proposals (τ). We estimate all effects (τ) using the regression in Equation (7) for the 3 p.p. vote window and using the regression in Equation (8) for 5 p.p. and 7 p.p. vote windows. Panel A presents shareholder proposals relevant for the E-Index (Bebchuk et al., 2009), and Panel B presents proposals for the broader G-Index (Gompers et al., 2003).

The change in employee satisfaction for companies with passed proposals is 8% to 16% lower compared to companies with failed proposals, which equals approximately 1 SD of the employee satisfaction measure in our sample. Based on a previous study by Symitsi et al. (2018), this difference of 8% to 16% in employee satisfaction

translates into a reduced annual abnormal return of 0.4% to 0.8%.¹⁸ All t -values are below -2 in our base case (Panel A of Table 2), which includes 5005, 12,171, and 18,233 individual reviews for the 3 p.p., 5 p.p., and 7 p.p. windows, respectively.

The average effects are larger for proposals included in the E-Index (Panel A of Table 2) compared to proposals in the broader G-Index (Panel B), which is in line with previous studies. Bebchuk et al. (2009) show that the positive stock price effect of stronger shareholder rights is mainly caused by the six provisions in the E-Index, whereas Kind and Menninger (2018) find a similar result for the negative effect of stronger shareholder rights on equity risk. Therefore, we use the E-Index in all further analysis. The effect when using the 3 p.p. window size (Column 1) around the threshold has less statistical significance than when using larger window sizes, which we assign to the lower number of observations.

Our estimates for τ are conservative because they increase if we control for the fact that employees who write a review take the situation before the annual meeting partly into account.¹⁹

In addition to the change in the average level of employee satisfaction, we analyze the change in the standard deviation of employee satisfaction scores and the change in the number of reviews in companies following close shareholder votes. Table 3 presents the results.

A larger standard deviation suggests that different parts of the workforce are affected to a different degree by the increase in shareholder rights. We find no such effect (Panel A of Table 3). A significant increase in the number of reviews for companies with a passed shareholder proposal (for which we observe a lower level of employee satisfaction) indicates that reviews are mainly written by dissatisfied employees. Again, we find no significant effect (Panel B).

5.2 | Alternative measures of employee satisfaction and channels

Glassdoor provides us with review information on *Culture and Values*, *CEO Opinion*, *Career Opportunities*, and *Compensation and Benefits*.²⁰ We use these variables in our RDD for a better understanding of why changes in corporate governance lead to the observed decrease in employee satisfaction. Table 4 presents the results.

We observe a strong decrease in *Culture and Values* (Panel A of Table 4). Although it is unclear what each reviewer understands by *Culture and Values*, Frei and Morriss (2012) suggest, “*Culture tells us how to respond to an unprecedented service request. It tells us whether to risk telling our bosses about our new ideas, and whether to surface or hide problems.*” Assuming a sufficient number of reviewers have a similar understanding of *Culture and Values*, its decrease is a clear indication that stronger shareholder rights reduce a valuable intangible asset.

We further observe a decrease in *CEO Opinion* (Panel B of Table 4). This result supports the idea that stronger shareholder rights increase performance pressure on top managers, who pass on that pressure to their subordinates. For *Career Opportunities* (Panel C), we observe only a small decrease, which allows us to exclude the possibility that our results are mainly driven by bad economic outlooks for some companies. A bad economic outlook that simultaneously affects employee satisfaction and votes in favor of the proposal should especially reduce career opportunities, yet we find only a small effect.

For *Compensation and Benefits* (Panel D of Table 4), we find a negative but insignificant effect. This result ensures the effect on employee satisfaction is not substantially driven by reduced compensation. In contrast, Cronqvist et al. (2009) find a significant drop in compensation following an increase in shareholder rights. We

¹⁸The number is based on a difference of approximately 0.40 on the Glassdoor 5-point scale for the average company with an overall satisfaction of 3.2% and 1.5% per point in Symitsi et al. (2018).

¹⁹If we assume that the average review is based on the situation after the annual meeting with fraction $\eta \in [0, 1]$ and based on the situation before the meeting with $(1 - \eta)$, the adjusted effect is given by $\Delta ES_{Adjusted} = \Delta ES / \eta$.

²⁰Not all these variables are available from 2008; therefore, the sample size for the additional measures of employee satisfaction is smaller than the sample size for *Overall Satisfaction*, which is used for our main result.

TABLE 3 Changes in standard deviation and number of reviews.

	Panel A: Standard deviation			Panel B: No. of reviews		
	(1)	(2)	(3)	(4)	(5)	(6)
τ	0.037 (1.48)	0.065 (1.52)	0.024 (0.71)	0.22 (0.05)	7.16 (0.38)	8.14 (0.45)
α	-0.026 (-1.59)	-0.042** (-2.13)	-0.023 (-1.46)	5.81* (1.97)	-1.48 (-0.17)	-2.64 (-0.30)
Poly. degree	0	1	1	0	1	1
Window size (in p.p.)	±3	±5	±7	±3	±5	±7
No. of months (T)	6	6	6	6	6	6
Min. no. of reviews	30	30	30	30	30	30
Economic adjustment	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.062	0.057	0.025	-0.059	0.001	0.056
Annual meeting obs.	19	35	48	19	35	48
No. of observed reviews	5005	12,171	18,233	5005	12,171	18,233

Note: This table shows the effect of stronger shareholder rights included in the Entrenchment Index (E-Index) of Bebchuk et al. (2009) on the standard deviation of employee satisfaction (Panel A) and on the number of company reviews (Panel B). We adjust the standard deviation of employee satisfaction for the average standard deviation of employee satisfaction in the United States during the same period. We also adjust the number of company reviews for the average number of company reviews in the United States during the same period. The treatment effect, τ , represents the difference between changes (before and after) in employee satisfaction of companies with passed and failed proposals. The intercept α captures the average change in employee satisfaction around all shareholder proposals in our sample, independent of the vote outcome. "Poly. degree" describes the degree of the polynomials used in the RDD. "Window size (in p.p.)" $\pm W$ specifies that proposals with votes in favor within W percentage points around the majority threshold are considered in the estimation. "No. of months" describes the time frame before and after the annual meeting to estimate the change in employee satisfaction. "Min. no. of reviews" defines the minimum number of employee reviews required to be included in our sample. "Economic adjustment" specifies whether the changes in employee satisfaction are adjusted for nationwide changes in employee satisfaction. The t-values are in parentheses.

* $p < 0.10$; ** $p < 0.05$.

believe the difference between our effect and their significant effect is caused by using a different country within their study (Sweden vs. United States). Additionally, employees who complete a review on the Glassdoor website in the months following the annual meeting most likely have contracts that date back to periods before the annual meeting, which also explains our insignificant effect.

We use log changes in the number of employees reported in the annual filings to investigate whether the drop in employee satisfaction is accompanied by layoffs (Panel E of Table 4). We observe a decrease in the number of employees for all three window sizes, though only the results for the 5 p.p. window are significant. In addition, we observe a significant decrease in capital expenditures (Panel F). Both reductions suggest that stronger shareholder rights cause managers to reduce costs at the expense of long-term profits.

This reduction in long-term investments allows two explanations for a decrease in employee satisfaction. First, because employees are frustrated by outdated equipment and fear layoffs, the drop in both variables could be responsible for the decrease in employee satisfaction. Alternatively, the decreases in the three measures, employee satisfaction, capital expenditures, and workforce could all be a direct consequence of increased short-termism by managers.

TABLE 4 Channels and alternative measures of employee satisfaction.

	Panel A: Culture and Values			Panel B: CEO Opinion		
	(1)	(2)	(3)	(4)	(5)	(6)
τ	–	–0.39**	–0.36*	–0.42	–1.42**	–1.01**
	–	(–2.43)	(–2.05)	(–1.44)	(–2.12)	(–2.13)
α	–	0.01	–0.02	0.11	0.25	0.02
	–	(0.30)	(–0.62)	(0.61)	(0.87)	(0.08)
Poly. degree	0	1	1	0	1	1
Window size (in p.p.)	±3	±5	±7	±3	±5	±7
No. of months (T)	6	6	6	6	6	6
Min. no. of reviews	30	30	30	30	30	30
Economic adjustment	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	–	0.230	0.120	0.062	0.051	0.085
Annual meeting obs.	<10	19	29	17	31	43
No. of observed reviews	–	8240	13,337	3970	9742	14,106
	Panel C: Career Opportunities			Panel D: Compensation and Benefits		
	(1)	(2)	(3)	(4)	(5)	(6)
τ	–0.02	–0.11	–0.10*	–0.01	–0.05	–0.04
	(–0.57)	(–1.43)	(–1.88)	(–0.46)	(–1.02)	(–1.01)
α	0.00	0.01	–0.02	0.01	0.01	–0.01
	(0.13)	(0.38)	(–0.62)	(0.52)	(0.65)	(–0.52)
Poly. degree	0	1	1	0	1	1
Window size (in p.p.)	±3	±5	±7	±3	±5	±7
No. of months (T)	6	6	6	6	6	6
Min. no. of reviews	30	30	30	30	30	30
Economic adjustment	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	–0.041	–0.016	0.149	–0.049	–0.050	0.040
Annual meeting obs.	18	33	45	18	33	45
No. of observed reviews	4601	11,146	16,531	4588	11,130	16,525
	Panel E: Number of Employees			Panel F: Capital Expenditures		
	(1)	(2)	(3)	(4)	(5)	(6)
τ	–0.089	–0.33**	–0.12	–0.51**	–0.68**	–0.58**
	(–0.87)	(–2.26)	(–0.94)	(–2.48)	(–2.36)	(–2.47)
α	0.05	0.87	0.09	0.40***	0.53***	0.41***
	(0.78)	(1.06)	(1.20)	(3.33)	(3.25)	(2.98)
Poly. degree	0	1	1	0	1	1
Window size (in p.p.)	±3	±5	±7	±3	±5	±7

TABLE 4 (Continued)

	Panel E: <i>Number of Employees</i>			Panel F: <i>Capital Expenditures</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
Adj. R^2	0.022	0.127	0.011	0.180	0.160	0.124
Annual meeting obs.	36	63	91	30	50	72

Note: This table shows the effect of stronger shareholder rights included in the Entrenchment Index (E-Index) of Bebchuk et al. (2009) on different measures of employee satisfaction and alternative dependent variables. We adjust all employee satisfaction measures (Panels A–D) for the corresponding average employee satisfaction in the United States during the same period. *Number of Employees* shows the log changes of the average number of employees in the 3 years before the shareholder proposal to the same number 3 years after the proposal. *Capital Expenditures* is calculated in accordance. All effects are obtained using a regression discontinuity design (RDD) applied to close votes on shareholder proposals at annual meetings. The treatment effect, τ , represents the difference between changes (before and after) in employee satisfaction of companies with passed and failed proposals. The intercept α captures the average change in employee satisfaction around all shareholder proposals in our sample, independent of the vote outcome. “Poly. degree” describes the degree of the polynomials used in the RDD. “Window size (in p.p.)” $\pm W$ specifies that proposals with votes in favor within W percentage points around the majority threshold are considered in the estimation. “No. of months” describes the time frame before and after the annual meeting to estimate the change in employee satisfaction. “Min. no. of reviews” defines the minimum number of employee reviews required to be included in our sample. “Economic adjustment” specifies whether the changes in employee satisfaction are adjusted for nationwide changes in employee satisfaction. The t-values are in parentheses. * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

In conclusion, decreases in corporate culture, satisfaction with the CEO, number of employees, and capital expenditures suggest that stronger shareholder rights lead to a reduced focus on long-term success factors, including employee satisfaction.

5.3 | Robustness

In our main study, we use Equation (2) to compute the change in employee satisfaction ΔES_i around annual meeting i by accounting for a relative employee satisfaction index adjustment. For robustness, we repeat our main study but compute the change in employee satisfaction by (1) using Equation (3), which accounts for an absolute employee satisfaction index adjustment, and (2) using Equation (4), which ignores the index adjustment altogether. Table 5 presents the results. Our results are robust in that, for all settings, we find negative effects (τ) that are significant at the 10% level at least.

We further investigate whether our results are robust to alternative periods to measure employee satisfaction in Equation (2). Columns 1–3 in Table 6 show the same estimation as in our main result, except that we include employee reviews within 3-month periods before and after the annual meeting. Accordingly, we reduce the minimum number of employee reviews required by a factor of 0.5 to ensure a similar sample size to our main result. The results are negative for all combinations and compare to our main result in terms of size. Only the 3 p.p. window size around the threshold (Column 1) is significant at the 5% level. We believe the reduction in the number of available reviews caused by the bisection of the periods increases the variance of the means, which reduces the significance of the results.

Columns 4–6 of Table 6 show the same effect using a 9-month window. Again, we adjust the minimum number of employee reviews required by the same factor as the period (1.5). For all window sizes, we observe decreases in employee satisfaction around 10%, which are all significant at the 10% level. The longer period adds more noise by including additional events that are unrelated to the shareholder proposal and that systemically affect employee satisfaction of a company.

TABLE 5 Change in employee satisfaction: Robustness to economic adjustment.

	Panel A: Absolute economic adjustment			Panel B: No adjustment		
	(1)	(2)	(3)	(4)	(5)	(6)
τ	-0.23*	-0.45*	-0.49***	-0.23*	-0.42*	-0.47**
	(-1.99)	(-2.01)	(-2.86)	(-1.79)	(-1.76)	(-2.53)
α	0.09	0.13	0.03	0.12	0.18	0.07
	(1.15)	(1.28)	(0.41)	(1.42)	(1.61)	(0.76)
Poly. degree	0	1	1	0	1	1
Window size (in p.p.)	± 3	± 5	± 7	± 3	± 5	± 7
No. of months (T)	6	6	6	6	6	6
Min. no. of reviews	30	30	30	30	30	30
Economic adjustment	Yes	Yes	Yes	No	No	No
Adj. R^2	0.141	0.044	0.140	0.109	0.030	0.094
Annual meeting obs.	19	35	48	19	35	48
No. of observed reviews	5005	12,171	18,233	5005	12,171	18,233

Note: This table shows the effect of stronger shareholder rights included in the Entrenchment Index (E-Index) of Bebchuk et al. (2009) on employee satisfaction when using an absolute economic adjustment to measure changes in employee satisfaction using Equation (3) (Panel A) and when using no economic adjustment estimated with Equation (4) to measure changes in employee satisfaction (Panel B). All effects are obtained using a regression discontinuity design (RDD) applied to close votes on shareholder proposals at annual meetings. The treatment effect, τ , represents the difference between changes (before and after) in employee satisfaction of companies with passed and failed proposals. The intercept α captures the average change in employee satisfaction around all shareholder proposals in our sample, independent of the vote outcome. "Poly. degree" describes the degree of the polynomials used in the RDD. "Window size (in p.p.)" $\pm W$ specifies that proposals with votes in favor within W percentage points around the majority threshold are considered in the estimation. "No. of months" describes the time frame before and after the annual meeting to estimate the change in employee satisfaction. "Min. no. of reviews" defines the minimum number of employee reviews required to be included in our sample. "Economic adjustment" specifies whether the changes in employee satisfaction are adjusted for nationwide changes in employee satisfaction. The t -values are in parentheses.

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

5.4 | Placebo checks

We perform a series of placebo tests to ensure that our results are not driven by effects other than the passing of the proposal. In Table 7, we replicate the main result with artificial voting cutoffs at 25% and 75% instead of the majority threshold (Panels A and B) or with artificial event dates 12 and 24 months before the annual meeting (Panels C and D). All results are close to 0 and nonsignificant.

Table 1 and Figure 3 show a nonsignificant difference in various company characteristics for close votes. Based on our main results alone, we cannot rule out the possibility that these small differences drive the change in employee satisfaction, independent of a shareholder proposal and whether it failed or passed. It is also possible that the votes in favor of the proposal approximate an omitted variable that is correlated with changes in employee satisfaction. If one of these possibilities applies, we should observe effects similar to our main result at different cutoffs away from 50%. Because we do not observe any effect at the 25% or 75% cutoff, we can rule out these alternative explanations for our main finding. The results for the artificial event date (Panels C and D of Table 7) ensure that companies with passed proposals do not have increasing employee satisfaction consistently over time, independent of the shareholder proposal.

TABLE 6 Change in employee satisfaction: Robustness to length of intervals.

	Panel A: Short interval			Panel B: Long interval		
	(1)	(2)	(3)	(4)	(5)	(6)
τ	-0.09** (-2.44)	-0.10 (-1.31)	-0.10 (-1.38)	-0.06* (-2.04)	-0.12* (-1.77)	-0.10* (-1.83)
α	0.05** (2.32)	0.04 (1.08)	0.02 (0.43)	0.01 (0.75)	0.04 (1.36)	0.00 (0.07)
Poly. degree	0	1	1	0	1	1
Window size (in p.p.)	±3	±5	±7	±3	±5	±7
No. of months (T)	3	3	3	9	9	9
Min. no. of reviews	15	15	15	45	45	45
Economic adjustment	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.199	-0.006	0.011	0.149	0.062	0.024
Annual meeting obs.	21	37	52	19	35	47
No. of observed reviews	2495	6124	9361	7297	17,722	26,426

Note: This table shows the effect of stronger shareholder rights included in the Entrenchment Index (E-Index) of Bebchuk et al. (2009) on employee satisfaction. We adjust employee satisfaction for average employee satisfaction in the United States during the same period. All effects are obtained using a regression discontinuity design (RDD) applied to close votes on shareholder proposals at annual meetings. The treatment effect, τ , represents the difference between changes (before and after) in employee satisfaction of companies with passed and failed proposals. The intercept α captures the average change in employee satisfaction around all shareholder proposals in our sample, independent of the vote outcome. "Poly. degree" describes the degree of the polynomials used in the RDD. "Window size (in p.p.)" $\pm W$ specifies that proposals with votes in favor within W percentage points around the majority threshold are considered in the estimation. "No. of months" describes the time frame before and after the annual meeting to estimate the change in employee satisfaction. "Min. no. of reviews" defines the minimum number of employee reviews required to be included in our sample. "Economic adjustment" specifies whether the changes in employee satisfaction are adjusted for nationwide changes in employee satisfaction. The t -values are in parentheses.

* $p < 0.10$; ** $p < 0.05$.

Figure 4 shows the change in employee satisfaction around various cutoffs. The abrupt decrease in employee satisfaction around the 50% cutoff is clearly visible. We observe changes in employee satisfaction different from zero only at the 50% cutoff or where the number of observations is below $N = 10$.

6 | CONCLUSION

We use shareholder proposals that pass or fail by a small margin as exogenous shocks to the corporate governance of a company and measure the subsequent change in employee satisfaction. The RDD allows us to observe a negative causal effect of stronger shareholder rights on employee satisfaction. We quantify employee satisfaction using employee reviews provided by the US career website Glassdoor. Our data set includes more than 5 million individual reviews from 2008 to 2017.

Employee satisfaction drops by approximately 10% following a shareholder proposal that passes within a small margin ($\pm 5\%$ around the majority threshold) compared to a similar proposal that fails within the same small margin. From a financial perspective alone, this implies a drop in abnormal annual returns of 0.6%. Each shareholder proposal in our sample affects one of the six provisions in the E-Index by Bebchuk et al. (2009) in favor of stronger shareholder rights.

TABLE 7 Placebo checks.

	Panel A: 25% cutoff			Panel B: 75% cutoff		
	(1)	(2)	(3)	(4)	(5)	(6)
τ	0.01 (0.31)	0.01 (0.32)	0.01 (0.29)	— —	-0.11 (-0.80)	-0.07 (-0.52)
α	-0.01 (-0.43)	-0.01 (-0.46)	0.00 (0.17)	— —	0.04 (0.33)	0.04 (0.33)
Poly. degree	0	1	1	0	1	1
Window size (in p.p.)	± 3	± 5	± 7	± 3	± 5	± 7
No. of months (T)	6	6	6	6	6	6
Min. no. of reviews	30	30	30	30	30	30
Economic adjustment	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	-0.043	-0.051	-0.049	—	-0.078	-0.237
Annual meeting obs.	23	38	51	<10	10	13
No. of observed reviews	17,515	28,363	37,197	—	1576	1888
	Panel C: Annual meeting minus 6 months			Panel D: Annual meeting minus 12 months		
	(1)	(2)	(3)	(4)	(5)	(6)
τ	0.00 (0.13)	0.06 (0.80)	0.09 (1.50)	-0.01 (-0.16)	-0.11 (-1.64)	-0.05 (-0.82)
α	-0.03 (-1.24)	-0.02 (-0.56)	-0.01 (-0.58)	0.02 (1.34)	0.02 (0.72)	0.01 (0.38)
Poly. degree	0	1	1	0	1	1
Window size (in p.p.)	± 3	± 5	± 7	± 3	± 5	± 7
No. of months (T)	6	6	6	6	6	6
Min. no. of reviews	30	30	30	30	30	30
Economic adjustment	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	-0.065	0.026	0.235	-0.069	0.221	0.093
Annual meeting obs.	17	31	43	16	29	42
No. of observed reviews	4272	10,560	15,055	3865	9173	13,099

Note: This table shows the effect of stronger shareholder rights included in the Entrenchment Index (E-Index) of Bebchuk et al. (2009) on employee satisfaction. We use other cutoffs instead of the majority threshold as placebo checks in Panels A and B. We use the majority threshold but shift the event date by 6 months in Panel C and 12 months in Panel D. We adjust employee satisfaction for average employee satisfaction in the United States during the same period. All effects are obtained using a regression discontinuity design (RDD) applied to close votes on shareholder proposals at annual meetings. The treatment effect, τ , represents the difference between changes (before and after) in employee satisfaction of companies with passed and failed proposals. The intercept α captures the average change in employee satisfaction around all shareholder proposals in our sample, independent of the vote outcome. "Poly. degree" describes the degree of the polynomials used in the RDD. "Window size (in p.p.)" $\pm W$ specifies that proposals with votes in favor within W percentage points around the majority threshold are considered in the estimation. "No. of months" describes the time frame before and after the annual meeting to estimate the change in employee satisfaction. "Min. no. of reviews" defines the minimum number of employee reviews required to be included in our sample. "Economic adjustment" specifies whether the changes in employee satisfaction are adjusted for nationwide changes in employee satisfaction. The t -values are in parentheses.

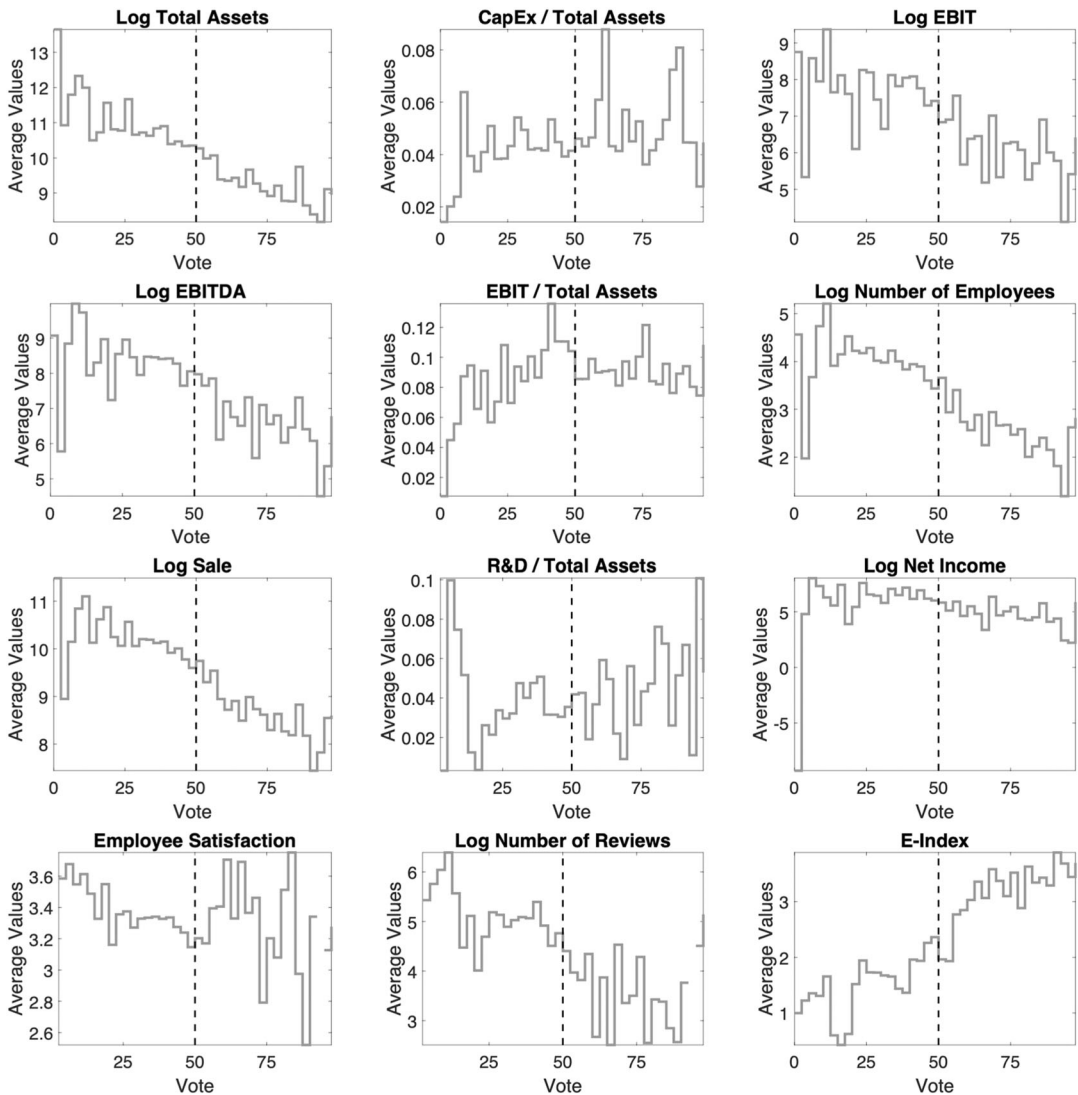


FIGURE 3 Preexisting differences. This figure shows the averages of various company characteristics (some of which are log-scaled) for various voting outcomes. The sample consists of all companies within our initial data set of S&P 1500 companies with votes on governance-related shareholder proposals between 2008 and 2017.

Our results are robust to different model specifications, such as various window sizes around the majority threshold, alternative methods to adjust for employee satisfaction in all US companies, and different periods used to estimate employee satisfaction. Placebo checks using artificial event dates or thresholds other than the majority do not lead to significant effects, which excludes alternative explanations for our results.

We repeat the RDD using alternative dependent variables to understand why stronger shareholder rights have a negative effect on employee satisfaction. Decreases in four of these variables (*Culture and Values*, *CEO Opinion*, *Number of Employees*, and *Capital Expenditures*) suggest that stronger shareholder rights increase managers' focus on short-term results and away from long-term investments, including employee satisfaction as an intangible asset.

Our findings are important to shareholders, managers, politicians, and employees. Shareholders can take the decrease in employee satisfaction into account when making future voting decisions, especially when they have

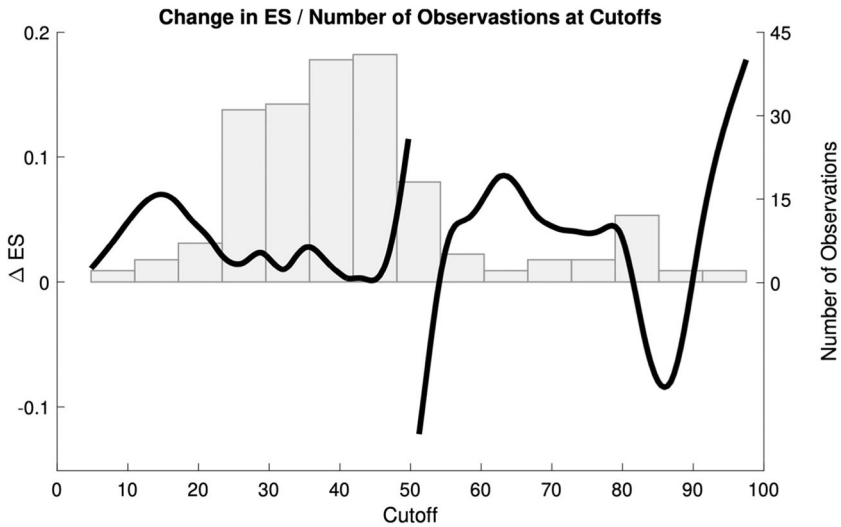


FIGURE 4 Change in employee satisfaction (ES) and number of observations at different cutoffs. This figure shows a smoothed function through the observed ES values (black line) at different cutoffs and the number of observed proposals at various cutoff buckets (light gray histogram).

interests beyond short-term stock price maximization. In contrast to classic corporate finance, which expects managers to serve shareholders by increasing the stock price, institutional investors expect managers to also serve other stakeholders, such as employees. The general public, represented by politicians, has an interest in high employee satisfaction because stress at the workplace causes high costs for society (see, e.g., Goh et al., 2015).

Our findings especially help employees who own stocks with voting rights in the company they work for to make informed decisions on their future votes related to shareholder rights. In contrast to the positive effects on their portfolio following stronger shareholder rights, our results allow them to take the negative nonfinancial effects at their workplace into account. We are among the first to show a causal effect of corporate governance on an intangible asset that is associated with long-term performance of a company. Therefore, our work provides empirical evidence of a causal relation between corporate governance and managerial short-termism.

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REFERENCES

- Bach, L., & Metzger, D. (2019). How close are close shareholder votes? *Review of Financial Studies*, 32(8), 3183–3214.
- Batts, E. (2018). *BlackRock talks ... and U.S. companies must listen*. Harvard Law School Forum on Corporate Governance and Financial Regulation. <https://corpgov.law.harvard.edu/2018/02/13/blackrock-talks-and-u-s-companies-must-listen/>
- Bebchuk, L. A. (2013). The myth that insulating boards serves long-term value. *Columbia Law Review*, 113(6), 1637–1694.
- Bebchuk, L. A., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance. *Review of Financial Studies*, 22(2), 783–827.

- Bebchuk, L. A., Cohen, A., & Wang, C. C. (2013). Learning and the disappearing association between governance and returns. *Journal of Financial Economics*, 108(2), 323–348.
- Bertrand, M., & Mullainathan, S. (2003). Enjoying the quiet life? Corporate governance and managerial preferences. *Journal of Political Economy*, 111(5), 1043–1075.
- Cattaneo, M. D., Jansson, M., & Ma, X. (2018). Manipulation testing based on density discontinuity. *Stata Journal*, 18(1), 234–261.
- Copland, J., Larcker, D. F., & Tayan, B. (2018). *The big thumb on the scale: An overview of the proxy advisory industry*. Stanford Closer Look Series (CGRP 72).
- Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics*, 51(3), 371–406.
- Cremers, M., Litov, L. P., & Sepe, S. M. (2017). Staggered boards and long-term firm value, revisited. *Journal of Financial Economics*, 126, 442–444.
- Cronqvist, H., Heyman, F., Nilsson, M., Svaleryd, H., & Vlachos, J. (2009). Do entrenched managers pay their workers more? *Journal of Finance*, 64(1), 309–339.
- Cuñat, V., Gine, M., & Guadalupe, M. (2012). The vote is cast: The effect of corporate governance on shareholder value. *Journal of Finance*, 67(5), 1943–1977.
- Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics*, 101(3), 621–640.
- Ertimur, Y., Ferri, F., & Stubben, S. (2010). Board of directors' responsiveness to share holders: Evidence from shareholder proposals. *Journal of Corporate Finance*, 16(1), 53–72.
- Ferreira, M., & Laux, P. (2007). Corporate governance, idiosyncratic risk, and information flow. *Journal of Finance*, 62(2), 951–989.
- Frei, F., & Morriss, A. (2012, May 12). Culture takes over when the CEO leaves the room. *Harvard Business Review*. <https://hbr.org/2012/05/culture-takes-over-when-the-ceo-leaves-the-room>
- Garvey, G. T., & Hanka, G. (1999). Capital structure and corporate control: The effect of antitakeover statutes on firm leverage. *Journal of Finance*, 54(2), 519–546.
- Giroud, X., & Mueller, H. M. (2010). Does corporate governance matter in competitive industries? *Journal of Financial Economics*, 95(3), 312–331.
- Goenner, C. F. (2008). Investing in Fortune's 100 best companies to work for in America. *Journal of Economics*, 34(1), 1–20.
- Goh, J., Pfeffer, J., & Zenios, S. A. (2015). The relationship between workplace stressors and mortality and health costs in the united states. *Management Science*, 62(2), 608–628.
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics*, 118(1), 107–156.
- Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40(1), 3–73.
- Green, T. C., Huang, R., Wen, Q., & Zhou, D. (2019). Crowdsourced employer reviews and stock returns. *Journal of Financial Economics*, 134(1), 236–251.
- Grennan, J. (2019). *A corporate culture channel: How increased shareholder governance reduces firm value* (Working Paper). Duke University.
- Hales, J., Moon, J. R., & Swenson, L. A. (2018). A new era of voluntary disclosure? Empirical evidence on how employee postings on social media relate to future corporate disclosures. *Accounting, Organizations and Society*, 68, 88–108.
- Hauf, P., & Menninger, F. (2017). *Does corporate governance matter for companies in the spotlight?* (Working Paper). University of Konstanz.
- Huang, K., Li, M., & Markov, S. (2020). What do employees know? Evidence from a social media platform. *Accounting Review*, 95(2), 199–226.
- Huang, M., Li, P., Meschke, F., & Guthrie, J. P. (2015). Family firms, employee satisfaction, and corporate performance. *Journal of Corporate Finance*, 34, 108–127.
- Huang, M., Masli, A., Meschke, F., & Guthrie, J. P. (2017). Clients' workplace environment and corporate audits. *Auditing: A Journal of Practice & Theory*, 36(4), 89–113.
- Jordan, B. D., Kim, S., & Liu, M. H. (2016). Growth opportunities, short-term market pressure, and dual-class share structure. *Journal of Corporate Finance*, 41, 304–328.
- Karpoff, J. M., & Wittry, M. D. (2018). Institutional and legal context in natural experiments: The case of state antitakeover laws. *Journal of Finance*, 73(2), 657–714.
- Kind, A., & Menninger, F. (2018). *Corporate governance and equity risk* (Working Paper). University of Konstanz.
- Kind, A., & Poltera, M. (2017). *Shareholder proposals as governance mechanism: Insights from the market value of corporate voting rights* (Working Paper). University of Konstanz.
- Lee, D. S., & Lemieux, T. (2010). Regression discontinuity designs in economics. *Journal of Economic Literature*, 48(2), 281–355.

- Lee, Y., Ng, S., Shevlin, T., & Venkat, A. (2021). The effects of tax avoidance news on employee perceptions of managers and firms: Evidence from glassdoor.com ratings. *Accounting Review*, 96(3), 343–372.
- Li, J., Pike, R., & Haniffa, R. (2008). Intellectual capital disclosure and corporate governance structure in UK firms. *Accounting and Business Research*, 38(2), 137–159.
- Lipton, M. (2017). *The new paradigm*. International Business Counsel of the World Economic Forum. <https://corpgov.law.harvard.edu/2017/01/11/corporate-governance-the-new-paradigm/#more-77179>
- Lipton, M. (2018). *Corporate governance, stakeholder primacy, federal incorporation*. Harvard Law School Forum on Corporate Governance and Financial Regulation. <https://corpgov.law.harvard.edu/2018/08/17/corporate-governance-stakeholder-primacy-federal-incorporation/>
- Liskovich, I. (2016). *Corporate governance and the firm's workforce* (Working Paper). University of Texas at Austin.
- Marinescu, I., Klein, N., Chamberlain, A., & Smart, M. (2018). Incentives can reduce bias in online reviews (*Technical Report*). National Bureau of Economic Research.
- Marinovic, I., & Varas, F. (2019). CEO horizon, optimal pay duration, and the escalation of short-termism. *Journal of Finance*, 74(4), 2011–2053.
- Martin, R. L. (2015). Yes, short-termism really is a problem. *Harvard Business Review*. <https://hbr.org/2015/10/yes-short-termism-really-is-a-problem>
- McCrary, J. (2008). Manipulation of the running variable in the regression discontinuity design: A density test. *Journal of Econometrics*, 142(2), 698–714.
- Roe, M. J. (2020). *Stock market short-termism's impact* (Working Paper). European Corporate Governance Initiative.
- Sageer, A., Rafat, S., & Agarwal, P. (2012). Identification of variables affecting employee satisfaction and their impact on the organization. *IOSR Journal of Business and Management*, 5(1), 32–39.
- Stein, J. C. (1988). Takeover threats and managerial myopia. *Journal of Political Economy*, 96(1), 61–80.
- Symitsi, E., Stamolampros, P., & Daskalakis, G. (2018). Employees online reviews and equity prices. *Economics Letters*, 162, 53–55.
- Warren, E. (2018). *One-page explainer of the Accountable Capitalism Act*. <https://www.warren.senate.gov/imo/media/doc/Accountable%20Capitalism%20Act%20One-Pager.pdf>
- Zingales, L. (2000). In search of new foundations. *Journal of Finance*, 55(4), 1623–1653.

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