

Climate Regulatory Risk and Shareholder Activism

Ruichen Wang

Abstract

This paper examines how climate regulatory risk affects shareholders votes for climate proposals. Using U.S. shareholder-sponsored CSR proposals from 2003-2020 and a Difference-in-Differences framework, I find that the adoption of the Paris Agreement increases shareholder votes for climate proposals requesting disclosure. The effect is sufficiently strong that it is only weakly attenuated by President Trump's subsequent announcement of U.S. withdrawal from the Paris Agreement. By contrast, the Paris Agreement has little impact on support for prescriptive climate proposals that demand specific corporate actions; Instead, support for these proposals declines in periods of heightened political uncertainty. Moreover, using a regression discontinuity design, I show that the passage of climate disclosure proposals with a narrow margin generates positive abnormal stock returns on the voting day, indicating that shareholders reward firms for climate-related transparency. The results offer implications for policymakers by showing the limitation of private ordering. It suggests that while shareholder activism may be able to advance climate-related disclosure, regulatory mandates remain essential for driving substantive emissions reductions and facilitating the transition to a low-carbon economy.

Keywords: Corporate Governance; Shareholder Activism; ESG; Paris Agreement; Climate Change; Non-Financial Disclosure

1 Introduction

Over the past decades, climate change has become a central topic of discussion among academics, practitioners, and policymakers. Investors have become increasingly aware of climate-related risks and have begun incorporating these risks into their investment decisions. Empirically, Sautner et al. 2023 find that climate risk is priced in both option and stock market. In particular, “brown” stocks have higher expected returns (Bolton and Kacperczyk 2021; Pástor, Stambaugh, and Taylor 2022).

Among the three channels (physical, technological, and regulatory) through which climate risk affects firm value, regulatory risk has emerged as particularly important. According to 439 surveys from institutional shareholders in 2017-2018, 50% of respondents believed that climate regulatory risks had already begun to materialize (Krueger, Sautner, and Starks 2020). A major turning point in the relevance of regulatory climate risk for U.S. firms was the adoption of the Paris Agreement on December 15, 2015. The agreement aims to limit the increase in global average temperature to well below 2°C above pre-industrial levels. Because the United States did not ratify the Kyoto Protocol, its participation in the Paris Agreement signaled a substantial policy shift toward a lower-carbon economy.

However, the evolution of climate regulation has not been monotonic. Political environments have introduced substantial policy uncertainty. During his presidential campaign and administration, President Trump expressed strong support for the U.S. oil and gas industry. His election in November 2016, followed by the June 2017 announcement of the United States’ withdrawal from the Paris Agreement, constituted major events that altered expectations about the future path of climate regulation. The impact of these political events was nevertheless ambiguous. Shortly after the withdrawal announcement, a broad coalition “We Are Still In” was formed. The initiative brought together U.S. states, cities, corporations, universities, and investors representing a substantial share of national economic activity and pledged to pursue emissions reductions and renewable energy adoption independently of federal policy. The coalition has since expanded con-

siderably and now includes 3,931 signatories.¹

Empirical evidence supports the view that the Paris Agreement had meaningful effects on financial markets. Diaz-Rainey et al. 2021 document negative stock market reactions in the oil and gas sector to both the Paris Agreement and the 2016 U.S. presidential election, suggesting that the influence of the Paris Agreement dominated that of the Trump administration. In contrast, Mukanjari and Sterner 2018 find only moderate market responses to both events, while Ramelli et al. 2021 report positive abnormal returns for high-emission industries following Trump’s election. Using long-horizon stock returns, Bolton and Kacperczyk 2023 document the emergence of a carbon risk premium after the Paris Agreement, while Monasterolo and De Angelis 2020 show a decline in the systematic risk of clean-energy equities, together indicating that investors increasingly incorporated climate transition risk into asset prices. Evidence from bond markets is consistent with this interpretation: Seltzer, Starks, and Zhu 2022 show that, after the Paris Agreement, high-emission firms experienced credit rating downgrades and higher bond yield spreads, although these effects weakened following the U.S. presidential election. Finally, Ginglinger and Moreau 2023 document a reduction in corporate leverage following the Paris Agreement, which they attribute to a decline in debt capacity driven by heightened shareholder awareness of physical climate risks.

Nevertheless, impacts of the Paris Agreement on shareholder activism about climate issues remains unveiled. Instead of divesting, investors actively manage climate risk of their portfolio firms, including submitting shareholder proposals on climate issues (Krueger, Sautner, and Starks 2020). Climate-related proposals have attracted substantially greater shareholder support over years. The average vote in favor of such proposals increased from 17.8% in 2003 to 32.1% in 2020, while the approval rate rose from 0 in 2003 to 21.1% in 2020. The Paris Agreement has shaped investor attitude toward climate change, one evidence is its frequent citation in climate-related shareholder proposals. For example, Chevron Corporation received a shareholder proposal in 2019 stating: “The proposal asks Chevron to issue a report on how it can reduce its carbon footprint

¹<https://www.wearestillin.com/signatories>

in alignment with the Paris Agreement’s goal of maintaining global warming well below 2 degrees Celsius.”

In this study, I first examine the impact of climate regulatory risk on shareholder votes for climate proposals. I use a Difference-in-Differences design that compares climate-related proposals with non-climate proposals, treating the adoption of the Paris Agreement as an exogenous shock to climate regulatory risk that affects only climate-related issues. Panel regression results show that the increase in regulatory risk significantly increases shareholder support for climate proposals, but that this effect is concentrated in proposals requesting disclosure rather than prescriptive corporate actions. After the Paris Agreement, climate proposals requesting disclosure garnered about 6-7% higher votes in favor, while the change in support for prescriptive climate proposals is barely significant. After the Trump’s withdrawal announcement, shareholder support for disclosure-requesting proposals remains elevated, still 5-6% higher than the pre-Paris Agreement period. However, support for prescriptive proposals declines by about 2-5%. These patterns suggest that heightened awareness of climate regulatory risk raises the value shareholders place on climate-related information, thereby increasing demand for disclosure. At the same time, shareholders remain reluctant to commit to carbon-emission reductions, especially under political uncertainty, which reflects the conflict between such commitments and profit maximization.

I next examine whether the disclosure of firms’ climate-related information is valued by investors. Prior research shows that corporate disclosure improves the firm’s information environment: nonfinancial disclosure increases the accuracy of analysts’ earnings forecasts (Dhaliwal et al. 2012), and voluntary earnings guidance enhances stock liquidity (Balakrishnan et al. 2014); improved liquidity, in turn, is associated with a lower cost of capital (Amihud 2002). By reducing uncertainty about future cash flows and regulatory exposure, disclosure should therefore be positively valued by shareholders (Flammer, Toffel, and Viswanathan 2021). To test for the value effect of disclosure, I use the passage of close-call proposals and regression discontinuity design as causal identification strategy. I find a positive and economically meaningful stock market reaction when disclosure proposals narrowly pass, with abnormal returns of approximately 1.5-4% on the

voting day, indicating that markets place value on firms' climate-related transparency.

A closely relevant, concurrent work is Khoo and Tallarita 2025. By using change in SEC guidance in 2021 as an exogenous shock to proposal prescriptiveness, they show that shareholders refrain from supporting prescriptive CSR proposals, due to larger implementation costs associated with these proposals. Another relevant study, He, Kahraman, and Lowry 2023, show that ES risk, measured by past ES incidents in the same industry, increases shareholder support for ES proposals. My study complements these studies by focusing specifically on climate-related proposals and by examining how changes in the expected regulatory environment affect shareholder support.

The other relevant studies, Berkman et al. 2024 and Diaz-Rainey et al. 2024, examine stock market reactions to climate-related shareholder proposals around proxy filing dates and annual shareholder meetings, as well as shareholder voting outcomes on such proposals. My study employs a rigorous Difference-in-Differences framework that examines the effect of the Paris Agreement on shareholder voting behavior.

This paper also contributes to the study on shareholder activism in terms of CSR issues (Michaely, Ordonez-Calafi, and Rubio 2021; Briere, Pouget, and Ureche-Rangau 2019; Barber 2006; Azar et al. 2021), stock market reaction to environment-related events (Flammer 2013; Flammer 2015; Flammer 2021; El Ouadghiri et al. 2021), and the effect of non-financial disclosure (Dahlmann, Branicki, and Brammer 2019; Dhaliwal et al. 2011).

The remainder of the paper proceeds as follows. Section 2 outlines the institutional background of the shareholder proposal process. Section 3 describes the data and sample construction. Section 4 analyzes shareholder voting outcomes. Section 5 studies the market valuation of climate disclosure using a regression discontinuity design. Section 6 concludes.

2 Shareholder Activism Through Proposals

Under SEC rules, shareholders have the right to submit proposals for a vote at annual shareholder meetings. These proposals may address a wide range of issues, including environmental, social,

and corporate governance matters.

After a proposal is submitted but prior to the shareholder meeting, firms typically engage in negotiations with the sponsor. During this period, management may agree to take certain actions, thereby the proposal is withdrawn and the issue does not proceed to a vote. Firms may also seek to omit proposals from the proxy ballot by requesting a no-action letter from the Securities and Exchange Commission (SEC), typically on procedural or relevance grounds. The proposals that are not withdrawn or omitted are eventually put to a vote at the annual meeting.

Shareholder votes are non-binding in nature; however, they can nonetheless exert meaningful influence on corporate decision making. Shareholder pressure, which is reflected both in the level of voting support and in the identity of shareholders voting in favor, can compel the board to respond. Directors may act on proposals that receive substantial support due to reputational concerns (Ertimur, Ferri, and Stubben 2010). As a result, shareholder proposals constitute an effective mechanism of shareholder activism.

Within the category of environmental proposals, a subset specifically addresses climate-related issues. In this study, climate proposals are manually classified into two groups. The two types of climate proposals differ primarily in the stringency of the actions they require firms to undertake. The prescriptiveness of shareholder proposals matters for voting outcomes because it affects the cost-benefit tradeoff associated with implementation. Relative to disclosure-requesting proposals, prescriptive proposals require a stronger commitment to curb carbon emissions and typically entail higher implementation costs. When climate regulatory risk is elevated, the expected benefits of implementing such proposals become higher. As a result, the interaction between proposal prescriptiveness and regulatory risk can lead to different shareholder voting outcomes.

3 Data

3.1 Shareholder Proposals

This study utilizes a sample of 3,317 shareholder-sponsored CSR proposals which have been voted from 2003 to 2020, sourced from the ISS Voting Analytics (Company Vote Results) database. The database provides detailed information on shareholder meeting dates, target company identities, sponsor identities, voting outcomes, and a short description of proposals. Based on the proposal description, I classify 444 proposals as climate-related and 2,873 as addressing other environmental or social issues.

To have an image of all the 6,609 submitted shareholder proposals, Figure 1 provides the annual number of climate and other CSR proposals, respectively. All proposals are included, regardless of whether they were omitted, withdrawn, or brought to a vote. There is a spike in 2009 that is not specific to climate issues: both climate and other CSR proposals increase temporarily. Outside of this temporary episode, climate proposals display an upward trend beginning around 2014 and remain elevated thereafter, while the number of other CSR proposals remains relatively stable. This divergence is consistent with growing shareholder attention to climate-related risks over time.

The following tables provide summary statistics for voted proposals. Table 1 reports the annual number of voted proposals, approval rates, and the mean and standard deviation of the percentage of favorable votes for climate-related and other environmental and social shareholder proposals, respectively, over the period 2003-2020. Climate-related proposals become increasingly frequent over time. Although approval rates are low throughout the sample period (3.8%), average shareholder support rises steadily, with the mean percentage of favorable votes increasing markedly in later years (from 17.8% in 2003 to 32.1% in 2020). This pattern indicates growing shareholder engagement with climate-related issues, even when proposals do not formally pass. Shareholder support for other environmental and social proposals displays a similar pattern: average approval rate increases from 0.8% in 2003 to 9.2% in 2020, average votes in favor increases from 11.0% in 2003 to 26.2% in 2020. Note that shareholder support for both climate and non-climate propos-

als increases over time, which underscores the importance of controlling for the common trend of shareholder votes for CSR proposals when trying to isolate the effect of climate regulatory risk on shareholder votes for climate proposals.

Table 2 reports summary statistics by proposal type. Environmental proposals are grouped into three categories: (i) proposals requesting disclosure of climate-related information; (ii) proposals requesting specific actions, such as adopting greenhouse gas emissions targets, setting renewable energy goals, establishing board-level committees for climate risk oversight, or linking senior executive compensation to GHG emissions, etc; and (iii) other environmental proposals. Table A1 and A2 in the Appendix show all the descriptions for disclosure-requesting and prescriptive climate proposals.

Disclosure-requesting proposals typically call for firms to assess, disclose, or report on climate-related issues. Examples include requests to “report on plans to reduce greenhouse gas emissions from products and operations”, “assess the benefits of adopting renewable energy goals”, and “disclose information supporting the company’s position on climate change”. In contrast, prescriptive proposals urge firms to undertake more concrete actions. A large majority of these proposals call for the adoption of greenhouse gas emissions reduction goals. Other prescriptive proposals focus on corporate governance mechanisms for managing climate risk, including requests to “establish a board committee on climate risk” or to “link executive compensation to greenhouse gas reduction”.

Table 2 shows substantial heterogeneity in voting outcomes across proposal types. Climate-related proposals attract higher average shareholder support than other environmental and social proposals. In particular, proposals requesting climate-related disclosure receive the highest approval rates (4.4% vs 2.7% in the full sample) and the highest average favorable vote shares (23.0% vs 19.1% in the full sample). By contrast, prescriptive climate proposals receive lower approval rates (2.4%) and lower votes in favor (20.9%). This pattern suggests that shareholders are more willing to support proposals framed around climate issues, especially when they emphasize disclosure rather than prescriptive actions.

Table 3 presents summary statistics by sponsor type for climate-related proposals and for

other environmental and social proposals, respectively. Sponsors are considered as individuals if they don't act on behalf of institutions. Proposals sponsored by one single individual or multiple individuals are both assigned to this group. Most of the individual sponsors are shareholder activists, e.g. John Chevedden, James McRitchie, Kenneth Steiner. Institutional sponsors include both single institutions and coordinated groups. Proposals sponsored by coordinated groups are those jointly sponsored by multiple institutions or by institutions and individuals. Institutions are further divided into 5 groups: public pension funds (e.g. California Public Employees' Retirement System), religious groups (e.g. Sisters of the Holy Names of Jesus and Mary), asset managers (e.g. Trillium Asset Management), labor unions and NGOs (e.g. Service Employees International Union, Pride Foundation, Physicians Committee for Responsible Medicine), and others.

The table shows that proposals sponsored by individuals account for the smallest fraction, and receive substantially lower approval rates and lower average vote shares than those sponsored by institutions. Among all institution categories, proposals sponsored by coordinated groups and public pension funds garner the highest support from shareholders. However, it is asset managers that submit the largest amount of CSR proposals. Comparing climate-related proposals with other proposals, all institutional sponsor categories exhibit higher approval rates and higher average favorable vote shares when the proposal concerns climate-related issues. Overall, Table 3 highlights the important role of institutions in shareholder activism, especially on climate-related topics.

Table 4 presents summary statistics by industry sector for climate-related proposals and for other environmental and social proposals, respectively. Being targeted by climate proposals is particularly relevant with whether the firm operates in a high-emitting industry. 151 out of 444 climate proposals target firms in the Energy sector, while 99 climate proposals target firms in the Utilities sector, these two sectors account for more than half of the total climate proposals. Regarding other ES proposals, it is Consumer Staples and Consumer Discretionary sectors that are targeted the most.

3.2 Summary Statistics of Variables

The 444 proposals on climate issues correspond to 326 firm-year observations, and the 2,873 proposals on other environmental and social issues correspond to 1,813 firm-year observations. The summary statistics of variables for firms which were targeted by climate-related and other proposals is presented in Table 5.

Abnormal return on the day of shareholder meeting is calculated with Fama-French 3 factors and momentum, the estimation window includes 200 trading days which ends 30 trading days before the meeting. The source of stock price data is Datastream.

Annual financial variables are issued from Compustat. Institutional ownership and environmental pillar score are from LSEG (formerly Refinitiv). $\text{Log}(\text{assets})$ is the book value of total assets in logarithm (at). ROE (return on equity) is the ratio of operating income ($ebit$) to the book value of equity (ceq) plus deferred taxes and investment tax credit ($txditc$). $Equity\ issuance$ is the ratio of sale of common and preferred stock ($sstk$) to the book value of total assets. $Cash$ is the ratio of cash and short-term investments (che) to total assets. $Leverage$ is the ratio of debt in current liabilities (dlc) and long-term debt ($dltt$) to total assets. $Tobin's\ Q$ is the ratio of the market value of total assets to the book value of total assets. The market value of total assets is the book value of total assets plus the market value of equity ($csho \times prcc_f$) minus the sum of the book value of equity (ceq) and deferred taxes ($txdb$). EPS (earnings per share) is net income (ni) divided by the number of common shares. $R\&D$ is R&D expenses (xrd) divided by the book value of total assets. $SG\&A$ is SG&A expenses ($xsga$) divided by the book value of total assets. $Institutional\ ownership$ is the share of institutional holding. $E\ score$ is LSEG environmental pillar score. $Polluting\ industry$ is a dummy variable which equals 1 if GICS industry sector of the firm is Energy (10), Materials (15), Industrials (20), or Utilities (55); and equals 0 otherwise. All variables are computed in the fiscal year that ends prior to the date of the vote. All ratios are trimmed at the 1.5th percentiles on each side.

The tables indicate that 70.35% of firms targeted by climate-related proposals operate in polluting industries, compared with 28.83% among firms targeted by other environmental and social

proposals. Firms targeted by climate-related proposals are, on average, larger, but they exhibit lower Tobin’s Q and weaker profitability than firms targeted by non-climate proposals. With respect to investment policies, these firms spend less on R&D and SG&A. Financial policies also differ systematically across the two groups: firms targeted by climate-related proposals maintain higher leverage and lower cash holdings.

4 Climate Regulatory Risk and Shareholder Votes for Climate Proposals

4.1 Main Results

In this section, I conduct empirical tests to examine the effects of the Paris Agreement on shareholders vote for climate proposals. I begin with an exploratory regression on the topic of proposals. The dependent variable is *Votes Cast For*, which is percentage of votes cast in favor of the proposal (ranging from 0 to 100%). The independent variable is *Climate*, which equals one for climate-related proposals and zero otherwise. As an alternative model specification, I use *Disclosure* and *Prescriptive* which indicate whether a climate proposal requests disclosure of climate-related information or prescribes specific actions to address climate issues, respectively. Firm-level controls include firm size, ROE, Tobin’s Q, leverage, cash ratio, R&D expense ratio, SG&A expense ratio, institutional ownership, and environmental score. Proposal-level characteristics include an indicator equal to one if ISS recommends voting in favor of the proposal (*ISSrec*), and a set of indicator variables for sponsor type (*Pension*, *Religious group*, *Asset manager*, *NGO*, *Other institution*, *Coordinated group*, *Sponsor missing*). Description of these variables can be found in Section 3.

Table 6 reports the estimation results. Year and firm fixed effects are included in Columns (1) and (3), while year and industry fixed effects are included in Columns (2) and (4). Columns (1) and (2) show that, climate-related proposals do not differ from non-climate proposals in terms of shareholder votes. Columns (3) and (4) reveal substantial heterogeneity within climate proposals.

Disclosure-requesting climate proposals receive 1.42% more votes in favor with firm fixed effects, significant at the 10% level. In contrast, prescriptive climate proposals receive 2.17% fewer votes in favor than non-climate proposals with firm fixed effects. While Both effects are absorbed by industry fixed effects.

The increase in climate regulatory risk associated with the adoption of the Paris Agreement is expected to affect shareholder voting behavior on climate-related proposals, but not on other environmental or social proposals. This setting therefore lends itself naturally to a Difference-in-Differences framework, in which non-climate proposals serve as a control group. Under this approach, changes in shareholder voting outcomes for climate proposals following the adoption of the Paris Agreement can be attributed to shifts in climate regulatory risk.

Post is an indicator equal to one if the shareholder meeting occurs after December 12, 2015, which is the date that the U.S. signed the Paris Agreement, and zero otherwise. I also include the interaction between *Post* and *Climate*, *Disclosure*, *Prescriptive*. All the other variables are defined as above.

Table 7 reports the results. Columns (1) and (3) include firm and year fixed effects, while Columns (2) and (4) include industry and year fixed effects. In Columns (1) and (2), the negative coefficient on *Climate* indicates that, prior to the Paris Agreement, climate-related proposals received less shareholder support than other CSR proposals. After the adoption of the Paris Agreement, however, climate proposals receive 4.44% (4.26%) more votes in favor with firm (industry) fixed effects. Columns (3) and (4) distinguish between disclosure-requesting and prescriptive climate proposals. Before the Paris Agreement, both types receive lower support than other CSR proposals. Following the Paris Agreement, disclosure-requesting climate proposals experience a 6.28% (5.93%) increase in votes cast in favor. By contrast, support for prescriptive climate proposals barely changes. These results suggest that as climate regulatory risk intensifies, shareholders become more supportive of proposals that enhance transparency through disclosure, while remaining cautious toward proposals that mandate specific corporate actions.

To disentangle the effect of the adoption of the Paris Agreement and President Trump’s sub-

sequent intention to withdraw from the Agreement on shareholder voting outcomes for climate-related proposals, I introduce $Post_1$ which is an indicator equal to one if the shareholder meeting is held after December 12, 2015 and before June 1, 2017, and zero otherwise; and indicator $Post_2$ which equals one if the meeting is held after June 1, 2017, corresponding to President Trump’s announcement of the intention to withdraw from the Paris Agreement. All the other variables are defined as before.

Table 8 reports the results. Columns (1) and (3) include firm and year fixed effects, while Columns (2) and (4) include industry and year fixed effects. Columns (1) and (2) show that the adoption of the Paris Agreement is associated with a significant increase in shareholder support for climate-related proposals. In the post-Paris Agreement period, climate proposals receive 4.71% (4.83%) more votes in favor. Following President Trump’s withdrawal announcement, shareholder support reduces only slightly: the increase in votes cast in favor remains at 4.08% (3.71%).

Column (3) shows that, following the Paris Agreement, disclosure proposals receive 7.05% more votes in favor, and the effect remains economically meaningful after the withdrawal announcement (5.52%). Column (4) shows that, when industry fixed effects are included instead of firm fixed effects, the estimated increases are 6.08% and 5.89%, respectively. A Wald test fails to reject the equality of the coefficients on $Post_1 \times Disclosure$ and $Post_2 \times Disclosure$, indicating that rising shareholder support for disclosure proposals after the Paris Agreement was not affected by Trump’s announcement.

In contrast, prescriptive climate proposals experience only a modest increase in shareholder support following the Paris Agreement (0.94%), and the effect is statistically insignificant. After the withdrawal announcement, the interaction coefficient turns negative (-4.27%) which is significant at the 5% level. A Wald test rejects the equality of the two coefficients at the 5% level, indicating that shareholder responses differ across the two post periods. When firm fixed effects are replaced by industry fixed effects, shareholder support for prescriptive proposals increases by 2.68%. After the withdrawal announcement, support declines (-2.66%). While the Wald test marginally fails to reject the equality of these two coefficients. These results suggest that Trump’s intention to

withdraw had a negative impact on shareholders votes for prescriptive proposals.

Column (1) and (2) of Table A3 in the Appendix report coefficients for all the variables, including controls. In particular, ISS recommendation has a strong impact on shareholder votes, both statistically and economically: a proposal which is recommended to vote for by ISS receives 20.87% (22.15%) more votes in favor with firm (industry) fixed effects, significant at the 1% level. Among all sponsor types, coordinated groups and public pension funds have the greatest influence over the voting outcome. Proposals submitted by public pension funds (coordinated groups) receive 2.38% (2.71%) higher vote share. This evidence is consistent with Gillan and Starks 2000 for governance proposals.

As a robustness test, Table A4 show results of the same regressions while in the subsample of a shorter time horizon from 2012 (Column (1) and (2)), and in the subsample of environmental proposals (Column (3) and (4)). The main findings remain qualitatively unchanged.

Taken together, these patterns suggest that shareholders became increasingly receptive to disclosure-requesting climate proposals following the adoption of the Paris Agreement, reflecting growing shareholder attention to climate-related regulatory risk. This effect appears sufficiently strong that it is barely attenuated by political uncertainty. By contrast, the Paris Agreement seems to have a trivial impact on proposals that call for prescriptive actions, while the potential policy reversal due to Trump’s announcement negatively affects shareholder support.

These results reflect the cost-benefit tradeoff of managing climate risks: Disclosing information typically entails relatively low implementation costs, whereas committing to carbon-reduction targets forces shareholders to confront the conflict between profit maximization and emissions abatement. Consequently, supporting disclosure proposals is comparatively easy for shareholders, while endorsing carbon reduction goals is more demanding. This finding complements Diaz-Rainey et al. 2024, which shows that disclosure-related proposals are more likely to be withdrawn following successful negotiations with management. Their evidence suggests that managers also weigh the economic impact of climate proposals against the externalities they are intended to address.

4.2 Validity Tests

The use of Difference-in-Differences assumes the common trend of treatment and control groups before the exogenous shock. To test for this assumption, instead of the interaction of *Post* and proposal topic, I include the full set of year dummies interacted with proposal topic. Year and firm fixed effects are controlled. The model specification is as follows:

Figure 2 plots the coefficients and 90% confidence interval of the interaction terms of year dummies and proposal type, the upper figure plots the coefficients for $Year_t \times Disclosure$, the bottom figure plots the coefficients for $Year_t \times Prescriptive$. From 2004 to 2015, shareholder support for disclosure-requesting proposals does not differ significantly from the 2003 baseline. Prescriptive proposals start to present in 2007, which is taken as the baseline. From 2008 to 2015, there is no significant difference in shareholder support for prescriptive proposals, relative to non-climate proposals. These patterns support the parallel-trends assumption prior to the adoption of the Paris Agreement.

Figure 2 also corroborate earlier findings in Table 8. Beginning in 2016, disclosure-requesting proposals receive significantly higher voting support, with an increase of 5.88% in votes cast in favor, significant at the 10% level. This timing coincides with the adoption of the Paris Agreement. The increase in voting support persists in subsequent years, reaching 9.11% in 2018 and 10.75% in 2020, statistically significant at the 5% and 1% levels, respectively. The only exception is 2019, for which the estimate is imprecise, likely reflecting the small number of observations ($n = 6$), compared with 21 in 2018 and more than 40 in 2016 and 2017. In contrast, prescriptive proposals exhibit a different pattern. Following the adoption of the Paris Agreement, votes cast in favor of prescriptive proposals barely change in 2016 and 2017. In 2018 and 2019, voting support declines, while the change is still not significant.

A potential concern is that firms are not randomly assigned to treatment and control groups. Firms targeted by climate proposals may differ systematically from those targeted by non-climate proposals, and voting outcomes could therefore reflect differences in firm characteristics rather than shareholders' attitudes toward climate issues. To address this concern, I construct a matched

sample in which each disclosure or prescriptive proposal is paired with a non-climate proposal from the same shareholder meeting. Each non-climate proposal can be used only once in the control group. This design enables comparisons within the same firm-meeting. It is analogous to propensity score matching but more restrictive: treated and control observations come from the same firm-meeting rather than from firms with similar observable characteristics. Column (1) of Table A5 reports the results. The regression includes meeting fixed effects. After the Paris Agreement, disclosure proposals receive 6.97% more shareholder votes; this effect declines to 6.23% following the withdrawal announcement. Both estimates are similar with those reported in Table 8. Shareholder support for prescriptive climate proposals changes only after the withdrawal announcement, declining by 5.87% (significant at the 1% level), a magnitude larger than the corresponding coefficient in Table 8.

Another concern is that proposal sponsors may differ across treatment and control groups, potentially explaining changes in voting outcomes after the Paris Agreement. To address this possibility, I re-estimate the baseline specification in Table 8 Column (3), replacing sponsor-type fixed effects with sponsor fixed effects. Column (2) of Table A5 presents the results. Shareholder support for disclosure proposals increases by 7.00% after the Paris Agreement and barely changes following the withdrawal announcement (6.81%). Support for prescriptive proposals is not strongly affected by either event.

Finally, I construct an alternative matched sample in which each disclosure or prescriptive proposal is paired with a non-climate proposal submitted by the same sponsor in the same year. This procedure yields 388 observations. Column (3) of Table A5 reports the results, controlling for both meeting and sponsor fixed effects. Shareholder support for disclosure proposals increases by 10.07% after the Paris Agreement and remains 7.99% higher following the withdrawal announcement. In contrast, support for prescriptive proposals declines by 14.10% after the withdrawal announcement. Overall, the results in Table A5 reinforce the validity of the main findings.

4.3 Shifts in Targets/Sponsors

Although Table A5 alleviates concerns that the observed pattern is driven by selection into the treatment group, the composition of firms and proposal sponsors in the overall sample may still change over time. Consequently, it remains unclear whether the increase in shareholder support reflects a change in shareholders' perception of climate regulatory risk (an intensive-margin effect) or changes in which firms are targeted and which sponsors submit proposals after the Paris Agreement (an extensive-margin effect). Importantly, shifts in targets or sponsors are not necessarily a threat to identification, as they may themselves represent a response to the shock. However, distinguishing between these channels is informative for understanding the mechanism.

To do so, Table A6 reports regressions restricted to proposals targeting the same firms in all three periods (Columns (1)–(2)) and proposals submitted by the same sponsors in all three periods (Columns (3)–(4)), respectively. The results are qualitatively similar to those in Table 8, indicating that the effects are primarily driven by within-firm and within-sponsor changes in voting behavior rather than by compositional changes in targets or sponsors.

4.4 Discussion

I interpret the Paris Agreement as an exogenous shock to shareholders expectations about future climate policy. However, it may also have increased investors' awareness of physical climate risk (Ginglinger and Moreau 2023), which accounts for the change in shareholders voting behavior. The content of shareholder proposals may help distinguish these channels. Tables A1 and A2 summarize the topics of disclosure and prescriptive climate proposals. Prescriptive proposals that request concrete actions, including setting emission reduction targets or adopting renewable energy, are especially relevant for high-emitting firms subject to regulatory constraints. Disclosure proposals generally request reporting of carbon emissions or plans to mitigate emissions, but not firms' exposure to physical climate risk and resilience. This type of proposals therefore concerns regulatory exposure. Proposals that aim at addressing regulatory concern do not necessarily garner higher support from shareholders, if the Paris Agreement only affects shareholders awareness of

physical climate risk.

5 Value Effect of Disclosure

In the previous section, I show that heightened climate regulatory risk following the adoption of the Paris Agreement significantly increases shareholder support for proposals requesting disclosure of climate-related information, whereas support for prescriptive climate proposals is largely unaffected by the Paris Agreement and instead responds primarily to political uncertainty. In this section, I investigate whether such disclosure is economically meaningful to investors. Specifically, I examine the abnormal return on the day of passing a proposal which requests disclosure on climate information.

5.1 Regression Discontinuity Design

This study employs a regression discontinuity design, following the framework of Klaauw 2002 and its application to shareholder voting by Cuñat, Gine, and Guadalupe 2012 and Flammer 2015. The RD approach exploits close-call shareholder proposals to identify the causal effect of passing proposals that request disclosure of climate-related information on firms' abnormal stock returns on the shareholder meeting date.

Shareholder proposals on CSR issues are advisory in nature, meaning that passage does not mechanically guarantee implementation. Nevertheless, proposals that pass are substantially more likely to be implemented than those that fail, even when passage occurs by a narrow margin. Consequently, proposals that pass or fail within a small vote margin are comparable in all respects except for the passage outcome itself. This feature generates quasi-random variation in proposal adoption and provides a credible source of causal identification.

The baseline specification is given by:

$$AR_{it} = \beta_0 + \beta_1 * Pass_{it} + \epsilon_{it} \quad (1)$$

Where $Pass_{i_t}$ is a dummy variable, which equals 1 if the proposal is passed, and 0 otherwise.

To incorporate non-close-call proposals into the analysis, potential endogeneity is addressed by flexibly controlling for the vote margin. Because the vote margin is the sole mechanical determinant of proposal passage, including polynomial functions of the vote margin captures any smooth correlation between passage and unobserved determinants of the outcome (Klaauw 2002).

I implement this approach using third-order polynomials of the vote margin, allowing the functional form to differ on either side of the majority threshold. The resulting specification is given by:

$$AR_{i_t} = \beta_0 + \beta_1 * Pass_{i_t} + P_l(v_{i,t}, \lambda_l) + P_r(v_{i,t}, \lambda_r) + \epsilon_{i_t} \quad (2)$$

To allow for treatment effects that materialize over multiple horizons and to account for the possibility of multiple proposals being voted on in the same shareholder meeting, Equation 5.1 is extended to a multi-period, multi-vote specification (Cellini, Ferreira, and Rothstein 2010). Specifically, I aggregate proposal outcomes within a meeting and estimate dynamic effects at horizon $t + \tau$ as follows:

$$y_{i,t+\tau} = \beta_0 + \beta_\tau \sum_{k=1}^n Pass_{it}^k + \left[P_l \left(\sum_{k=1}^n v_{it}^k, \lambda_{l,\tau} \right) + P_r \left(\sum_{k=1}^n v_{it}^k, \lambda_{r,\tau} \right) \right] + \alpha_i + \alpha_\tau + \alpha_c + \varepsilon_{i,t+\tau}. \quad (3)$$

Multiple periods are incorporated by exploiting a panel data structure in which, for each firm-meeting observation (i, t) , outcomes at time $t + \tau$ are pooled across multiple horizons τ , including periods prior to the meeting ($\tau < 0$). Specifically, the estimation window spans from $t - T_1$ to $t + T_2$. The coefficient on $Pass$, which captures the number of proposals that pass at the meeting, β_τ , is allowed to vary with the horizon τ and is restricted to zero for $\tau < 0$. Likewise, the parameters of the vote-margin polynomials, $\lambda_{l,\tau}$ and $\lambda_{r,\tau}$, are permitted to vary for $\tau \geq 0$. Pooling observations before and after the meeting allows the inclusion of firm-meeting fixed effects, α_{it} , which absorb

all unobserved firm characteristics that remain constant over the event window. In addition, the specification includes fixed effects for the time relative to the meeting date, α_τ (“distance-to-the-election” fixed effects), as well as calendar year fixed effects, α_c .

5.2 Tests for Quasi-Randomized Assignment

The validity of the regression discontinuity design relies on the assumption that shareholder vote outcomes are randomly assigned in a neighborhood around the majority threshold. A discontinuity in the density of vote shares at the 50% cutoff would indicate non-random sorting of proposals into the “pass” and “fail” categories. Bach and Metzger 2019 document evidence of managerial manipulation of shareholder-sponsored governance proposals by detecting such a discontinuity in vote shares. As shown by McCrary 2008, complete manipulation of the running variable leads to a failure of identification in the RDD framework. Therefore, continuity of the vote share density at the threshold is a key requirement for the validity of the design. Figure 3 presents a visual inspection of the formal density test proposed by McCrary 2008. The test reveals no evidence of a discontinuous jump in the density of vote shares at the 50% cutoff. Accordingly, the null hypothesis of continuity at the threshold cannot be rejected (p-value = 0.337), supporting the validity of the regression discontinuity design.

The second test is reported in Table 9, which examines whether the adoption of CSR proposals is systematically related to firm characteristics prior to the shareholder meeting. All firm characteristics are defined in Table 5. Columns (1) and (2) measure these characteristics in the year preceding the meeting ($t - 1$), while columns (3) and (4) consider changes in the characteristics between years $t - 2$ and $t - 1$. Each row corresponds to a distinct firm characteristic, and each cell reports the estimate from a separate regression. Columns (1) and (3) present differences across all firms, whereas columns (2) and (4) focus on local differences at the majority threshold by controlling for a third-order polynomial in the vote margin on both sides of the cutoff. Operating in a polluting industry, firm size, profitability, cash holdings, and institutional ownership in the previous year are significantly associated with proposal passage when considering the full sample.

However, these relationships disappear for all the characteristics except for Tobin’s Q and environmental score around the majority threshold. Change in leverage and institutional ownership from year $t - 2$ to year $t - 1$ positively relates to the passage of proposals, while this relationship disappears around the majority threshold. Overall, this evidence indicates that firms passing and rejecting close-call proposals display no ex-ante difference in characteristics, thereby supporting the validity of the regression discontinuity identification strategy.

5.3 Results

Figure 4 shows the visualization of abnormal return on the voting day with respect to vote margin. The y-axis reports abnormal stock returns on the day of the shareholder vote, computed using the four-factor model. The x-axis shows the vote margin. Each dot represents the average abnormal return within 2% vote margin bins. The solid lines plot fitted values from second-order polynomial regressions in the vote margin, estimated separately on each side of the majority threshold. The figure reveals a clear discontinuous jump at the 50% cutoff, with abnormal returns increasing by approximately 3% when proposals narrowly pass relative to when they narrowly fail.

Table 10 presents regressions of the abnormal returns on the voting day on the pass dummy. Columns (1)-(3) restrict the sample to CSR proposals whose vote share is within 2.5%, 5%, 10% respectively, of the majority threshold, and estimate Equation 5.1. Across all three bandwidths, the coefficient on the pass indicator is positive and statistically significant. Specifically, passing a proposal is associated with abnormal returns of 5.47% within the 2.5% window, 2.07% within the 5% window, and 1.69% within the 10% window. The magnitude of the effect declines as the bandwidth widens, consistent with attenuation from including observations farther from the cutoff.

Column (4) estimates the full-sample specification in Equation 5.1, controlling flexibly for third-order polynomials in the vote margin on both sides of the threshold. The estimated discontinuity remains positive and significant, with abnormal returns increasing by 4.06% when a proposal narrowly passes. Column (5) further adds firm-level control variables, including log assets, ROE, Tobin’s Q, leverage, cash holdings, institutional ownership, environmental score, and year fixed

effects. The coefficient on pass remains statistically significant at the 1% level, with an estimated abnormal return of 3.95%.

Overall, the results indicate a robust and economically meaningful positive market reaction to the passage of CSR proposals requesting climate-related disclosure. It suggests that investors value the information generated by the adoption of such proposals, consistent with earlier finding that shareholders are increasingly willing to vote for this type of proposals, even in the presence of policy uncertainty and the potential regulatory reversal signaled by President Trump’s announcement.

Table 11 examines the dynamic effects of passing climate-risk disclosure proposals on market reaction. Consistent with Table 10, there is a positive and statistically significant increase in abnormal returns around the voting date. The abnormal return on the day prior to the vote ($d - 1$) is insignificant; It increases to 3.47% on the voting day (d). The effect remains positive on the day after the vote ($d + 1$), with an abnormal return of 1.92%, but dissipates in the period $d + 2 \sim d + 7$, where the estimate becomes slightly negative. This price response suggests that markets react quickly to the information conveyed by the passage of climate disclosure proposals.

Note that these results on stock market reaction is subject to selection effects: firms are targeted by climate proposals, likely because shareholders believe that climate regulatory risk constitutes a big concern for these firms. This type of proposals could be less valuable for firms with less risk exposure.

6 Conclusion

This paper studies the impact of climate regulatory risk on shareholder activism, and the value effect of climate-related disclosure. Using the Paris Agreement and the subsequent U.S. withdrawal announcement as exogenous shifts in climate regulatory risk, I document that shareholder support for climate-related proposals responds strongly to changes in the regulatory environment. Importantly, this response is highly heterogeneous across proposal types: shareholders consistently favor disclosure-requesting climate proposals, while remaining cautious toward proposals that mandate

specific corporate actions.

Employing a regression discontinuity design based on close-call shareholder votes, I further show that the passage of climate disclosure proposals generates economically meaningful market reactions. Firms experience positive abnormal returns of roughly 1.5-4% on the voting day when such proposals narrowly pass, indicating that investors value the information generated by enhanced climate disclosure.

These findings highlight the role of shareholder activism as a channel which complements regulatory mandates. Regardless of political environment, shareholders increasingly support transparency-enhancing initiatives that help investors assess firms' exposure to climate risks. However, the evidence also shows clear limits of private ordering (Fisch and Robertson 2023). Shareholders' reluctance to support commitment to GHG reduction goals reflects their concern about the tradeoff between profit maximization and carbon abatement, which is particularly pronounced under political and policy uncertainty. In sum, the results suggest that while shareholder activism can advance climate-related disclosure, regulatory mandates remain essential for driving substantive emissions reductions and facilitating the transition to a low-carbon economy.

References

- Amihud, Yakov (2002). “Illiquidity and stock returns: cross-section and time-series effects”. In: *Journal of financial markets* 5.1, pp. 31–56.
- Azar, José et al. (2021). “The Big Three and Corporate Carbon Emissions around the World”. In: *Journal of Financial Economics* 142.2, pp. 674–696.
- Bach, Laurent and Daniel Metzger (2019). “How close are close shareholder votes?” In: *The Review of Financial Studies* 32.8, pp. 3183–3214.
- Balakrishnan, Karthik et al. (2014). “Shaping liquidity: On the causal effects of voluntary disclosure”. In: *the Journal of Finance* 69.5, pp. 2237–2278.
- Barber, B. M. (2006). “Monitoring the Monitor: Evaluating CalPERS’ Activism”. In: Available at SSRN: 890321.
- Berkman, Henk et al. (2024). “The value impact of climate and non-climate environmental shareholder proposals”. In: *Journal of Corporate Finance* 89, p. 102653.
- Bolton, Patrick and Marcin Kacperczyk (2021). “Do investors care about carbon risk?” In: *Journal of financial economics* 142.2, pp. 517–549.
- (2023). “Global pricing of carbon-transition risk”. In: *The Journal of Finance* 78.6, pp. 3677–3754.
- Briere, Marie, Sebastien Pouget, and Loredana Ureche-Rangau (2019). “Do universal owners vote to curb negative corporate externalities? An empirical analysis of shareholder meetings”. In: *Proceedings of Paris December 2019 Finance Meeting Eurofidai-Essec*.
- Cellini, Stephanie Riegg, Fernando Ferreira, and Jesse Rothstein (2010). “The value of school facility investments: Evidence from a dynamic regression discontinuity design”. In: *The Quarterly Journal of Economics* 125.1, pp. 215–261.
- Cuñat, Vicente, Mireia Gine, and Maria Guadalupe (2012). “The vote is cast: The effect of corporate governance on shareholder value”. In: *The journal of finance* 67.5, pp. 1943–1977.

- Dahlmann, Frederik, Layla Branicki, and Stephen Brammer (2019). “Managing carbon aspirations: The influence of corporate climate change targets on environmental performance”. In: *Journal of business ethics* 158.1, pp. 1–24.
- Dhaliwal, Dan S et al. (2011). “Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting”. In: *The accounting review* 86.1, pp. 59–100.
- Dhaliwal, Dan S. et al. (2012). “Nonfinancial Disclosure and Analyst Forecast Accuracy: International Evidence on Corporate Social Responsibility Disclosure”. In: *The Accounting Review* 87.3, pp. 723–759. DOI: 10.2308/accr-10218.
- Diaz-Rainey, Ivan et al. (2021). “Trump vs. Paris: The impact of climate policy on US listed oil and gas firm returns and volatility”. In: *International Review of Financial Analysis* 76, p. 101746.
- Diaz-Rainey, Ivan et al. (2024). “Shareholder Activism on Climate Change: Evolution, Determinants, and Consequences: I. Diaz-Rainey et al.” In: *Journal of Business Ethics* 193.3, pp. 481–510.
- El Ouadghiri, Imane et al. (2021). “Public attention to environmental issues and stock market returns”. In: *Ecological economics* 180, p. 106836.
- Ertimur, Yonca, Fabrizio Ferri, and Stephen R Stubben (2010). “Board of directors’ responsiveness to shareholders: Evidence from shareholder proposals”. In: *Journal of corporate finance* 16.1, pp. 53–72.
- Fisch, Jill E and Adriana Robertson (2023). “Shareholder proposals and the debate over sustainability disclosure”. In: *U of Penn, Inst for Law & Econ Research Paper* 23-29.
- Flammer, Caroline (2013). “Corporate Social Responsibility and Shareholder Reaction: The Environmental Awareness of Investors”. In: *Academy of Management Journal* 56.3, pp. 758–781.
- (2015). “Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach”. In: *Management science* 61.11, pp. 2549–2568.
- (2021). “Corporate green bonds”. In: *Journal of financial economics* 142.2, pp. 499–516.

- Flammer, Caroline, Michael W Toffel, and Kala Viswanathan (2021). “Shareholder activism and firms’ voluntary disclosure of climate change risks”. In: *Strategic Management Journal* 42.10, pp. 1850–1879.
- Gillan, Stuart L and Laura T Starks (2000). “Corporate governance proposals and shareholder activism: The role of institutional investors”. In: *Journal of financial Economics* 57.2, pp. 275–305.
- Ginglinger, Edith and Quentin Moreau (2023). “Climate risk and capital structure”. In: *Management Science* 69.12, pp. 7492–7516.
- He, Yazhou Ellen, Bige Kahraman, and Michelle Lowry (2023). “ES risks and shareholder voice”. In: *The Review of Financial Studies* 36.12, pp. 4824–4863.
- Khoo, Kenneth and Roberto Tallarita (2025). “Expanding shareholder voice: The impact of SEC guidance on environmental and social proposals”. In: *European Corporate Governance Institute-Law Working Paper* 822.
- Klaauw, Wilbert Van der (2002). “Estimating the effect of financial aid offers on college enrollment: A regression–discontinuity approach”. In: *International Economic Review* 43.4, pp. 1249–1287.
- Krueger, Philipp, Zacharias Sautner, and Laura T Starks (2020). “The importance of climate risks for institutional investors”. In: *The Review of financial studies* 33.3, pp. 1067–1111.
- McCrary, Justin (2008). “Manipulation of the running variable in the regression discontinuity design: A density test”. In: *Journal of econometrics* 142.2, pp. 698–714.
- Michaely, Roni, Guillem Ordonez-Calafi, and Silvina Rubio (2021). “ES votes that matter”. In: *ECGI-Finance Working Paper* 774.
- Monasterolo, Irene and Luca De Angelis (2020). “Blind to carbon risk? An analysis of stock market reaction to the Paris Agreement”. In: *Ecological Economics* 170, p. 106571.
- Mukanjari, Salvatore and Thomas Sterner (2018). “Do Markets Trump Politics? Evidence from Fossil Market Reactions to the Paris Agreement and the U.S. Election”. Working Paper.
- Pástor, L’uboš, Robert F Stambaugh, and Lucian A Taylor (2022). “Dissecting green returns”. In: *Journal of financial economics* 146.2, pp. 403–424.

- Ramelli, Stefano et al. (2021). “Investor rewards to climate responsibility: Stock-price responses to the opposite shocks of the 2016 and 2020 US elections”. In: *The Review of Corporate Finance Studies* 10.4, pp. 748–787.
- Sautner, Zacharias et al. (2023). “Firm-level climate change exposure”. In: *The Journal of Finance* 78.3, pp. 1449–1498.
- Seltzer, Lee H, Laura Starks, and Qifei Zhu (2022). “Climate regulatory risk and corporate bonds”. In.

Figure 1: This figure plots the annual number of climate and other CSR proposals.

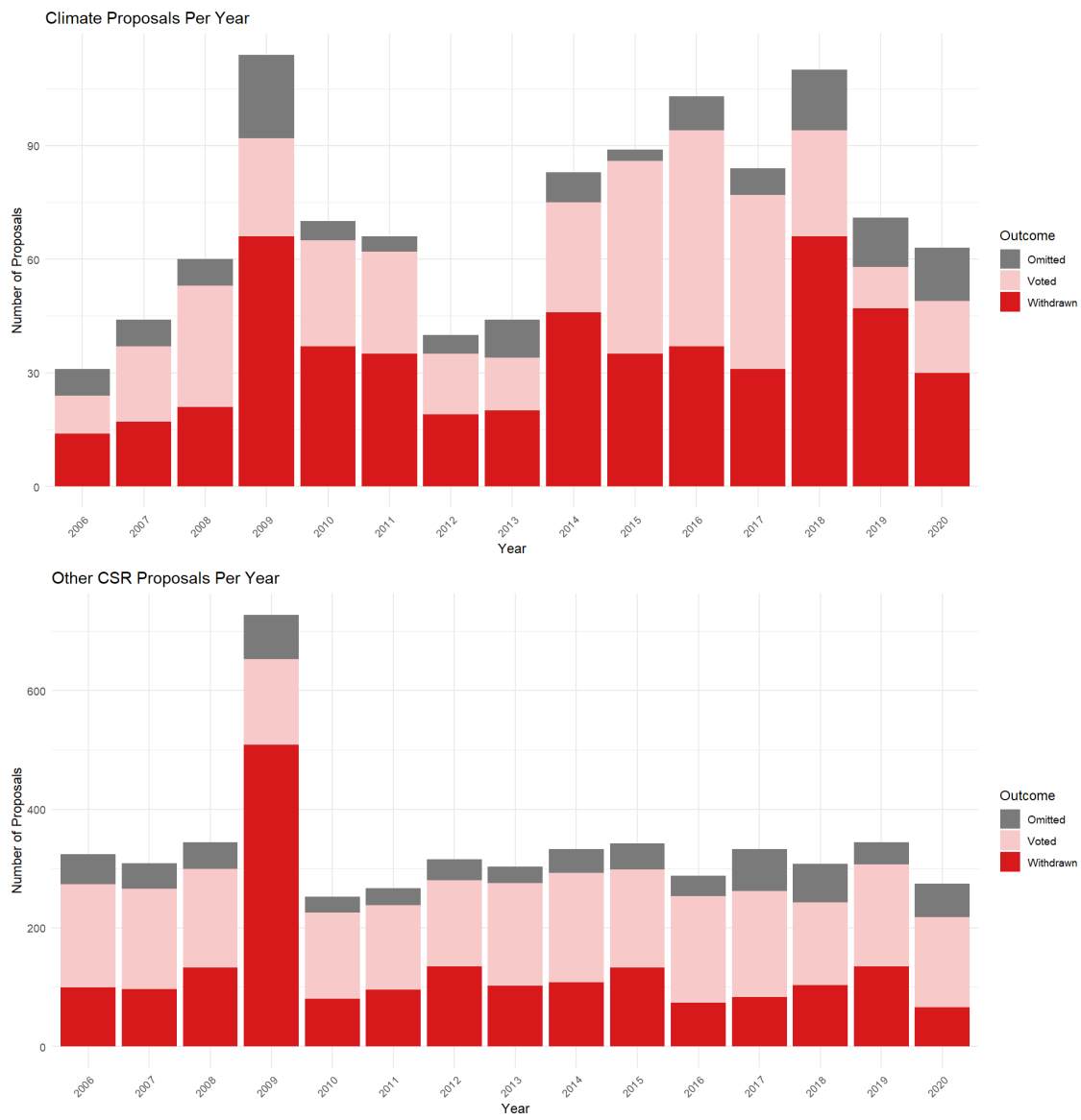


Figure 2: This figure plots the coefficients and 90% confidence interval of the interaction terms of year dummies and proposal type, the upper figure plots the coefficients for $Year_t \times Disclosure$, the bottom figure plots the coefficients for $Year_t \times Prescriptive$. The dependent variable is votes cast for the proposal. Year and firm fixed effects are controlled.

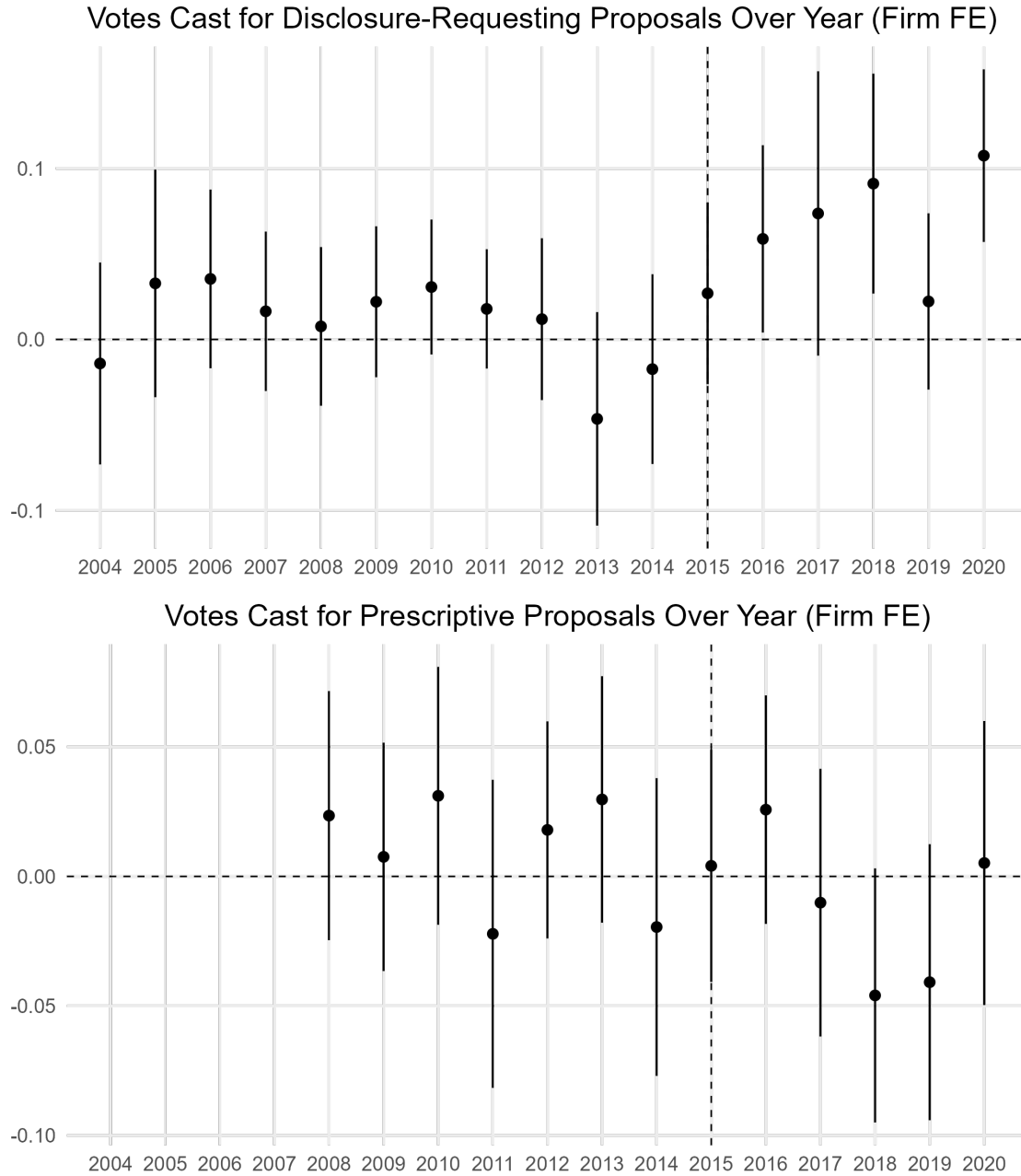


Figure 3: This figure presents a visualization of the McCrary 2008 test for the continuity of vote share distribution around the majority threshold (50%). The x-axis indicates votes in favor. The y-axis indicates the estimated density.

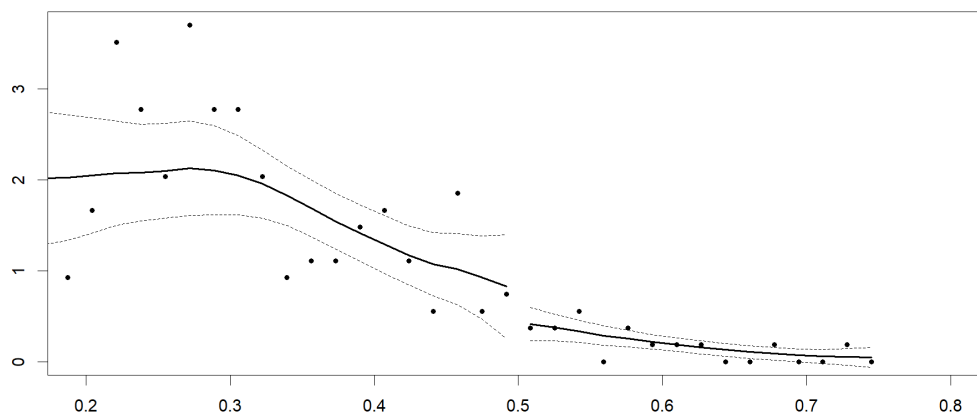


Figure 4: AR on the Voting Day: The y-axis reports abnormal stock returns on the day of the shareholder vote, computed using the four-factor model. The x-axis shows the vote margin. Each dot represents the average abnormal return within 2% vote-margin bins. The solid lines plot fitted values from second-order polynomial regressions in the vote margin, estimated separately on each side of the majority threshold.

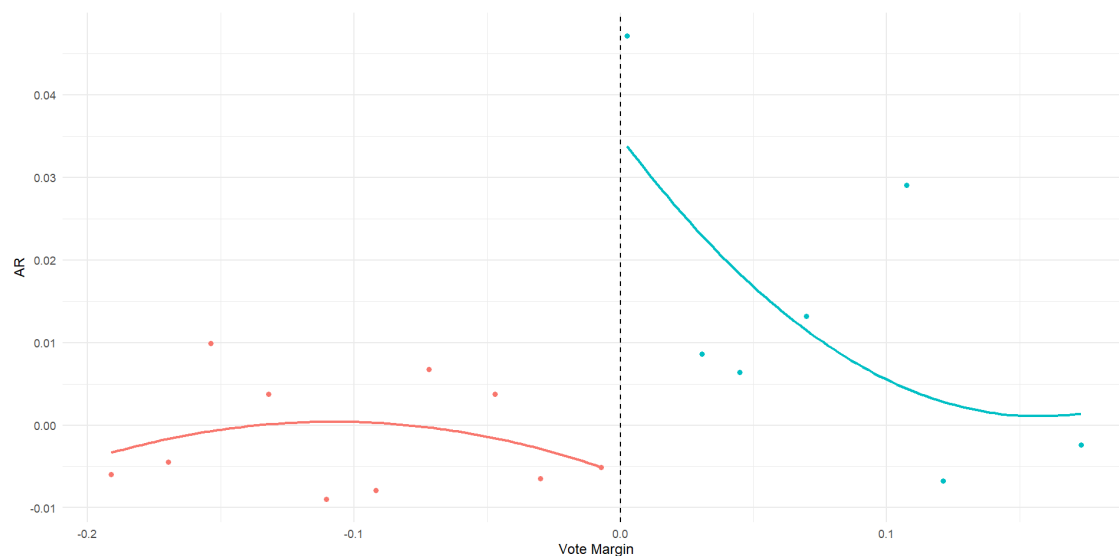


Table 1: Summary of Proposals by Year

This table displays the number of shareholder proposals, the percentage of approved proposals, the mean and standard deviation of the percentage of favorable votes. The sample consists of all CSR proposals in the ISS database from 2003 to 2020. The upper panel summarizes climate proposals while the bottom panel summarizes non-climate proposals. The proposals are classified by year.

Year	NB Proposals	Approval	Average Votes	SD
Panel A: Climate Proposals				
2003	11	0.000	0.178	0.084
2004	11	0.000	0.144	0.115
2005	8	0.000	0.122	0.095
2006	10	0.000	0.136	0.122
2007	20	0.000	0.150	0.124
2008	32	0.000	0.175	0.130
2009	26	0.038	0.178	0.153
2010	28	0.036	0.206	0.146
2011	27	0.037	0.163	0.130
2012	16	0.000	0.170	0.089
2013	14	0.000	0.204	0.097
2014	29	0.000	0.238	0.083
2015	51	0.000	0.216	0.113
2016	57	0.035	0.257	0.145
2017	46	0.065	0.301	0.170
2018	28	0.179	0.306	0.174
2019	11	0.000	0.321	0.093
2020	19	0.211	0.321	0.206
Total	444	0.038	0.224	0.146
Panel B: Other Proposals				
2003	121	0.008	0.110	0.109
2004	164	0.006	0.101	0.094
2005	157	0.006	0.099	0.089
2006	174	0.011	0.136	0.119
2007	169	0.018	0.153	0.138
2008	166	0.012	0.140	0.126
2009	144	0.014	0.173	0.139
2010	146	0.007	0.189	0.145
2011	142	0.028	0.216	0.164
2012	145	0.007	0.195	0.141
2013	173	0.023	0.220	0.157
2014	185	0.038	0.225	0.159
2015	165	0.006	0.199	0.136
2016	179	0.039	0.200	0.156
2017	179	0.022	0.200	0.140
2018	140	0.043	0.247	0.156
2019	172	0.064	0.264	0.171
2020	152	0.092	0.262	0.172
Total	2873	0.025	0.186	0.150

Table 2: Summary of Proposals by Type

This table displays the number of shareholder proposals, the percentage of approved proposals, the mean and standard deviation of the percentage of favorable votes. The sample consists of all CSR proposals in the ISS database from 2003 to 2020. The proposals are classified by proposal type. Environmental proposals are further grouped into three categories: (i) proposals requesting disclosure of climate-related information; (ii) proposals requesting specific actions, such as adopting greenhouse gas emissions targets, setting renewable energy goals, establishing board-level committees for climate risk oversight, or linking senior executive compensation to GHG emissions; and (iii) other environmental proposals.

Type	NB Proposals	Approval	Average Votes	SD
Environmental	924	0.028	0.209	0.146
Climate (Disclosure)	320	0.044	0.230	0.151
Climate (Prescriptive)	124	0.024	0.209	0.133
Other environmental	480	0.019	0.194	0.145
Social	2393	0.026	0.184	0.151
Total	3317	0.027	0.191	0.150

Table 3: Summary of Proposals by Sponsor

This table displays the number of shareholder proposals, the percentage of approved proposals, the mean and standard deviation of the percentage of favorable votes. The sample consists of all CSR proposals in the ISS database from 2003 to 2020. The proposals are classified by sponsor. Sponsors are considered as individuals if they don't act on behalf of institutions. Proposals sponsored by one single individual or multiple individuals are both assigned to this group. Institutional sponsors could be one single institution or coordinated groups. Coordinated groups refer to the two following cases: multiple institutions, institutions and individuals. Institutions are divided into five groups: public pension funds, religious groups, asset managers, labor unions and NGOs, and others.

Sponsor	NB Proposals	Approval	Average Votes	SD
Panel A: Climate Proposals				
Individual	37	0.000	0.149	0.112
Institution	324	0.052	0.253	0.149
Coordinated group	33	0.121	0.306	0.171
Pension	49	0.082	0.303	0.144
Religious	43	0.047	0.242	0.107
Assets	112	0.045	0.251	0.153
Union	82	0.024	0.216	0.145
Others	5	0.000	0.180	0.133
Unidentified	83	0.000	0.143	0.103
Total	444	0.038	0.224	0.146
Panel B: Other Proposals				
Individual	169	0.024	0.135	0.145
Institution	1996	0.031	0.216	0.151
Coordinated group	119	0.050	0.254	0.165
Pension	416	0.058	0.278	0.144
Religious	290	0.014	0.167	0.135
Assets	591	0.024	0.223	0.144
Union	531	0.019	0.185	0.148
Others	49	0.061	0.154	0.179
Unidentified	708	0.010	0.111	0.114
Total	2873	0.025	0.186	0.150

Table 4: Summary of Proposals by Industry

This table displays the number of shareholder proposals, the percentage of approved proposals, the mean and standard deviation of the percentage of favorable votes. The sample consists of all CSR proposals in the ISS database from 2003 to 2020. The proposals are classified by GICS sector of the targeted firm.

Industry	NB Proposals	Approval	Average Votes	SD
Panel A: Climate Proposals				
Energy	151	0.053	0.241	0.140
Materials	6	0.000	0.243	0.150
Industrials	36	0.111	0.342	0.137
Consumer Discretionary	38	0.000	0.162	0.109
Consumer Staples	19	0.053	0.221	0.188
Health Care	2	0.000	0.302	0.002
Financials	29	0.000	0.123	0.121
Information Technology	3	0.000	0.044	0.028
Communication Services	6	0.000	0.072	0.070
Utilities	99	0.030	0.232	0.142
Real Estate	3	0.000	0.156	0.147
Unclassified	52	0.019	0.206	0.137
Total	444	0.038	0.224	0.146
Panel B: Other Proposals				
Energy	258	0.012	0.219	0.127
Materials	82	0.049	0.187	0.173
Industrials	335	0.033	0.218	0.151
Consumer Discretionary	391	0.026	0.181	0.146
Consumer Staples	412	0.015	0.121	0.130
Health Care	243	0.021	0.185	0.149
Financials	298	0.020	0.195	0.136
Information Technology	155	0.052	0.176	0.159
Communication Services	171	0.012	0.166	0.134
Utilities	131	0.023	0.232	0.155
Real Estate	29	0.069	0.291	0.216
Unclassified	368	0.033	0.190	0.164
Total	2873	0.025	0.186	0.150

Table 5: Summary Statistics of Variables

This table shows summary statistics of variables for firms targeted by climate proposals and non-climate proposals respectively. Abnormal returns on the day of the vote are computed using the four-factor model. All Compustat variables are computed in the fiscal year that ends prior to the date of the vote. $\text{Log}(\text{assets})$ is the book value of total assets in logarithm (at). ROE (return on equity) is the ratio of operating income ($ebit$) to the book value of equity (ceq) plus deferred taxes and investment tax credit ($txditc$). Equity issuance is the ratio of sale of common and preferred stock ($sstk$) to the book value of total assets. Cash is the ratio of cash and short-term investments (che) to total assets. Leverage is the ratio of debt in current liabilities (dlc) and long-term debt ($dltt$) to total assets. $\text{Tobin's } Q$ is the ratio of the market value of total assets to the book value of total assets. The market value of total assets is the book value of total assets plus the market value of equity ($csho \times prcc_f$) minus the sum of the book value of equity (ceq) and deferred taxes ($txdb$). EPS (earnings per share) is net income (ni) divided by the number of common shares. $\text{R\&D}$ is R\&D expenses (xrd) divided by the book value of total assets. $\text{SG\&A}$ is SG\&A expenses ($xsga$) divided by the book value of total assets. $\text{Institutional ownership}$ is the share of institutional holding. $E \text{ score}$ is LSEG environmental pillar score. $\text{Polluting industry}$ is a dummy variable which equals 1 if GICS industry sector of the firm is Energy (10), Materials (15), Industrials (20), or Utilities (55); and equals 0 otherwise. All ratios are trimmed at the 1.5th percentiles on each side.

	Other			Climate			Diff in Mean
	N	Mean	SD	N	Mean	SD	
$AR(0)$	1400	0.0005	0.0175	271	0.0000	0.0176	-0.0005
$\text{Log}(\text{assets})$	1624	9.8234	1.6838	317	10.1448	1.5587	0.3214***
ROE	1623	0.2682	0.3951	317	0.1858	0.3218	-0.0824***
Equity issuance	1624	0.0086	0.0144	317	0.0068	0.0144	-0.0018**
Cash	1622	0.1254	0.1248	317	0.0797	0.0973	-0.0456***
Leverage	1616	0.2681	0.1758	317	0.3017	0.1628	0.0335***
$\text{Tobin's } Q$	1483	2.4874	1.6831	310	1.8970	1.2037	-0.5905***
EPS	1623	2.6556	3.2614	317	2.3524	3.6191	-0.3032
$\text{R\&D}$	1624	0.0175	0.0328	317	0.0059	0.0213	-0.0116***
$\text{SG\&A}$	1350	0.1846	0.1503	209	0.1219	0.1506	-0.0628***
$\text{Institutional ownership}$	1657	0.7545	0.1797	322	0.7500	0.1783	-0.0045
$E \text{ score}$	1378	53.1532	26.0463	284	51.1826	25.1086	-1.9706
$\text{Polluting industry}$	1630	0.2883	0.4531	317	0.7035	0.4574	0.4151***

Table 6: Votes for Climate Proposals

This table shows the relationship between votes cast for the proposal and the issue of proposal. *Climate* is a dummy variable which equals 1 if the proposal relates to climate, and 0 otherwise. *Disclosure* is a dummy variable which equals 1 if the proposal requests disclosure on climate-related information, and 0 otherwise. *Prescriptive* is a dummy variable which equals 1 if the proposal requests specific actions to tackle climate change, such as setting carbon emission goals, and 0 otherwise.

	(1) Votes Cast For	(2) Votes Cast For	(3) Votes Cast For	(4) Votes Cast For
<i>Climate</i>	0.0031 (0.0071)	-0.0002 (0.0078)		
<i>Disclosure</i>			0.0142* (0.0084)	0.0061 (0.0091)
<i>Prescriptive</i>			-0.0217** (0.0093)	-0.0133 (0.0105)
Year FE	Y	Y	Y	Y
Firm FE	Y	N	Y	N
Industry FE	N	Y	N	Y
Firm-level controls	Y	Y	Y	Y
Sponsor-type FE	Y	Y	Y	Y
Adj. R ²	0.809	0.693	0.810	0.694
Observations	1879	1879	1879	1879

Standard errors (clustered at the firm level) are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Table 7: Paris Agreement and Votes for Climate Proposals

This table shows the effect of the Paris Agreement on shareholders votes for climate proposals. *Climate* is a dummy variable which equals 1 if the proposal relates to climate, and 0 otherwise. *Disclosure* is a dummy variable which equals 1 if the proposal requests disclosure on climate-related information, and 0 otherwise. *Prescriptive* is a dummy variable which equals 1 if the proposal requests specific actions to tackle climate change, such as setting carbon emission goals, and 0 otherwise. *Post* is a dummy variable which equals 1 if shareholder meeting was held after 2015-12-12, and 0 otherwise.

	(1) Votes Cast For	(2) Votes Cast For	(3) Votes Cast For	(4) Votes Cast For
<i>Climate</i>	-0.0137* (0.0070)	-0.0179** (0.0083)		
<i>Post</i> $\times$ <i>Climate</i>	0.0444*** (0.0141)	0.0426*** (0.0142)		
<i>Disclosure</i>			-0.0096 (0.0074)	-0.0178** (0.0089)
<i>Post</i> $\times$ <i>Disclosure</i>			0.0628*** (0.0170)	0.0593*** (0.0177)
<i>Prescriptive</i>			-0.0205* (0.0108)	-0.0155 (0.0120)
<i>Post</i> $\times$ <i>Prescriptive</i>			-0.0027 (0.0157)	0.0057 (0.0199)
Year FE	Y	Y	Y	Y
Firm FE	Y	N	Y	N
Industry FE	N	Y	N	Y
Firm-level controls	Y	Y	Y	Y
Sponsor-type FE	Y	Y	Y	Y
Adj. R ²	0.810	0.695	0.812	0.696
Observations	1879	1879	1879	1879

Standard errors (clustered at the firm level) are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Table 8: Paris Agreement, Trump's Intention to Withdraw and Votes for Climate Proposals

This table shows the effect of the Paris Agreement and Trump's intention to withdraw on shareholders votes for climate proposals. *Climate* is a dummy variable which equals 1 if the proposal relates to climate, and 0 otherwise. *Disclosure* is a dummy variable which equals 1 if the proposal requests disclosure on climate-related information, and 0 otherwise. *Prescriptive* is a dummy variable which equals 1 if the proposal requests specific actions to tackle climate change, such as setting carbon emission goals, and 0 otherwise. *Post*₁ is a dummy variable which equals 1 if shareholder meeting was held after 2015-12-12 and before 2017-06-01, and 0 otherwise. *Post*₂ is a dummy variable which equals 1 if shareholder meeting was held after 2017-06-01, and 0 otherwise.

	(1) Votes Cast For	(2) Votes Cast For	(3) Votes Cast For	(4) Votes Cast For
<i>Climate</i>	-0.0137* (0.0070)	-0.0178** (0.0083)		
<i>Post</i> ₁ × <i>Climate</i>	0.0471** (0.0186)	0.0483*** (0.0178)		
<i>Post</i> ₂ × <i>Climate</i>	0.0408** (0.0177)	0.0371* (0.0198)		
<i>Disclosure</i>			-0.0094 (0.0074)	-0.0179** (0.0089)
<i>Post</i> ₁ × <i>Disclosure</i>			0.0705*** (0.0258)	0.0608** (0.0265)
<i>Post</i> ₂ × <i>Disclosure</i>			0.0552*** (0.0205)	0.0589*** (0.0224)
<i>Prescriptive</i>			-0.0202* (0.0108)	-0.0151 (0.0120)
<i>Post</i> ₁ × <i>Prescriptive</i>			0.0094 (0.0182)	0.0268 (0.0193)
<i>Post</i> ₂ × <i>Prescriptive</i>			-0.0427** (0.0170)	-0.0266 (0.0325)
Year FE	Y	Y	Y	Y
Firm FE	Y	N	Y	N
Industry FE	N	Y	N	Y
Firm-level controls	Y	Y	Y	Y
Sponsor-type FE	Y	Y	Y	Y
Adj. R ²	0.810	0.695	0.812	0.696
Observations	1879	1879	1879	1879

Standard errors (clustered at the firm level) are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Table 9: Pre-existing Differences

This table tests whether the adoption of CSR proposals is systematically related to firm characteristics prior to the meeting. All characteristics are defined in Table 5. In columns (1) and (2), these characteristics are measured in the year prior to the shareholder meeting ($t - 1$). Columns (3) and (4) consider the change in these characteristics between years $t - 2$ and $t - 1$. Each row corresponds to a different characteristic and each entry comes from a separate regression. Columns (1) and (3) report the differences among all firms, whereas columns (2) and (4) report the differences at the majority threshold by controlling for a third-order polynomial in the vote share on both sides of the threshold.

	$t - 1$		Change $t - 2$ to $t - 1$	
	(1)	(2)	(3)	(4)
<i>Log(assets)</i>	-0.5868* (0.3390)	-0.5909 (0.8635)	-0.0217 (0.0303)	-0.0536 (0.0570)
<i>ROE</i>	-0.1286** (0.0648)	-0.4345 (0.2823)	-0.0177 (0.0590)	-0.2007 (0.3165)
<i>Equity issuance</i>	-0.0007 (0.0053)	0.0303 (0.0280)	-0.0026 (0.0066)	0.0210 (0.0294)
<i>Cash</i>	-0.0420*** (0.0119)	-0.0099 (0.0342)	-0.0035 (0.0056)	0.0111 (0.0105)
<i>Leverage</i>	0.0243 (0.0283)	0.0151 (0.0650)	0.0316** (0.0154)	0.0373 (0.0414)
<i>Tobin's Q</i>	0.1252 (0.2449)	-0.7131* (0.4167)	-0.0570 (0.0926)	-0.3474 (0.2427)
<i>EPS</i>	-1.0431 (0.6378)	-2.9162 (2.6297)	0.4319 (0.8930)	-0.5031 (2.7425)
<i>R&D</i>	-0.0032 (0.0023)	0.0062 (0.0054)	-0.0001 (0.0003)	0.0009 (0.0006)
<i>SG&A</i>	-0.0407 (0.0307)	0.0021 (0.0500)	-0.0071 (0.0095)	0.0134 (0.0094)
<i>Institutional ownership</i>	0.0917** (0.0422)	0.1707 (0.1075)	0.0165** (0.0081)	0.0350 (0.0216)
<i>E score</i>	-3.2227 (6.1198)	-23.5354* (13.0574)	4.0161 (3.6180)	-4.6080 (6.3348)
<i>Polluting industry</i>	0.2003** (0.0835)	0.0786 (0.1644)	/	/
Polynomial in vote share	N	Y	N	Y

Standard errors (clustered at the firm level) are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Table 10: Market Reaction on the Voting Day

This table presents regressions of the abnormal returns on the voting day on the pass dummy, i.e., a dummy variable that equals 1 if the proposal is passed and 0 otherwise. Abnormal returns are computed using the four-factor model. Columns (1)-(3) restrict the sample to CSR proposals whose vote share is within 2.5%, 5%, 10% respectively, of the majority threshold, and estimate Equation 5.1. Column (4) estimates the specification given by Equation 5.1 in the full sample. This specification controls for two polynomials of order 3 in the vote share on both sides of the majority threshold. Column (5) is a variant of the specification in column (4), except that the regression also includes control variables. The control variables include the logarithm of total assets, ROE, Tobin's Q, leverage, cash ratio, institutional ownership, and environmental score, as well as year dummies.

	(1) (−2.5%, 2.5%)	(2) (−5%, 5%)	(3) (−10%, 10%)	(4) all with poly.	(5) all with controls
<i>Pass</i>	0.0547***	0.0207**	0.0169**	0.0406***	0.0395***
SE	0.006	0.0088	0.007	0.0131	0.0139
Adj. R ²	0.6051	0.2624	0.1132	0.0411	0.0925
Observations	8	18	36	254	135

Standard errors (clustered at the firm level) are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Table 11: Dynamic Effects

The regression estimates the effect of passing a proposal which requires report on climate risk on the four-factor abnormal returns on the day previous to the vote ($d - 1$), the day of the vote (d), the day after the vote ($d + 1$), and the next 6 days on average ($d + 2 \sim d + 7$). The regression specification is given by Equation 5.1, in which multiple CSR proposals in a given meeting are aggregated. The regression includes meeting fixed effects, distance-to-the-election fixed effects, as well as year fixed effects.

	AR
<i>Pass</i> $d - 1$	0.0128 (0.0111)
<i>Pass</i> d	0.0347*** (0.0087)
<i>Pass</i> $d + 1$	0.0192** (0.0094)
<i>Pass</i> $d + 2 \sim d + 7$	-0.0044 (0.0078)
Adj. R^2	-0.017
Observations	1284

Standard errors (clustered at the firm level) are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Appendix

Table A1: Disclosure-Requesting Proposal Descriptions (Part 1)

Adopt Report on Plans to Reduce Greenhouse Gas from Products and Operations; Annually Assess Portfolio Impacts of Policies to Meet 2 Degree Scenario; Annually Report Reserve Replacements in BTUs; Assess Benefits of Adopting Renewable Energy Goals; Assess Climate Benefits and Feasibility of Adopting Quantitative Renewable Production Goals; Assess Energy Use and Establish Reduction Targets; Assess Feasibility and Benefits of Adopting Quantitative Renewable Energy Goals; Assess Impact of a 2 Degree Scenario; Assess Plans to Increase Distributed Low-Carbon Electricity Generation; Assess Portfolio Impacts of Policies to Meet 2 Degree Scenario; Assess and Report on Exposure to Climate Change Risks; Assess and Report on Transition to a Low Carbon Economy; Disclose Business Strategy for Aligning with 2 Degree Warming Goal; Disclose GHG Emissions Caused by Individual Products via Product Packaging; Disclose Information Supporting the Company Position on Climate Change; Electrification of the Transportation Sector Study; Prepare Carbon Principles Report; Prepare a Global Warming Report; Publish a Scientific Global Warming Report; Report Analyzing Profit Potential Based on Renewable Energy Metrics; Report Analyzing Renewable Energy Adoption; Report Influence on Government Regulation of Fuel Economy Standards; Report of Greenhouse Gas Emissions; Report on Actions to Reduce Impact of Enhanced Oil Recovery; Report on Benefits of Adopting Renewable Energy Goals; Report on Biomass Carbon Footprint and Assess Risks; Report on Capital Expenditure Strategy with Respect to Climate Change Policy; Report on Carbon Dioxide Emissions Information at Gas Stations; Report on Carbon Principles; Report on Climate Change; Report on Climate Change Business Risk; Report on Climate Change Business Risks; Report on Climate Change Financing Risk; Report on Climate Change Impacts on Emerging Countries; Report on Climate Change Initiatives; Report on Climate Change Policies; Report on Climate Change Position and Proxy Voting; Report on Climate Change Research; Report on Climate Lobbying; Report on Climate Lobbying Aligned with Paris Agreement Goals; Report on Coal Combustion Waste Hazard and Risk Mitigation Efforts; Report on Company Policies for Compliance with the Kyoto Protocol; Report on Costs & Benefits of Climate-Related Expenditures; Report on Costs and Benefits of Climate-Related Activities; Report on Costs of Renewable Energy Investments; Report on Dioxin; Report on Distributed Renewable Generation Resources; Report on Emission Reduction Goals; Report on Emissions; Report on Encouraging Customer Use of Renewable Energy Systems; Report on Energy Efficiency; Report on Energy Efficiency Policy; Report on Energy Efficiency and Renewable Energy Programs; Report on Energy Technologies Development; Report on Environmental Impact of Oil Sands Operations in Canada; Report on Feasibility of Adopting GHG Disclosure and Management; Report on Feasibility of Adopting GHG Emissions Targets; Report on Feasibility of Net-Zero GHG Emissions; Report on Financial Risks From Climate Change; Report on Financial Risks of Climate Change

Table A1: Disclosure-Requesting Proposal Descriptions (Part 2)

Report on Financial Risks of Coal Reliance; Report on Financial Risks of Stranded Carbon Assets; Report on Financial and Physical Risks of Climate Change; Report on Fleet GHG Emissions in Relation to CAFE Standards; Report on GHG Emission Reduction Scenarios; Report on GHG Emissions Reductions From Products and Operations; Report on GHG emission Reduction Scenarios; Report on Global Warming; Report on Global Warming Lobbying Activities; Report on Global Warming Science; Report on Global Warming-Related Lobbying Activities; Report on Goals to Reduce Greenhouse Gas Emissions; Report on Greenhouse Gas Emissions; Report on Greenhouse Gas Emissions Disclosure; Report on Greenhouse Gas Emissions Goals; Report on Greenhouse Gas Emissions and Future Reductions; Report on Impacts and Risks of Natural Gas; Report on Impacts of and Plans to Align with Global Climate Change Policy; Report on Insurance Division's Response to Climate Change Risks; Report on Methane Emissions; Report on Methane Emissions Management; Report on Methane Emissions Management and Reduction Targets; Report on Methane Emissions Management, Including Reduction Targets; Report on Methane Emissions Management, Pipeline Maintenance and Reduction Targets; Report on Methane Emissions and Flaring Targets; Report on Methane Leaks & Management Actions; Report on Methane and Flaring Emissions Management and Reduction Targets; Report on Mitigating Health and Climate Impacts of Duke Energy's Coal Use; Report on Net-Zero Greenhouse Gas Emissions; Report on Petrochemical Risk; Report on Plans to Adapt to Distributed Energy Generation and Energy Efficiency Changes in Sector; Report on Plans to Address Stranded Carbon Asset Risks; Report on Plans to Increase Renewable Energy Use; Report on Plans to Reduce Carbon Footprint Aligned with Paris Agreement Goals; Report on Plans to Reduce Coal-Related Costs and Risks; Report on Plans to Reduce Greenhouse Gas from Products and Operations; Report on Power Plant Emissions; Report on Reducing GHG Emissions; Report on Reducing GHGs from Products and Operations; Report on Renewable Energy; Report on Renewable Energy Adoption; Report on Renewable Energy Practices; Report on Report on Coal Combustion Residual Matters at San Juan Generating Station; Report on Reputational Risk Related to Canadian Oil Sands, Oil Sands Pipeline Companies and Arctic Oil and Gas Exploration and Production.; Report on Risks Associated with Repeal of Climate Change Policies; Report on Risks and Costs of Sea Level Rise; Report on Risks of Alternative Long-term Fossil Fuel Demand Estimates; Report on Risks of Gulf Coast Petrochemical Investments; Report on Steps Taken to Improve Board Oversight of Climate Change Risk; Report on Strategy for Aligning with 2 Degree Scenario; Report on Sustainability, Including GHG Goals; Report on Transition to a Low Carbon Business Model; Report on Water/Energy Efficient Showerheads; Report on and Assess Proxy Voting Policies in Relation to Climate Change Position; Report on the Adoption of Quantitative GHG Reduction Goals; Report on the Equator Principles; Report on the Feasibility of Achieving Net Zero GHG Emissions; Request a Study of the Electrification of the Transportation Sector; Review Public Policy Advocacy on Climate Change; Scientific Report on Global Warming

Table A2: Prescriptive Proposal Descriptions

Adopt Climate Change Policy; Adopt GHG Emissions Reduction Goals; Adopt GHG and Other Air Emissions Reduction Goals; Adopt Global Warming Principles; Adopt Greenhouse Gas Emission Reduction Goals; Adopt Greenhouse Gas Emissions Goals; Adopt Greenhouse Gas Emissions Goals for Products and Operations; Adopt Greenhouse Gas Goals for Products and Operations; Adopt Low Carbon Energy Policy; Adopt Policy Acknowledging the Imperative for 2 Degree Limit; Adopt Policy to Increase Renewable Energy; Adopt Policy to Increase Renewable Energy Portfolio; Adopt Quantitative Carbon Dioxide Reduction Goals; Adopt Quantitative Company-wide GHG Goals; Adopt Quantitative Company-Wide GHG Goals; Adopt Quantitative Emissions Goals; Adopt Quantitative GHG Goals From Operations; Adopt Quantitative GHG Goals for Maritime Shipping; Adopt Quantitative GHG Goals for Operations; Adopt Quantitative GHG Goals for Operations, Including Methane Emissions; Adopt Quantitative GHG Goals for Products and Operations; Adopt Quantitative GHG Goals from Products and Operations; Adopt Quantitative GHG goals from Products and Operations; Adopt Quantitative Goals for GHG and Other Air Emissions; Adopt Quantitative Renewable Energy Goals; Adopt Renewable Energy Production Goal; Adopt and Report on Science-Based GHG Emissions Reduction Targets; Amend GHG Emissions Policies to Limit Coal Financing; Create Feasibility Plan for Net-Zero GHG Emissions; Create Feasibility Plan for Net-Zero GHG Emissions, Including for Major Suppliers; Establish Board Committee on Climate Risk; Establish Fossil-Fuel-Free Energy Goal; Examine and Take Active Steps to Participate in Natural Gas Local Distribution Sector; Increase Return of Capital to Shareholders in Light of Climate Change Risks; Increase Return of Capital to Shareholders in Light of Climate Change Risks; Prohibit Energy Projects Only Concerned With CO2 Reduction; Require Divestment from Fossil Fuels

Table A3: (Part 1) Paris Agreement, Trump's Intention to Withdraw and Votes for Climate Proposals (Full Table)

This table shows the effect of the Paris Agreement and Trump's intention to withdraw on shareholders votes for climate proposals. Column (1) and (2) report all the coefficients of Table 8. *Climate* is a dummy variable which equals 1 if the proposal relates to climate, and 0 otherwise. *Disclosure* is a dummy variable which equals 1 if the proposal requests disclosure on climate-related information, and 0 otherwise. *Prescriptive* is a dummy variable which equals 1 if the proposal requests specific actions to tackle climate change, such as setting carbon emission goals, and 0 otherwise. *Post*₁ is a dummy variable which equals 1 if shareholder meeting was held after 2015-12-12 and before 2017-06-01, and 0 otherwise. *Post*₂ is a dummy variable which equals 1 if shareholder meeting was held after 2017-06-01, and 0 otherwise.

	(1) Votes Cast For	(2) Votes Cast For
<i>Disclosure</i>	-0.0094 (0.0074)	-0.0179** (0.0089)
<i>Post</i> ₁ × <i>Disclosure</i>	0.0705*** (0.0258)	0.0608** (0.0265)
<i>Post</i> ₂ × <i>Disclosure</i>	0.0552*** (0.0205)	0.0589*** (0.0224)
<i>Prescriptive</i>	-0.0202* (0.0108)	-0.0151 (0.0120)
<i>Post</i> ₁ × <i>Prescriptive</i>	0.0094 (0.0182)	0.0268 (0.0193)
<i>Post</i> ₂ × <i>Prescriptive</i>	-0.0427** (0.0170)	-0.0266 (0.0325)

(Continued)

Table A3: (Part 2)

<i>ISSrec</i>	0.2087*** (0.0092)	0.2215*** (0.0091)
<i>Pension</i>	0.0238* (0.0132)	0.0087 (0.0135)
<i>Religious group</i>	0.0070 (0.0081)	-0.0177* (0.0099)
<i>Asset manager</i>	0.0024 (0.0083)	-0.0080 (0.0103)
<i>NGO</i>	0.0021 (0.0072)	-0.0127 (0.0092)
<i>Other institution</i>	0.0047 (0.0153)	-0.0074 (0.0167)
<i>Sponsor missing</i>	0.0067 (0.0076)	-0.0111 (0.0091)
<i>Coordinated group</i>	0.0271*** (0.0104)	0.0166 (0.0128)
<i>ROE</i>	0.0093** (0.0045)	0.0046 (0.0053)
<i>Tobin's Q</i>	0.0028 (0.0023)	0.0083*** (0.0025)
<i>Log(assets)</i>	-0.0193** (0.0080)	-0.0055 (0.0054)
<i>Leverage</i>	-0.0493 (0.0300)	-0.0386* (0.0221)
<i>Cash</i>	0.0169 (0.0301)	-0.0535 (0.0330)
<i>SG&A</i>	-0.1111 (0.0751)	-0.0178 (0.0471)
<i>R&D</i>	0.2203 (0.3249)	-0.4999*** (0.1922)
<i>Institutional ownership</i>	-0.0012 (0.0394)	0.1176** (0.0504)
<i>E score</i>	0.0003* (0.0002)	0.0001 (0.0002)
Year FE	Y	Y
Firm FE	Y	N
Industry FE	N	Y
Firm-level controls	Y	Y
Sponsor-type FE	Y	Y
Adj. R ²	0.812	0.696
Observations	1879	1879

Standard errors (clustered at the firm level) are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Table A4: Paris Agreement, Trump's Intention to Withdraw and Votes for Climate Proposals (Robustness)

This table shows the effect of the Paris Agreement and Trump's intention to withdraw on shareholders votes for climate proposals. Column (1) and (2) use a subsample of proposals submitted from 2012 onward. Column (3) and (4) use a subsample of environmental proposals. *Climate* is a dummy variable which equals 1 if the proposal relates to climate, and 0 otherwise. *Disclosure* is a dummy variable which equals 1 if the proposal requests disclosure on climate-related information, and 0 otherwise. *Prescriptive* is a dummy variable which equals 1 if the proposal requests specific actions to tackle climate change, such as setting carbon emission goals, and 0 otherwise. *Post*₁ is a dummy variable which equals 1 if shareholder meeting was held after 2015-12-12 and before 2017-06-01, and 0 otherwise. *Post*₂ is a dummy variable which equals 1 if shareholder meeting was held after 2017-06-01, and 0 otherwise.

	from 2012		E subsample	
	(1) Votes Cast For	(2) Votes Cast For	(3) Votes Cast For	(4) Votes Cast For
<i>Disclosure</i>	-0.0211 (0.0196)	-0.0312 (0.0199)	0.0085 (0.0078)	-0.0113 (0.0096)
<i>Post</i> ₁ × <i>Disclosure</i>	0.0759*** (0.0224)	0.0700** (0.0286)	0.0826*** (0.0289)	0.0925*** (0.0300)
<i>Post</i> ₂ × <i>Disclosure</i>	0.0686*** (0.0252)	0.0681** (0.0274)	0.0662** (0.0259)	0.0512** (0.0257)
<i>Prescriptive</i>	-0.0331* (0.0183)	-0.0220 (0.0185)	-0.0021 (0.0117)	-0.0086 (0.0150)
<i>Post</i> ₁ × <i>Prescriptive</i>	0.0163 (0.0227)	0.0295 (0.0238)	0.0172 (0.0259)	0.0416* (0.0241)
<i>Post</i> ₂ × <i>Prescriptive</i>	-0.0362* (0.0209)	-0.0305 (0.0331)	-0.0308 (0.0242)	-0.0536 (0.0379)
Year FE	Y	Y	Y	Y
Firm FE	Y	N	Y	N
Industry FE	N	Y	N	Y
Firm-level controls	Y	Y	Y	Y
Sponsor-type FE	Y	Y	Y	Y
Adj. R ²	0.821	0.662	0.852	0.718
Observations	1102	1102	513	513

Standard errors (clustered at the firm level) are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Table A5: Paris Agreement, Trump’s Intention to Withdraw and Votes for Climate Proposals (Selection Effect)

This table shows the effect of the Paris Agreement and Trump’s intention to withdraw on shareholders votes for climate proposals. Column (1) uses a matched sample in which each disclosure or prescriptive proposal is paired with a non-climate proposal from the same meeting. Column (2) uses the full sample while controlling for sponsor fixed effects rather than sponsor type fixed effects. Column (3) uses a matched sample in which each disclosure or prescriptive proposal is paired with a non-climate proposal submitted by the same sponsor in the same year. *Climate* is a dummy variable which equals 1 if the proposal relates to climate, and 0 otherwise. *Disclosure* is a dummy variable which equals 1 if the proposal requests disclosure on climate-related information, and 0 otherwise. *Prescriptive* is a dummy variable which equals 1 if the proposal requests specific actions to tackle climate change, such as setting carbon emission goals, and 0 otherwise. *Post*₁ is a dummy variable which equals 1 if shareholder meeting was held after 2015-12-12 and before 2017-06-01, and 0 otherwise. *Post*₂ is a dummy variable which equals 1 if shareholder meeting was held after 2017-06-01, and 0 otherwise.

	(1) Votes Cast For	(2) Votes Cast For	(3) Votes Cast For
<i>Disclosure</i>	-0.0101 (0.0062)	-0.0312 (0.0199)	-0.0319 (0.0298)
<i>Post</i> ₁ × <i>Disclosure</i>	0.0697*** (0.0217)	0.0700** (0.0286)	0.1007*** (0.0259)
<i>Post</i> ₂ × <i>Disclosure</i>	0.0623*** (0.0188)	0.0681** (0.0274)	0.0799** (0.0309)
<i>Prescriptive</i>	0.0010 (0.0108)	-0.0220 (0.0185)	-0.0205 (0.0286)
<i>Post</i> ₁ × <i>Prescriptive</i>	-0.0150 (0.0207)	0.0295 (0.0238)	-0.0215 (0.0372)
<i>Post</i> ₂ × <i>Prescriptive</i>	-0.0587*** (0.0219)	-0.0305 (0.0331)	-0.1410* (0.0788)
Year FE	N	Y	Y
Firm FE	N	Y	Y
Meeting FE	Y	N	N
Industry FE	N	N	N
Firm-level controls	N	Y	N
Sponsor-type FE	Y	N	N
Sponsor FE	N	Y	Y
Adj. R ²	0.854	0.662	0.770
Observations	410	1102	388

Standard errors (clustered at the firm level) are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Table A6: Paris Agreement, Trump's Intention to Withdraw and Votes for Climate Proposals (Shifts in Targets/Sponsors)

This table shows the effect of the Paris Agreement and Trump's intention to withdraw on shareholders votes for climate proposals. Column (1) and (2) use a subsample of proposals targeting the same firms in all three periods. Column (3) and (4) use a subsample of proposals targeted by the same sponsors in all three periods. *Climate* is a dummy variable which equals 1 if the proposal relates to climate, and 0 otherwise. *Disclosure* is a dummy variable which equals 1 if the proposal requests disclosure on climate-related information, and 0 otherwise. *Prescriptive* is a dummy variable which equals 1 if the proposal requests specific actions to tackle climate change, such as setting carbon emission goals, and 0 otherwise. *Post*₁ is a dummy variable which equals 1 if shareholder meeting was held after 2015-12-12 and before 2017-06-01, and 0 otherwise. *Post*₂ is a dummy variable which equals 1 if shareholder meeting was held after 2017-06-01, and 0 otherwise.

	Same Firms		Same Sponsors	
	(1)	(2)	(3)	(4)
	Votes Cast For	Votes Cast For	Votes Cast For	Votes Cast For
<i>Disclosure</i>	-0.0064 (0.0102)	-0.0097 (0.0108)	-0.0611* (0.0350)	-0.0711** (0.0301)
<i>Post</i> ₁ × <i>Disclosure</i>	0.0589* (0.0305)	0.0520 (0.0339)	0.0725*** (0.0264)	0.0734** (0.0327)
<i>Post</i> ₂ × <i>Disclosure</i>	0.0662** (0.0318)	0.0538* (0.0314)	0.0768** (0.0312)	0.1055*** (0.0340)
<i>Prescriptive</i>	0.0135* (0.0079)	0.0015 (0.0105)	-0.0175 (0.0302)	-0.0252 (0.0250)
<i>Post</i> ₁ × <i>Prescriptive</i>	0.0008 (0.0071)	-0.0035 (0.0078)	-0.0094 (0.0180)	-0.0041 (0.0287)
<i>Post</i> ₂ × <i>Prescriptive</i>	-0.0521*** (0.0130)	-0.0553*** (0.0150)	-0.1793*** (0.0372)	-0.1334*** (0.0307)
Year FE	Y	Y	Y	Y
Firm FE	Y	N	Y	N
Industry FE	N	Y	N	Y
Firm-level controls	Y	Y	Y	Y
Sponsor-type FE	Y	Y	N	N
Sponsor FE	N	N	Y	Y
Adj. R ²	0.804	0.759	0.845	0.718
Observations	968	968	716	716

Standard errors (clustered at the firm level) are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.