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Proxy Advisory Firms and Corporate Shareholder Engagement

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Abstract

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Keywords: Proxy advisors, ISS, shareholder engagement, executive compensation, CD&A disclosures

JEL Classifications: D72, D82, G34, G38, M12

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1. Introduction

Proxy advisors (PAs) play a key governance role by providing voting recommendations to investors. PAs conduct research on a variety of issues and, in turn, have considerable influence on voting outcomes (Ertimur et al., 2013; Malenko and Shen, 2016). The literature, however, is mixed as to whether PAs have a positive or negative influence on governance and firm value. Some point to the positive monitoring aspects of PA recommendations (Malenko and Malenko, 2019; Albuquerque et al., 2020), while others link PAs to standardization of pay plans and a reduction in firm value (Larcker et al., 2015; Cabezon, 2020). Consistent with the arguments and evidence presented by the latter group of studies, the influence of PA firms—in particular, of the largest PA firm, ISS—has attracted recent scrutiny from market participants and regulators (Li, 2018; SEC, 2020).[1]

In this paper, we revisit the role of PAs through the lens of shareholder engagement.[2] We first investigate whether PAs can substantively influence firms' engagement policies. Given the increased demand for shareholder engagement by market participants and regulators, evidence of PA influence on engagement practices can add to our understanding of whether PAs can have a disciplinary spillover effect by inducing desirable firm behavior.[3] Second, we investigate the concerns raised by shareholders during engagement and firms' responsiveness to those issues. Such evidence can contribute to our knowledge of how shareholders shape corporate practices.

Although PAs have no legal standing to enforce engagement in firms, our inquiry into the influence of PAs on engagement is motivated by two factors. First, institutional theory argues that private decentralized organizations (such as PAs) can have a powerful effect in shaping firm behavior due to a threat of economic sanctions (Ingram and Silverman, 2002; Delmas and Toffel, 2008). Second, recent surveys of corporate directors (Hayne and Vance, 2019) and institutional investors (McCahery et al., 2016) suggest that an important role of PAs is to facilitate company and investor interactions.

We exploit a level of Say-On-Pay (SOP) voting opposition where ISS calls for an explicit response. When a firm's SOP voting support falls below 70%, ISS conducts a qualitative review of firms' shareholder engagement efforts and responsiveness to concerns before the next annual meeting. In its stated policies,

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[1] ISS has a US market share of over 60% (Shu, 2021) and covers more than 44,000 shareholder meetings for over 1,600 institutional clients. The size and market power of ISS has drawn recent scrutiny from the SEC. See https://corpgov.law.harvard.edu/2020/08/08/initial-perspectives-and-implications-of-sec-proxy-advisory-reform/.

[2] We follow ISS in defining engagement as individual discussions between firms and investors. See ISS, Shareholder Engagement: Maximizing the Shareholder Relationship, 2013, https://www.issgovernance.com/file/publications/MaximizingTheShareholderRelationshipVol_13.3.pdf.

[3] See Fairfax (2013) for discussions on a rising demand for engagement. The SEC has also called for greater engagement. For example, Chair Mary Schapiro implored directors to have, "clear conversations with investors with how a company is governed." See http://www.sec.gov/news/speech/2010/spch101910mls.htm. Similarly, Chair Jay Clayton noted, "Shareholder engagement is a hallmark of our public capital markets." See https://www.sec.gov/news/public-statement/statement-announcing-sec-staff-roundtable-proxy-process.

ISS outlines the disclosure elements required for firms to demonstrate a robust engagement response to a low vote. Depending on the degree of the reported response in the subsequent proxy statement, ISS either issues a favorable recommendation and ceases enhanced monitoring of the firm, or threatens to recommend voting against SOP, members of the compensation committee, and potentially the entire board.

Our identifying assumption is that, around the 70% threshold, receiving ISS treatment is as good as random since firms cannot precisely manipulate the SOP vote. To test this assumption, we plot SOP voting outcomes and find a smooth distribution across the threshold with no sharp changes on either side. Moreover, a formal test of the marginal density around the 70% cutoff fails to uncover any discontinuities in the assignment variable. We then test for pre-treatment differences in prior SOP voting, firm characteristics, CEO pay, and engagement levels and find no statistical differences in the attributes of firms with SOP support just below 70% (treatment) relative to those just above it (control). Together, these findings support our identification strategy and allow us to attribute changes in investor engagement as being causally impacted by ISS.

We then develop novel disclosure-based measures of the presence and intensity of shareholder engagement and find that ISS-treated firms significantly increase engagement versus control firms in the year after a low SOP vote. Treatment firms also display considerable breadth of engagement. For example, they contact and speak with institutional investors possessing substantively greater ownership stakes than those engaged by control firms. Moreover, ISS-treated firms exhibit substantial depth in their interactions with shareholders as they provide more forthcoming discussions of their engagement efforts in the proxy statement than control firms.

Importantly, shareholder engagement differences expand *beyond* the year after the initial treatment. In a panel regression, we find immediate, large, and enduring increases in shareholder engagement efforts by ISS-treated firms in the years after, and not before, the low SOP vote. Our visual and empirical analyses also fail to falsify the parallel trends assumption, which further support our identification strategy.

The above findings—particularly, the sustained engagement beyond the period of ISS scrutiny—are intriguing, given that SOP votes are non-binding, and failure to meet certain voting thresholds or to engage with shareholders does not invite any SEC penalties. Further, firms around the 70% threshold already have majority SOP support, potentially attenuating the urgency to change their existing engagement policies. This naturally raises the question of whether this effect is present for PAs in general.

To shed light on this notion, we examine the engagement effects of Glass Lewis (GL), which is the second largest PA with about half the US market share of ISS (Shu, 2021). Notably, GL has a stated policy on engagement but utilizes a higher SOP voting cutoff. Using a similar approach, we find a proportionally smaller but significant impact on the presence of shareholder engagement for GL-treated versus control

firms. However, this impact does not persist beyond the year of GL scrutiny, and we find no discernable effect of GL on the intensity of engagement.

In sum, our findings indicate a sustained effect of ISS, but not GL, on firms' shareholder engagement behavior. Additional analyses reveal that firms with weaker ex-ante governance and stock performance exhibit a stronger engagement response to ISS treatment, suggesting that ISS plays a substitute role for poor governance in this setting. Ex-post analyses associate instrumented shareholder engagement with improved stock liquidity, lower information asymmetry, less frequent shareholder activism, and no increases in myopic behavior or reductions in director monitoring. Moreover, we conduct an event study and find that the coupling of ISS recommending against the SOP vote and ISS treatment lead to a positive abnormal market response of 2–3% when the voting results are revealed. These findings imply that greater shareholder engagement can benefit the firm and its investors.

Next, we conduct a textual analysis to identify the topics of shareholder concerns raised during one-on-one conversations. ISS-treated firms disclose 47% more shareholder concerns than controls after a low SOP vote, suggesting that these firms better understand the issues that led to shareholder dissent. Concerns about CEO compensation and incentives as well as elements of pay disclosure and transparency are the most commonly reported concerns by shareholders.

We further investigate changes in properties of the Compensation Discussion & Analysis (CD&A) section of the proxy statement. ISS-treated firms are no more likely than controls to report shareholder concerns with CD&A transparency after engagement. Consistent with the lack of differences, we find no evidence that treated firms differentially alter the length or readability of their pay disclosures after a low SOP vote, which serves as a falsification test. We do, however, find the tone of the CD&A becomes more positive for treated firms, which prior work associates with greater shareholder satisfaction with pay practices (Balsam et al., 2016).

As a second element of pay transparency, we examine changes in firms' compensation benchmark practices based on peer group disclosures. ISS-treated firms report more concerns with the constituents of their compensation peer group, indicating concerns about strategic selection of peers (Faulkender and Yang, 2013). In the years after engagement, ISS-treated firms significantly reduce the size of their peer group versus control firms.

Next, we examine changes in CEO pay. Due to the timing of SOP votes and shareholder engagement, we measure pay changes in year t+2 after the low vote, as compensation components take longer to adjust due to contracting (Armstrong et al., 2013). Our analyses reveal a substantive decline in total CEO pay versus controls. Within the components of CEO pay, treated firms have larger reductions in CEO bonuses, option awards, and stock awards—especially time-vesting equity, which recent work links to lower SOP voting support (Pawliczek, 2018).

Taken together, our analyses indicate that ISS-treated firms respond to shareholder engagement efforts by altering components of CEO compensation and pay transparency that were raised more often as concerns by shareholders. Moreover, treated firms show no tendency to adjust elements of pay or pay disclosure that were not identified as a concern.

Our findings are subject to some limitations. First, our shareholder engagement measures are disclosure-based and might not reflect the true engagement levels. However, some of our measures, such as the shares held by engaged investors, are precise metrics. Given the liability associated with SEC proxy-statement disclosures, we posit that disclosing firms likely convey true engagement behavior. Second, while we find that ISS encourages more engagement, which appears to be beneficial for firms, we cannot determine what level of engagement is optimal for the firm and its investors.

Subject to the above, our study contributes to several literatures. Our primary contribution is to the literature on the economic role of PAs and, in particular, of ISS (e.g., Alexander et al., 2010; Ertimur et al., 2013; Malenko and Shen, 2016; Shu, 2021). We show that ISS has a powerful role in shaping corporate engagement policies. Our analyses causally link ISS policies to greater and enduring shareholder engagement after a low SOP vote, indicating an important spillover effect of ISS on firm behavior. Our results support survey evidence suggesting that PAs can benefit shareholder engagement (McCahery et al., 2016; Hayne and Vance, 2019) and complement research on the impact of PAs on corporate policies (e.g., Daines et al., 2010; Larcker et al., 2013; 2015; Malenko and Malenko, 2019; Albuquerque et al., 2020; Cabezon et al., 2020).

Second, our study contributes to the broader executive compensation literature—especially the strand related to SOP (Ferri and Maber, 2013; Ertimur et al., 2013). We find that firms substantively alter compensation policies after increased engagement. Ertimur et al. (2013) were the first to study pay changes following the introduction of SOP. They provide compelling evidence of a higher probability of pay changes as SOP dissent increases and note the likely role of PAs such as ISS. Our paper complements and adds to their findings by identifying the direction of pay changes and the specific elements of compensation altered following a low vote. Importantly, we tie these changes to concerns raised by shareholders in the engagement process. Overall, our findings suggest that ISS can help align executive pay practices with shareholder interests and complement field evidence in Hayne and Vance (2019).

Third, we extend the disclosure literature on shareholder engagement and executive compensation. Prior work links positive CD&A tone to greater SOP voting support (Balsam et al., 2016). We show that firms' CD&A tone becomes more positive after engaging with shareholders following a low SOP vote and ISS intervention. Moreover, we extend the literature on disclosure of compensation benchmarking practices (Bizjak et al., 2008; 2011; Faulkender and Yang, 2010; 2013) by showing that firms alter their peer firm choices following shareholder engagement.

Fourth, our study is related to the small, but emerging, body of work examining causes and consequences of direct interactions between managers and capital market participants. For example, nascent work links retail investor engagement to lower capital costs (Lee and Zhong, 2021) and sustainability-related discussions to reductions in investors' downside risk (Hoepner et al., 2021). We extend this literature by showing that firms under ISS scrutiny engage more with their institutional investors and appear to enjoy capital market benefits via reductions in bid-ask spreads, stock illiquidity, and activism.

Finally, our results can contribute to the contemporaneous policy debate on the market power of PAs (Li, 2018). We show that PAs facilitate shareholder engagement, and the magnitude of increased engagement is proportional to the market power of ISS and GL. Further, firms are responsive to the concerns raised by shareholders, indicating that their voice gets incorporated into firm practices. While our paper cannot address the debate on whether PAs create or destroy value on net, our evidence that they encourage greater conversations between firms and shareholders is likely to be of interest to academics, market participants, and policymakers.

2. Institutional Background and Conceptual Framework

2.1. Background Information and Brief Literature on Proxy Advisors

PAs provide fee-based voting advice to their clients on company-specific shareholder proposals. PAs develop and revise their voting policies based on research and analysis of regulations, companies, industry practices, and discussions with market participants such as institutional investors (GAO, 2016). Thus, PAs must process substantial amounts of information each year to generate their recommendations (Ertimur et al., 2013). ISS and GL are the two largest PAs in the US with an estimated market share of over 90% (Copeland et al., 2018). Shu (2021) estimates the market share of ISS and GL to be 63% and 28%, respectively, in 2017.

Institutional investors, who are the primary client of PAs, subscribe to PA reports to reduce the costs of making informed voting decisions within diversified portfolios (Malenko and Malenko, 2019). As institutional ownership has risen over the past 20 years, so has the demand for PA services, in part due to the introduction of the SOP voting under Dodd-Frank (SEC, 2011).

PA recommendations are highly influential on voting outcomes (e.g., Choi et al, 2010; Ertimur et al., 2013; Larcker et al., 2015; Malenko and Shen, 2016), and this influence appears to be proportional to their market share. For example, Ertimur et al. (2013) examine the first year of SOP voting in 2011 and find a recommendation by ISS to vote against SOP is associated with a 25% reduction in shareholder support, while GL recommendations are associated with a 13% decline. Similarly, Malenko and Shen (2016) provide causal evidence linking a negative ISS recommendation on SOP to a 25% reduction in voting support.

Some scholars point to "robovoting"—which is the process of blindly following PA recommendations—as one reason for the strong influence of PA's recommendations (Malenko and Shen, 2016; Rose, 2019; Shu, 2021). Others note that institutional investors consider PA advice, but do not uniformly follow their voting recommendations (Aggarwal et al., 2015; Iliev and Lowry, 2015; McCahery et al., 2016; Boone et al., 2020).

There is an ongoing academic debate on whether PAs have a positive or negative effect on governance and firm value (Alexander et al., 2010; Ertimur et al., 2013; Malenko and Shen, 2016; Larcker et al. 2013; 2015; Shu, 2021). For instance, Larcker et al. (2015) find that companies alter pay components to avoid a negative SOP voting recommendation. The market response to these changes is negative, which they interpret as an unintended reduction in shareholder wealth. Malenko and Malenko (2019) provide a model showing that PA recommendations can add value, but only if the quality is sufficiently high. In a working paper, Albuquerque et al. (2020) find that some recommendations are high quality. "Against" recommendations by ISS correlate with declines in future firm performance, but only for those with a non-December fiscal year end, which they interpret as a resource constraint on PA information processing during busy proxy seasons.

2.2. ISS Policy on Shareholder Engagement

According to its stated policies, when an SOP proposal receives less than 70% support of votes cast (for and against), ISS conducts a qualitative review of the firm's responsiveness to shareholder opposition at the next annual meeting. Importantly, ISS does not act as an intermediary that facilitates this communication. Instead, ISS expects firms to engage shareholders and looks for these companies to explicitly disclose several quantitative and qualitative aspects of engagement in the next proxy statement.[4]

First, companies should disclose the number of shareholders with whom they engaged and the percent of outstanding shares they hold. Second, they should disclose who from the company or board spoke with shareholders. Third, the company should disclose the issues raised by shareholders that led to high SOP dissent. Fourth, the company should disclose specific and meaningful actions to address these issues and, if not addressed, provide a justification. Fifth, the company should disclose whether the issues will reoccur and steps taken to ensure they will not.

If the company demonstrates a "sufficiently robust response" in its proxy statement before the next annual meeting, ISS does not monitor disclosures of engagement in future years so long as the SOP vote exceeds the threshold. However, if the company has not demonstrated adequate responsiveness, ISS will

[4] See ISS, U.S. Compensation Policies, Dec. 20, 2018, https://www.issgovernance.com/file/policy/2019/americas/US-Compensation-Policies-FAQ.pdf. In conversations with ISS, they note that the policy was established in 2011 after surveying public companies and institutional investors about the level of SOP voting opposition that should trigger an explicit response. ISS shared the survey results with us, which we summarize in the Internet Appendix.

generally recommend a vote against the SOP proposal and incumbent compensation committee members in the next year. If the board demonstrates what ISS considers to be a "moderate degree of responsiveness," ISS might limit their adverse voting recommendation to the SOP proposal and not recommend voting against compensation committee members. In cases of multiple years of insufficient responsiveness, indicating a systemic problem around board stewardship and oversight, ISS threatens to recommend against the full board.[5]

2.3. Hypotheses Development: Level of Shareholder Engagement

While the value implications of PA recommendations are debatable, we consider a different channel for how PAs—in particular, ISS—can add value by causing a shift in firms' engagement behavior over time. Our inquiry into the role of PAs in shaping firm behavior is couched in the tenets of institutional theory of organizational studies, which examines how different types of institutions shape organizational behavior (e.g., Ingram and Clay, 2000; Ingram and Silverman, 2002; Delmas and Toffel, 2008). Based on this theory, private decentralized organizations—such as norms or codes of behaviors—can have a powerful influence on management behavior, even in the absence of legal sanctions, due to the threat of penalizing non-compliance with economic or social sanctions (Ellickson, 1991; Ingram and Silverman, 2002; Terlaak, 2007).[6]

In our setting, ISS provides an advisory service to its clients, the institutional investors, who own stock in publicly traded firms and vote on shareholder proposals. Since public companies are not clients of ISS, they cannot be directly forced to increase shareholder engagement or alter disclosure practices when SOP voting support falls below the 70% threshold. Instead, the disciplining mechanism is the threat by ISS to provide a negative recommendation on future SOP or director votes if the company fails to demonstrate a robust engagement in the next proxy filing. Given the significant influence of ISS on voting outcomes, we expect that the threat of an "Against" recommendation by ISS at the next shareholder meeting will cause firms to follow ISS requirements by increasing shareholder engagement and providing related details in the subsequent proxy statement following the low SOP vote. These discussions lead to our first hypothesis:

H1a*: Firms with SOP voting support just below 70% will follow the requirements of ISS*

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[5] We verify these policy interpretations with ISS. In addition, ISS shared a voting recommendation report for a company with just under 70% SOP voting support that failed to demonstrate a sufficiently robust response in their next proxy statement. In this example, the ISS report notes that shareholder engagement details were disclosed by the company, but its disclosed shareholder feedback was vague, and no changes were made to pay programs to address the prior low vote results. Thus, ISS followed its stated policies and recommended voting against SOP but did not recommend voting against members of the compensation committee or other directors.

[6] The classification of institutions was introduced by Ingram and Clay (2000). The system classifies institutions based on their scope (public or private), and how are they made and enforced (in centralized or decentralized fashion). States produce public institutions, whereas organizations and individuals create private institutions. Centralized institutions are enforced through designated central functionaries (e.g., courts), whereas decentralized institutions rely on diffuse individuals to punish violations. Based on this classification, ISS would fall under a private decentralized organization.

by increasing shareholder engagement in the following year.

Even if engaging firms receive an ISS "For" SOP recommendation at the next meeting, managers might wish to avoid future negative attention from ISS or shareholders. The reputation concerns of directors could also compel them to demonstrate a continued commitment to shareholder engagement and transparency to avoid the risk of future ISS recommendations "Against" their director election nominations.[7] We posit that firms will respond to this disciplining threat of ISS by continuing to engage shareholders at a greater rate beyond the initial year after a low vote. Beyond the threat of ISS, firms might also continue to engage as the marginal cost might be lower once the infrastructure to engage is in place. Moreover, once they begin engaging, firms might recognize additional benefits of continuous shareholder interactions (e.g., generating goodwill and creating allies). Thus, as an extension of H1a, we conjecture:

> ***H1b****: Increases in shareholder engagement after an SOP voting support just below 70% will not be short lived.*

If our empirical evidence supports H1b, it would be consistent with views expressed by the directors, human resource executives, and compensation consultants interviewed by Hayne and Vance (2019), wherein they indicate that PAs fill a positive role by "*providing an impetus for firms to engage with institutional investors.*" Moreover, McCahery et al. (2016) provide survey evidence showing that institutional investors employing the services of PAs are more likely to engage portfolio companies.

Alternatively, we might not observe support for H1a or H1b for the following reasons. First, SOP votes are non-binding advisory votes, so there is an absence of any SEC penalties for receiving low voting support. Second, even for firms receiving just below 70% support, we might not observe a differential response versus those just above the threshold since they are already an outlier in terms of SOP voting support. For example, during 2011-2019, we find an average of 91% voting support for SOP for all firms. Fewer than 2% of SOP votes fail to receive majority support, on average. Therefore, even in the absence of PAs, firms on both sides of the 70% SOP voting threshold might be compelled to increase shareholder engagement and provide disclosures detailing these efforts to demonstrate responsiveness to investors. Third, firms just above the threshold might anticipate future SOP support falling below the threshold and wish to engage shareholders and avoid ISS scrutiny. Fourth, the GL designation for a low SOP vote that should elicit a response is 75% during 2011 to 2017 and 80% after 2018. Thus, all firms around the 70% threshold would be "treated" with additional scrutiny from GL.[8] Fifth, SOP voting support just below 70%

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[7] In our discussions with ISS, they confirm that once a company demonstrates a sufficiently robust response, it no longer monitors engagement disclosures or factors it into future voting recommendation in t+2 and beyond.

[8] See GL, Proxy Paper Guidelines, https://www.glasslewis.com/wp-content/uploads/2016/11/2017_Guideline_US.pdf; and https://www.glasslewis.com/wp-content/uploads/2017/11/US_Guidelines_2018.pdf.

still indicates that a majority of shareholders approve of executive compensation. Thus, some firms might only respond to shareholder concerns if SOP support falls below 50%.

We might also find support for H1a but not H1b. For example, firms might increase their engagement to satisfy ISS policies in the year after the low SOP vote. To the extent that these engagement efforts are fruitful, SOP voting support rises, and ISS does not recommend voting "Against" SOP, then firms might consider the executive pay problems to be solved. At that point, we might expect engagement levels to revert back to their prior level.

2.4. Hypotheses Development: Firms' Responses to Shareholder Concerns

Our second set of hypotheses examine the firm responsiveness to shareholder concerns regarding CEO pay and related disclosures.

We examine the disclosure properties of the CD&A along three dimensions. First, we expect that some shareholders might express concerns about the length or readability of the CD&A. For example, SEC officials have publicly acknowledged shareholder frustration with the use of boilerplate language and the growing length of CD&A disclosures.[9] Thus, in response to shareholder engagement efforts, firms might reduce the length of their CD&A.

Second, we might also find that CD&A language will become more readable after engaging with shareholders. Laksmana et al. (2012) note that CD&A disclosures are inherently difficult to read, and that management tends to obfuscate compensation disclosures when pay elements diverge from economic performance. Consistent with this notion, Balsam et al. (2016) report that less readable CD&A disclosures tend to be associated with greater SOP voting dissent. Moreover, they find that a positive tone in the CD&A correlates with more SOP voting support. Thus, we might also expect firms to become more positive in their discussions of pay practices after engaging with shareholders and addressing their concerns. However, we might not find this result if the CD&A adjustments simply convey shareholder concerns that lead to the voting dissent, since these concerns are inherently negative. To the extent that shareholders raise concerns over the properties of CD&A transparency, we expect to find support for this hypothesis:

> ***H2a****: Firms receiving SOP voting support just below 70% will alter the length, complexity, and tone of their CD&A disclosure in the following year.*

When a company benchmarks material elements of its executive compensation program, the SEC requires it to identify members of the peer group in the CD&A. Benchmarking is widely used by

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[9] One SEC official noted, "*We've heard that investors are becoming more and more frustrated by the increase in boilerplate language and CD&A length. We hear repeatedly that there is too much unnecessary bulk and we encourage you to see where you can shorten your disclosure by deleting unnecessary background and process-oriented information. The quality of your analysis is not measured by its length. We urge you to step back and make sure the real story is coming through loud and clear*." See Speech by SEC Staff: Executive Compensation Disclosure, November 9, 2009, https://www.sec.gov/news/speech/2009/spch110909sp.htm.

compensation committees to gauge the market wage that should be paid to retain the CEO's valuable human capital. Prior studies find that the use of competitive benchmarking via peer groups significantly influences CEO compensation (Bizjak et al., 2008; 2011).

Given the discretion that boards have in selecting and altering members of its peer group, prior work raises concerns that firms with highly paid CEOs can opportunistically select or adjust peers to "window dress" their compensation as being reasonable (Faulkender and Yang, 2010; 2013). For example, since CEO pay is publicly available information, firms can selectively choose peers in the same industry with highly paid CEOs. Given that size might proxy for firm complexity, firms can also benchmark CEO pay to that of a similar sized firm that operates in another industry. If shareholders raise concerns over peer group constituents, we expect to uncover empirical support for this hypothesis:

> ***H2b****: Firms receiving SOP voting support just below 70% will alter their peer group in the subsequent disclosure.*

Next, we expect that shareholders will raise specific concerns about controversial elements of executive compensation and that, to demonstrate responsiveness, firms will respond by altering these pay components. Prior work finds that firms tend to alter executive pay after receiving more than 20-30% SOP dissent (Ertimur et al., 2013; Ferri and Maber, 2013). For example, Ertimur et al. (2013) study the first year of SOP voting and note that SOP votes rarely fail to obtain majority support. However, they report that the probability of changing some element of compensation increases from 16% with 0-20% dissent to 36% with 20-25% dissent. Moreover, when moving from the 25-30% dissent to 30-35% dissent, they find the probability of altering CEO pay increases to 72%. Ertimur et al. note that the jump around the 30% threshold is likely due to ISS voting guidelines. Although they do not study the direction of pay changes, we expect to find a reduction in total CEO pay due to the negative attention of the low SOP vote and additional ISS scrutiny. To empirically test these outcomes, we state the following hypothesis about total CEO compensation:

> ***H3a****: Firms receiving SOP voting support just below 70% will reduce total CEO compensation.*

Although we expect to find results consistent with Ertimur et al.'s study, several factors provide tension in our conjecture. Ertimur et al. studied the first year of SOP voting and, by extension, focused on a small sample. To the extent that firms were unsure of the consequences of a low SOP vote, they might have been more responsive to ISS in the first year of SOP voting as some claim that the influence of ISS has declined over time (e.g., Boone et al., 2020). Thus, our decade-long sample period might not reveal large changes in CEO pay. Moreover, in work that pre-dates SOP voting, Armstrong et al. (2013), examine the effects of shareholder voting on equity-based compensation plans over 2001-2010 and find, "*virtually no evidence that lower shareholder support for, or even the outright rejection of, proposed equity*

compensation plans leads to decreases in future CEO incentive compensation or firm-wide stock option grants." Firms might, therefore, primarily respond to other shareholder concerns but resist reducing CEO compensation. Moreover, shareholders might raise concerns about specific elements of pay (rather than total compensation) and firms might respond by adjusting those elements downward while simultaneously increasing other dimensions. Thus, we might not observe a reduction in total pay.

We also investigate the different components of executive compensation packages (e.g., salary, bonus, stock, option, etc.). We expect that firms responding to shareholder concerns will be more likely to alter—and in most cases reduce—the dimensions of pay that are controversial. For example, firms engaging with investors might be more likely to disclose concerns about non-performance-based equity grants such as those that simply vest over time (Pawliczek, 2018). If boards wish to demonstrate responsiveness to shareholder concerns, we expect to find support for this hypothesis:

> ***H3b****: Firms receiving SOP voting support just below 70% will reduce specific components of CEO pay that shareholders identify as a concern.*

Alternatively, we might not observe support for H2 and H3 for several reasons. Firms might not align their compensation design or disclosure choices with shareholders if they perceive that those changes will go against what the board believes is optimal given the firm's circumstances. For example, some shareholders might repeat standardized concerns raised in ISS voting recommendation reports. Prior work notes standardized pay practices might not reflect the economic incentives of executives at certain firms (Hayne and Vance, 2019; Malenko and Malenko, 2019). Further, to the extent that shareholder concerns simply reflect a "one-size-fits-all" compensation policy, firms might not adjust their pay plans in ways that they perceive to reduce firm value. For example, prior work finds a negative market response to compensation changes made in anticipation of ISS recommendations (Larcker et al., 2015). Next, firms are not required to make policy changes in response to shareholder concerns. So long as they provide a justification in their response, they can potentially satisfy ISS's requirement of a robust response. Finally, firms might not alter CEO pay since SOP votes are non-binding and there are no regulatory consequences for failing to make changes raised by shareholders.

3. Sample and Research Design

3.1. Sample Selection

We construct our sample by downloading 27,060 SOP voting outcomes for 5,374 unique firms from the ISS Voting Analytics database over calendar years 2011 to 2019. We tabulate the *SOP voting support* following the ISS definition of votes for the SOP proposal divided by the sum of the votes for and against SOP. Abstention votes are not included in the ISS definition.

Our primary sample includes firms with a vote in the 67.5%−72.5% range for the first time during our sample period. This choice allows for a cleaner testing of our hypothesis on firms' engagement behaviors in anticipation of the following SOP outcome (H1a), as well as their propensity to engage over time (H1b). To verify that our sample is complete, and firms are classified accurately, we obtain a file directly from ISS with all firms with SOP voting outcomes below 70% and cross-check the firms in these datasets.

We merge these data with the Center for Research in Security Prices (CRSP) and Compustat databases and exclude observations with missing stock price or accounting information used as controls. Our final sample includes 426 firms, with 209 firms just below the 70% threshold (treated firms) and 217 firms just above the threshold (control firms). The sample is approximately equally distributed across our sample period. We define *ISS treatment* as an indicator variable which equals 1 for firms in the 67.50% to 69.99% range, and 0 for those with an SOP vote between 70.00% and 72.50%. Appendix A provides a timeline of ISS treatment and subsequent changes in shareholder engagement, pay disclosure, and CEO pay, which we define below.

3.2. Measures of Shareholder Engagement

3.2.1. Primary measures: Level and intensity of engagement

Our primary engagement measures are based on textual analysis of proxy statements, where ISS expects firms to voluntarily disclose shareholder engagement activities. Appendix B provides examples. To construct these measures, we first develop a Python script to extract text from the proxy. We review engagement discussions and flag these "engagement" keywords and their variants (*) as an indication that the firm engaged shareholders: engage*, feedback* or conversation*. We identify the presence of three "engagement" keywords within 100 characters on either side of the following "shareholder" keywords: shareholder*, stockholder*, or investor*.

Based on this keyword extraction, we generate two outcome variables to capture the presence and intensity of shareholder engagement during the nine-year period centered on the SOP vote in year t. First, *engagement indicator* equals 1 if the firm mentions any engagement keyword near a shareholder keyword in the proxy statement. This measure captures the presence of engagement following the prior shareholder meeting. Second, *engagement count* is the number of engagement keywords near shareholder keywords within the proxy statement. We assume that more engagement discussions in the proxy reflects greater intensity of shareholder engagement and find support for this notion using additional measures below.

3.2.2. Additional measures: Depth and breadth of engagement

We attempt to glean more nuanced data points by including aspects of engagement disclosure specifically requested by ISS. Recall from Subsection 2.2 that ISS asks companies with an SOP vote below

70% to provide evidence of a "sufficiently robust response" by disclosing specific concerns that led investors to the vote against SOP and specific actions taken to address these concerns or justify the lack of a response. We develop additional measures to proxy for the depth of SOP-related discussions with investors and the breadth of shareholder outreach efforts.

To capture the depth of engagement, we hand collect two points of information from the proxy statement in the year after the low SOP vote (year t+1). First, we determine whether the engagement text references the prior year's SOP vote. For example, some firms note that their engagement efforts are a direct response to the low SOP vote in the prior year. Thus, we create the variable, *engagement references SOP*, that equals 1 if the proxy statement links the engagement efforts to the previous SOP vote, and otherwise 0.

Second, we create an indicator, *engagement table*, that equals 1 if the firm provides a concise summary table of their engagement activity, and otherwise 0. As shown in Appendix B, these summary tables usually follow a variant of a table with columns describing (1) "what we heard" and (2) "our response" to each of the shareholder concerns that led to voting against SOP. The summary table helps to provide information on the extent of SOP-related engagement in two ways. First, the table communicates important information on details of shareholder concerns and how the firm responded. By prominently highlighting the importance of investor input on executive compensation, firms can increase the confidence of investors and PAs that the firm seriously considered and acted upon shareholder feedback. Second, the tabular format of the disclosure enhances transparency about the engagement process by reducing information processing costs and facilitates follow-up reactions from investors and PAs.[10]

To capture the breadth of engagement, we first record the disclosed percent of shares outstanding held by investors that were contacted in response to a low SOP vote (*shareholders contacted*). Second, we ascertain the percent of shares held by investors that agreed to speak with the company in response to the low SOP vote (*shareholders spoken with*).

Both of these engagement breadth variables are precise disclosures on the magnitude of shareholder outreach efforts and lend additional credibility to our disclosure-based proxies of engagement intensity. However, we note that not all firms provide these statistics. For firms with no disclosure of the percent of shares held by investors contacted or spoken with and a value of 0 for *engagement references SOP*, we set *shareholders contacted* and *shareholders spoken with* to 0; we set these values to missing for firms with a value of 1 for *engagement references SOP* but no disclosure of the *shareholders contacted* or *shareholders*

[10] For example, Dong et al. (2016) find the SEC's adoption of XBRL, which tabulates financial statement information, helps reduce investor processing and acquisition costs. Anecdotally, in our manual review of shareholder engagement disclosures, we observed that the CD&A disclosure tended to be vaguer in describing shareholder feedback and corresponding actions when the information was provided in the narrative text rather than a summarized table.

spoken with. When firms reference the percent of shares held by engaged investors but do not delineate between those contacted and spoken with, we assume that the firm spoke with the engaged investors.

3.3. Shareholder Feedback and Firm Response

3.3.1. Shareholder concerns

We develop several measures to capture the feedback that shareholders provide to the board and management. We count the unique *number of concerns* raised by shareholders during the engagement. Given the large heterogeneity of shareholder concerns, we sort concerns into the following five categories: (1) CD&A Transparency; (2) Peer Group; (3) CEO Compensation; (4) Pay Equity; and (5) Other. The topic *CD&A Transparency* reflects general concerns about the pay disclosure in the proxy statement. For examples, one sample firm notes in the engagement table that its shareholders wanted them to "*[p]rovide more "user-friendly" compensation disclosure."*[11] The topic *Peer Group* includes shareholder concerns with compensation benchmarking. For example, Tiffany & Co. discloses feedback, "*questioning the peer group selected for comparison."*[12] The topic *Compensation & Incentives* includes concerns about equity grants, pay-for-performance, financial metrics for bonuses, and stock ownership. As an example, investors in one pharmaceutical company requested that the firm, "*align the long-term equity incentive awards granted to named executive officers with increases in stockholder value*."[13] *Pay Equity* includes shareholder concerns about the pay of the CEO versus other top executives. The category *Other* includes less specific (e.g., general oversight by the board) or idiosyncratic (e.g., lack of an investor day) concerns or general dissatisfaction with firm performance.

The next two subsections discuss our variables that capture aspects of the topics CD&A Transparency, Peer Group, and CEO Compensation. These measures are motivated by the topics of concern raised by shareholders during the engagement and prior academic literature.

3.3.2. Changes in pay disclosure

Using the scraped text from the proxy statement, we generate three properties of CD&A Transparency. First, *CD&A length* is the number of words in the CD&A section. Second, to capture the user-friendliness of pay information—which some investors specifically note as a concern—we use the

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[11] Greenhill & Co., 2017 Proxy Statement, https://www.sec.gov/Archives/edgar/data/1282977/000119312517203012/d337943ddef14a.htm#toc337943_21.

[12] Tiffany & Co, 2018 Proxy Statement, https://www.sec.gov/Archives/edgar/data/98246/000009824619000063/proxy2018.htm#sfce28929c3704041b19a214d2b5f702b. Similarly, CVS Health Corporation notes in its 2015 Proxy Statement that it modified its peer group after shareholders noted, "*your peer group includes telecommunications and other companies that don't seem to align with what you do*." See https://www.sec.gov/Archives/edgar/data/64803/000120677415001037/cvs_def14a.htm.

[13] See Intercept Pharmaceuticals, 2019 Proxy Statement, https://www.sec.gov/Archives/edgar/data/1270073/000114420419022368/tv519111-def14a.htm .

readability index (RIX), which counts the number of seven-character words scaled by the number of sentences. We label this variable as *CD&A complexity*. Our third measure is the *CD&A tone*, which is the percent of Loughran and McDonald (2011) financial-positive words.

To capture changes in response to concerns in the Peer Group topic, we compute a *peer count*, which is the total number of compensation peer firms in the CD&A disclosure. For these data, we combine hand collected data from proxy statements with the Peer Data for Benchmark Compensation module from the ISS Incentive Lab database. We measure peer-firm changes during years t+1 and t+2 after the SOP vote since benchmark firms might already be selected for t+1.

3.3.3. Changes in CEO compensation

We obtain CEO compensation data from ISS Incentive Lab. These data include *CEO salary*, *bonus*, *stock awards*, *option awards*, *non-equity incentives*, *change in pension value*, and *other compensation*. We hand collect missing information from the Summary Compensation Table (SCT) of proxy statements. We also generate three summary measures. *CEO total pay* is the total compensation reported in the SCT. *CEO equity pay* is the sum of stock and option award values in the SCT. *Non-equity pay* is the sum of CEO salary, bonus, non-equity incentives, change in pension value, and other compensation disclosed in the SCT. For firms with CEO turnover, we use the pay of the new CEO as shareholders would likely be voting on this CEO's remuneration.

Armstrong et al. (2013) note the timing of compensation changes in response to a shareholder vote could be delayed as some elements are set prior to the vote. In our setting, it could take time to uncover shareholder concerns and adjust elements of CEO pay. Thus, for changes in CEO pay, we expect these outcomes to vary in year t+2 after the SOP vote. To calculate pay change for each component, we log transform one plus the value in t+2 and subtract one plus the log transformed value in t+1.

3.4. Firm Characteristics and Controls

Based on prior research (e.g., Ertimur et al., 2013; Malenko and Shen, 2016), we examine a wide range of firm characteristics that might affect a firm's SOP vote or its propensity to engage with shareholders or alter components of pay or pay transparency. Appendix C defines these variables, which include standard controls such as *size*, *market-to-book*, *return on assets*, *leverage*, *sales growth*, *abnormal returns*, *stock return volatility*, and an *operating loss* indicator based on data from CRSP and Compustat. We also control for the ISS voting recommendations using data from ISS Voting Analytics. We generate the variable *ISS recommendation*, which equals 1 if ISS recommends voting for the SOP proposal and otherwise 0.

We also control for whether a company qualifies for compensation disclosure exemptions. The SEC requires most firms to provide a CD&A section within the annual proxy statement that

comprehensively discloses information such as the objectives of executive compensation, what pay programs are designed to reward, the determination and justification of each pay component, and the use of peer benchmarking. Firms that meet the SEC's definition of a Smaller Reporting Company (SRC) are exempt from the CD&A requirement but must still hold an SOP vote and can voluntarily furnish a CD&A. To meet the SRC definition, firms must have a public float less than $75 million prior to September 10, 2018, and less than $250 million after this date (SEC, 2018). We hand check annual 10-Ks and designate 33 sample firms as SRCs. We label these firms as *CD&A exempt* using an indicator variable.

Firms with greater institutional ownership or analyst following might receive more executive pay scrutiny or have stronger incentives to engage with shareholders. We obtain the number of analysts following a company from IBES Academic. We define *Ln(analysts)* as the log transformed value of one plus the number of analysts providing earnings per share forecasts during the four quarters prior to the annual meeting.[14] Institutional ownership data are from SEC 13-F filings in the Thomson Reuters Institutional Holdings database. We define *institutional ownership* as the total shares held by these institutions divided by shares outstanding from CRSP.

Finally, we capture CEO turnover based on two measures. First, *forced CEO turnover* equals 1 if the CEO departure was not voluntary based on data from Peters and Wagner (2014) via WRDS. Second, *CEO turnover* equals 1 for any type of turnover using hand collected data from the proxy statement. The results are similar using either measure of turnover.

3.5. Validating the Identification Strategy

Our identification strategy relies upon ISS's policy on shareholder engagement. Since ISS designates less than 70% SOP support as problematic and, over the subsequent year, reviews the firm's responsiveness to shareholder concerns, those firms with SOP voting support just below 70% receive treatment and those above it do not. Our identifying assumption is that, around this threshold, receiving ISS treatment is as good as random assignment.

To test this assumption, we first plot voting outcomes for all firms in ISS Voting Analytics in Figure 1. We graph firms with SOP voting support between 50% and 90% in Panel A and 67.5% to 72.5% in Panel B to see if the distribution is smooth across the deterministic threshold. We find no sharp changes or clustering in SOP voting support on either side of 70%, implying that the assignment is locally random.

[Insert Figure 1 here]

[14] Because analyst following correlates with size, we measure *residualized analyst following* to capture the portion of analyst following not explained by a firm's total assets. All inferences are similar with this alternative control.

Second, we conduct a formal test for manipulation of the assignment variable around the 70% cutoff, which we report in the Internet Appendix. Using the local polynomial density estimation of Cattaneo et al. (2020), we find no evidence of a discontinuity in *SOP voting support* around the 70% threshold.

Third, we test for differences in pre-assignment characteristics for ISS treated and control firms prior to the shareholder vote. In Table 1, we report the mean values of each of the pre-assignment SOP voting support, firm characteristics, shareholder engagement, pay disclosure, CEO pay, and board monitoring proxies. Column (1) reports the mean value for the treated firms and Column (2) presents the values for control firms. We report the difference in means in Column (3) and the associated test statistics in Column (4). We find no statistical differences in the attributes of firms with voting outcomes just below 70% relative to those just above the threshold. Thus, the set of treatment and control firms are similar along these dimensions.

[Insert Table 1 here]

Taken together, Figure 1 and Table 1 support our identification strategy by suggesting that the distribution around the 70% SOP voting support threshold is as good as random. Thus, we can link changes in engagement and other directly related outcomes to the effect of ISS.

3.6. Research Design

To test the effect of ISS treatment on engagement, we consider the SOP vote by shareholders of firm *i* at time *t*, the annual meeting date. The percentage of votes approving SOP is the vote share v_{it}. If v_{it} is below the 70% vote threshold, v^*, then it receives ISS treatment, and we code the indicator for treatment as $ISS\ treatment_{it} = 1$. When $v_{it} \geq v^*$, $ISS\ treatment_{it}$ takes the value of 0. We estimate the effect of ISS treatment on outcome variable y_{it} using this equation:

$$y_{it+1} = \kappa + \theta ISS\ treatment_{it} + \mathrm{X}_{it} + \varphi_j + \mu_t + \varepsilon_{it}\,, \tag{1}$$

where the coefficient of interest θ is the effect of ISS on the outcome variable y_{it} (e.g., shareholder engagement) after a low SOP vote. We include industry fixed effects (φj) using one-digit Standard Industrial Classification (SIC) codes, which controls for time-invariant unobserved heterogeneity across industries, and fiscal year fixed effects (μt) to control for time trends that affect all firms.[15]

X_{it} is a vector of firm-level control variables described in Subsection 3.4 that includes *size*, *market-to-book*, *return-on-assets*, *leverage*, *sales growth*, *abnormal returns*, *stock return volatility*, *operating loss*, *CD&A exempt*, *ISS recommendation*, *Ln(analysts)*, *institutional ownership*, and *forced CEO turnover*. All

[15] We use one-digit SIC codes for industry fixed effects to maximize regression observations. The results are not sensitive to this choice. We use a difference-in-differences approach rather than a regression discontinuity design (RDD) to be consistent with our panel regression tests of the effect of PAs over time. In the Internet Appendix, we show that the ISS treatment effect on shareholder engagement is similar with an RDD approach.

accounting variables are measured in the same fiscal year (year t) as the CEO pay that is reported in the proxy and voted on in the SOP proposal.

Our tests rely on two key assumptions. First, the parallel trends assumption presumes that, absent the influence of ISS, treated and control firms' tendencies to engage with shareholders would have evolved in a similar pattern. We examine this assumption in Section 4.1.2. Second, the stable unit treatment value assumption (SUTVA) requires that the ISS treatment does not affect engagement outcomes of firms in the control group (Armstrong and Kepler, 2018). ISS does not require firms receiving support just above 70% to demonstrate an explicit response. However, control firms close to the ISS threshold might wish to avoid future ISS scrutiny and proactively strengthen their disclosure efforts. Moreover, an SOP voting support around 70% is already in the bottom quintile of all SOP votes, which could spur greater engagement even in the absence of ISS. These factors could lead us to *underestimate* the effect of ISS on engagement. Conversely, control firms could decrease their engagement activities and related disclosures, which would lead us to *overestimate* the effect of ISS treatment. This possibility is highly unlikely given that the low SOP vote is already in the bottom quintile of the distribution and these firms have non-PA related incentives to improve SOP support by engaging investors and disclosing their responsiveness.

4. Results

4.1. Shareholder Engagement after ISS treatment

4.1.1. Engagement just after ISS treatment

This section examines the influence of ISS on shareholder engagement (H1a), beginning with changes in year t+1 after ISS treatment. For each of engagement measure, Panel A of Table 2 presents the overall sample mean, and subsample mean, median, and standard deviation for ISS treated and control firms, which we formally test in a regression setting in Panels C and D.

[Insert Table 2 here]

In the year following a low SOP vote, 53% of sample firms disclose the presence of shareholder engagement. The average intensity of disclosure is 1.97 engagement words. Both of these measures increase notably from the year prior to receiving a vote around the 70% threshold. The additional measures reveal a similar propensity to engage, as 55% report engaging with investors in specific response to the prior year's low SOP vote. Approximately 10% of sample firms provide a table summarizing the shareholder concerns and board response. Sample firms contact shareholders owning 15% of shares on average and report speaking with owners of 12% of outstanding shares. When conditioning on nonzero engagement disclosure, sample firms contact shareholders holding an average 58% of shares and speak with holders of 42% of shares. Firms in the ISS treated subsample engage with shareholders holding an average of 10% more shares outstanding and speak with investors holding 8% more shares versus the control firms.

Panel B provides a correlation matrix showing the engagement measures capture unique information. For example, Column (1) shows *engagement indicator* is highly but not perfectly correlated with most engagement measures. In Panel C, we formally test the relation between ISS treatment and engagement. We estimate Eq. (1) using OLS regressions when the dependent variable is *engagement indicator*, and a fixed effects Poisson regression for tests of *engagement count*, which follows the advice of Cohn et al. (2021) for testing count data.

The results show that *ISS treatment* is positively related to the presence and intensity of shareholder engagement. In all four models, the coefficient on *ISS treatment* is statistically different from zero at the 1% level. Moreover, the magnitude of engagement differences is economically meaningful. Column (1) shows that treated firms are 16.7% more likely to report engagement, which is a 32% increase from the sample mean. The coefficient on *ISS treatment* in Column (2) is 0.4, indicating that the *engagement count* is 49% higher for treated firms.[16] In Columns (3) and (4), we control for lagged values of the dependent variable to measure engagement changes. The results are similar as *ISS treatment* loads positively and significantly.[17]

In Panel D, we test our additional engagement measures. Firms receiving ISS treatment are 12.4% more likely to reference the prior year's SOP vote (Column 1) and are 7.1% more likely to summarize the board response to concerns in an engagement table (Column 2). Moreover, ISS-treated firms reach out to investors holding 7.9% more shares overall and speak with investors holding 7.0% more ownership. These differences are economically important as they are a 47% and 60% increase from the sample mean, respectively. All differences are significant at the 1% level except for tests of the *engagement table*, where *ISS treatment* has a *p*-value of 0.013.

4.1.2. Engagement over time

Next, we examine the effects of ISS treatment on engagement variation over time. These tests have two goals. First, we want to examine the validity of the parallel trends assumption in our setting. Second, we wish to determine if the immediate spike in engagement after ISS treatment persists over time (H1b). For these tests, we measure engagement during the nine-year period centered on the low SOP vote. We

[16] This difference is calculated by exponentiating the *ISS treatment* coefficient: $e^{(0.4)} - 1 = 0.492$.

[17] Prior work shows large investors (e.g., BlackRock) engage with portfolio companies on governance issues (Pawliczek et al., 2021). To help rule out that investors' engagement policies drive our results, we take the following approach. First, in the Internet Appendix, we show our results are not driven by BlackRock's ownership level. Second, we examine the stated policies of Blackrock other large institutions (State Street and Vanguard) and find no language requiring portfolio companies to engage after a particular level of SOP dissent.

then include indicator variables to estimate dynamic treatment effects in an event-time difference-in-differences design.[18]

We first plot the presence and intensity of engagement in Panels A and B of Figure 2. Panel A shows that firms receiving ISS treatment have an immediate, large, and persistent increase in disclosing the presence of shareholder engagement. Panel B shows the intensity of shareholder engagement also rises with treatment and that this spike is larger for ISS-treated firms. Moreover, treated and control firms exhibit similar patterns and levels of engagement *prior* to the SOP vote around the 70% threshold, which visually fails to falsify the parallel trends assumption.

[Insert Figure 2 here]

We formally test engagement over time by estimating this equation:

$$Engagement_{it+1} = \kappa + \theta ISS\ treatment_{it} + \mathrm{X}_{it} + \omega_i + \mu_t + \varepsilon_{it}\ , \qquad (2a)$$

where the coefficient of interest θ is the effect of ISS on shareholder engagement over time in a panel regression. We test the presence (*engagement indicator*) and intensity (*engagement count*) of engagement separately using a fixed effects OLS and Poisson panel regression. We include firm fixed effects (ωi) and fiscal year fixed effects (μt) to control for time trends that affect all firms. The vector of firm controls, Xit, is identical to Eq. (1) except that they vary over time.

To determine whether the pre- and post-ISS treatment results in engagement variation, we re-estimate Eq. (2a) by replacing the *ISS* indicator with six indicator variables—ISS^{-1}, ISS^{0}, ISS^{+1}, ISS^{+2}, ISS^{+3}, and ISS^{+4}—which indicate the year relative to the ISS treatment with a low SOP vote. The values for years −4, −3, and −2 are pushed into the intercept to serve as the baseline of comparison. The coefficients on ISS^{-1} and ISS^{0} are important because their significance and magnitude will indicate any differences in engagement between treatment and control groups before the low SOP vote, which formally attempts to falsify the parallel trends assumption.

The coefficient on ISS^{+1} is important because it reveals how quickly firms alter shareholder engagement in response to ISS treatment. Indeed, ISS notes in its manual that it considers the timing of shareholder engagement in its determination of a sufficiently robust response.

The coefficients on ISS^{+2}, ISS^{+3}, and ISS^{+4} are also important since they capture longer-term differences in engagement. If firms continue to engage at a higher rate in future years, then we expect these coefficients to be positive and statistically significant. The coefficients on these indicators are our tests of H1b that engagement after ISS treatment will persist over time.

[18] Recent work (e.g., Baker et al., 2021) raises concerns of potential bias introduced by difference-in-differences estimations with staggered treatment and two-way time and unit (firm) fixed effects. Because our panel approach uses a single treatment period, our estimates should not be subject to this source of bias.

[Insert Table 3 here]

In Table 3, we first estimate the effect of ISS treatment on shareholder engagement with no control variables over 3,040 firm years. The coefficient on *ISS treatment* is 0.186 and is highly significant with a *t*-statistic of 8.30 (p<0.001). Moreover, the economic magnitude is large as it represents a 54% increase from the sample mean of 0.34 over the full panel.

We then replace the *ISS treatment* indicator with the six timing indictors. The coefficients on ISS^{-1} and ISS^{0} are not significantly different from zero in any of the four columns (2-3, 5-6). Thus, we fail to falsify the parallel trends assumption. Moreover, the impact of ISS treatment shows up in the first year after the low SOP for both *engagement indicator* and *engagement count*, as the coefficient on ISS^{+1} is significantly positive at the 1% level in all four tests. In Column (3), the *ISS treatment* coefficient represents 22% more engagement, which is a 65% increase from the sample mean. Thus, the effect of ISS on engagement following a low SOP vote is substantial.

The coefficients on ISS^{+2} and ISS^{+3} are also positive and significant at the 5% level or better for the presence and intensity of engagement. For the *engagement indicator*, the coefficient on ISS^{+4} is also statistically different from zero, indicating that the effect of ISS on the presence of shareholder engagement persists for several year after the low SOP vote, thereby supporting H1b.[19]

To visually depict the results in Columns (3) and (6), we plot the coefficient estimates with 90% confidence interval bands in Figure 3. These graphs visually demonstrate the magnitude of the ISS effect on shareholder engagement over time; they show that the positive influence of ISS on shareholder engagement is swift, substantial, and—importantly—not short lived.

[Insert Figure 3 here]

4.1.3. Glass Lewis effect and placebo tests

In this subsection, we examine whether the influence of PAs on shareholder engagement is limited to ISS or extends to GL. We exploit the fact that GL has a different SOP voting threshold where it requires firms to demonstrate shareholder engagement. GL's threshold was 75% through the 2017 proxy year and 80% beginning in 2018. We first create a sample of firms with *SOP voting outcomes* for the first time within 2.5% of the yearly GL threshold. We then generate a *GL treatment* variable that equals 1 for firms just below the threshold; and 0 for firms at or above it.

[Insert Figure 4 here]

In Panel A of Figure 4, we plot the presence of shareholder engagement for the nine-year period centered on the vote around the GL threshold. GL-treated firms have lower pre-treatment engagement than controls but exhibit visually parallel trends. Treated firms appear to close the gap the year after the low

[19] In the Internet Appendix, we find similar results using the *shareholders contacted* and *shareholders engaged*.

SOP vote and exhibit similar levels of engagement thereafter. Thus, GL appears to influence engagement. We formally test for this effect by estimating Eq. (2b), which replaces the *ISS treatment* indicator with the *GL treatment* indicator:

$$Engagement_{it+1} = \kappa + \theta GL\ treatment_{it} + \mathrm{X}_{it} + \omega_i + \mu_t + \varepsilon_{it}\ , \quad (2b)$$

where all fixed effects (ω_i and μ_t) and controls (X_{it}) are identical to Eq. (2a) except we control for the GL recommendation on SOP when available using data from Proxy Insight. For firms with missing GL information, we replace it with the ISS recommendation and label this variable *PA recommendation*. Table 4 presents the results.

In tests of *engagement indicator*, the 0.094 coefficient on *GL treatment*$^{+1}$ is significant at the 1% level and represents a 39% increase over the sample mean of 0.238. This effect is smaller than the 65% increase in engagement associated with ISS treatment (Table 3, Column 3). None of the coefficients on *GL treatment*$^{+2}$, *GL treatment*$^{+3}$, or *GL treatment*$^{+4}$ are statistically different from zero, indicating that the GL effect on engagement is shorter lived than the ISS effect, which we plot in Panel B of Figure 3. Moreover, unlike tests of ISS, we find no effect of GL treatment on the *engagement count* in Column (2). The differences in the ISS and GL effect on engagement could be due to a number of factors such as disparities in market power or enforcement of stated policies on shareholder engagement expectations.

[Insert Table 4 here]

We next test whether the ISS and GL results are driven by optical differences in falling below a significant SOP threshold. First, we use 90% SOP voting support as a significant threshold since it excludes firms with treatment by either PA. We create *placebo-90% treatment* indicator that equals 1 for firms with *SOP voting support* between 87.50% and 89.99%; and 0 for those with 90.00% to 92.49% support. Second, we test the 50% SOP threshold since it is widely considered an SOP failure. We create an indicator, *placebo-50% treatment*, that equals 1 for firms with SOP voting support between 47.50% and 49.99%; and 0 for those with support between 50.00% and 52.49%. Similar to the ISS and GL samples, we only keep sample firms during the first time they appear in this range of *SOP voting support* around the threshold. We then estimate Eq. (2c):

$$Engagement_{it+1} = \kappa + \theta Placebo\ treatment_{it} + \mathrm{X}_{it} + \omega_i + \mu_t + \varepsilon_{it}\ , \quad (2c)$$

where all other controls and fixed effects are identical to Eqs. (2a) and (2b). The variable *PA recommendation* is the ISS recommendation in these tests. We estimate Eq. (2c) using the *placebo-90% treatment* and *placebo-50% treatment* separately.

None of the coefficients on the placebo treatment in Columns (3) to (6) are statistically different from zero in the post-treatment period. Thus, firms with an SOP voting outcome just below 90% are not more likely to alter engagement than those just above that cutoff. Similarly, firms around the 50% threshold

do not exhibit differential engagement patterns. These findings further support that PAs facilitate shareholder engagement after a low SOP vote.

4.2. Shareholder Concerns

The next three subsections examine the alignment of firms' compensation and disclosure changes to shareholder concerns. Panel A of Table 5 reports the sample averages for the number and topics of concerns, as well as the subsample statistics for ISS treated and control firms.

[Insert Table 5 here]

On average, firms report 0.67 concerns including those reporting no concerns. When conditioning on disclosing at least one shareholder issue, the sample average is 1.5 concerns. Within the subsamples, ISS-treated firms report 0.2 to 0.3 more concerns, on average, than control firms. The most common topic of concern is *Compensation & Incentives*, at 38.5% of firms. Approximately 8.0% of firms report concerns with the *CD&A Transparency* in general and 8.5% report specific concerns with choices in the *Peer Group*. Just over 1% mention *Pay Equity*, and 10% fall into the "Other" category with various concerns. Across all topic categories except *CD&A Transparency*, ISS-treated firms appear to report these concerns more often.

In Panel B, we formally test for the ISS treatment effect on the disclosure of shareholder concerns. For these tests, we estimate Eq. (1) where the dependent variable is *number of concerns* using a fixed effects Poisson regression; and using a fixed effects OLS estimate for the topics of concerns. The coefficient on *ISS treatment* in Column (1) is 0.390 and significant at the 1% level (p=0.001). The positive relation between ISS and disclosing more issues is also economically meaningful as this coefficient represents a 47% increase in the number of disclosed concerns. In Columns (3) to (6), all topics are more likely to be disclosed by ISS-treated firms at the 5% level or better. Consistent with the summary statistics, ISS-treated firms are not more likely to disclose concerns about *CD&A Transparency* in Column (2).

4.3. Changes in CEO Pay Disclosure

In this subsection, we test for changes in CEO pay disclosure (H2). We estimate Eq. (1) where the dependent variables are *CD&A length*, *CD&A complexity*, and *CD&A tone*, using a fixed effects OLS estimator. We control for the lagged values of these measures from year t so that the coefficient on *ISS treatment* represents a change from the disclosure before the low SOP vote. All controls are identical to Eq. (1) except we exclude the *CD&A exempt* variable as none of these firms provide a CD&A in their proxy. Table 6 presents the results.

[Insert Table 6 here]

Columns (1) and (2) show the length and complexity of the CD&A do not change differentially for ISS-treated firms. This result is consistent with the findings in Table 5, where ISS-treated firms were not more likely to report shareholder concerns over *CD&A Transparency*. However, we do find a statistically

significant increase in the tone of the CD&A in Column (3). The coefficient on *ISS treatment* is 0.059, which is statistically different from zero at the 1% level (p=0.001). Thus, ISS-treated firms—who disclosed more engagement with shareholders—tend to use more positive language in describing this engagement and the subsequent pay disclosure.

We next use a fixed effects Poisson estimator of Eq. (1) where the dependent variable is *peer count*. We control for the lagged *peer count* in year t so that the coefficients represent a change. In Column (4), we find a −0.065 coefficient on *ISS treatment*, which is significant at the 5% level (p=0.049). Thus, treated firms are more likely to remove a peer, which could reflect a problematic peer identified by shareholders. In Column (5), the coefficient on *ISS treatment* in year t+2 is both negative (−0.137) and statistically significant at the 1% level (p=0.006). These results indicate that ISS-treated firms are more likely to reduce their list of compensation benchmark firms, which aligns with concerns raised more often by shareholders of ISS-treated firms during engagement.

4.4. Changes in CEO Pay

We next examine changes in CEO pay after ISS treatment (H3). In Table 7, we estimate the change in total CEO pay and individual pay components described in Subsection 3.3.3. using Eq. 1.[20] In Columns (1) and (2) of Panel A, we report a decline in the CEO's total and equity pay. For example, in Column (2), the coefficient on *ISS treatment* is −2.016 and is statistically different from zero at the 1% level (p=0.002) for changes in equity pay. For changes in total pay, the coefficient on *ISS treatment* is negative and significant at the 10% level (p=0.077). Column (3) shows no statistical differences in CEO's non-equity summary measures with ISS treatment.

[Insert Table 7 here]

In Panel B, we drill down into the individual components of CEO pay. We find significant declines in stock (Column 3) and option awards (Column 4) for ISS-treated firms. In tests of stock awards in Column (3), the coefficient on *ISS treatment* is −1.865, which is significant at the 1% level (p=0.003).[21] Similarly, the results in Column (2) show a relative decline in CEO bonuses with ISS treatment, as the coefficient is negative and significant at the 10% level (p=0.094).

Table 5 shows that some investors raised concerns of Pay Equity. In untabulated results, we find no relation between *ISS treatment* and changes in the *CEO pay slice*, which is the CEO's pay as a percent of the total pay for all named executives. The non-result could stem from the small number of investors

[20] For these tests, we use two-digit SIC codes for industry fixed effects to be consistent with prior work on compensation (e.g., Faulkender and Yang, 2010; Pawliczek, 2018). Results are similar using one-digit SIC codes.

[21] Pawliczek (2018) finds lower SOP voting support when firms use time-vested equity—which can vest independent of performance—rather than performance-vested equity to compensate executives. In the Internet Appendix, we show that ISS treatment is linked to a decline in time-vested and not performance-vested equity grants to the CEO.

(five out of 426 firms) expressing that concern. The effect of ISS treatment on Other Concerns is not testable in a regression since it includes less specific or one-off issues.

Recall from Table 5, that ISS-treated firms were more likely to disclose Pay and Incentives as a shareholder concern. Table 7 shows that ISS-treated firms are more likely to reduce pay along these dimensions. Thus, these findings suggest that ISS-treated firms are more likely to make actual pay changes in response to topics of concerns raised by shareholders.

5. Additional Analyses

5.1. Cross-Sectional Tests of Shareholder Engagement

In this subsection, we conduct several cross-sectional tests. We conjecture that firms with poorer *ex-ante* governance and stock performance will respond more to ISS treatment because the threat of economic sanctions could be stronger. For example, additional scrutiny by ISS for failing to demonstrate a robust response to a low SOP vote could draw attention to other problematic governance or performance dimensions. In turn, it could raise the likelihood that, in addition to SOP, ISS recommends voting against members of the compensation committee or the board.

To test this notion, we examine how the presence (*engagement indicator*) and intensity (*engagement count*) of engagement by treatment firms vary with ex-ante values of their *abnormal stock returns*, *board independence*, *compensation committee tenure,* and *institutional ownership*.[22] We create *High value* indicators that equal 1 if the values of these variables are above the yearly median sample value, and 0 otherwise. We then estimate a panel regression that fully interacts these indicators with each of the controls and year fixed effects. Our variable of interest is the interaction of *ISS treatment* × *High value*, which indicates whether ISS treatment has a differential effect on firms with higher ex-ante values of these partitioning variables.

[Insert Table 8 here]

In Table 8, the coefficient on *ISS treatment* × *High value* is positive and significant for *compensation committee tenure* and negative and significant for most other estimates. Thus, firms with poorer ex-ante performance (as evidenced by their stock returns), and weaker monitoring environments (as evidenced by lower institutional presence and variables consistent with weaker board oversight) tend to engage more with shareholders after receiving ISS treatment. These results further support inferences that ISS plays a positive governance role in this setting.

[22] To proxy for board oversight, we measure *board independence* for a subsample of firms in the ISS Governance database, where a greater portion of independent directors reflects additional monitoring (Knyazeva et al., 2013). Since US exchanges require almost all firms to have a fully independent compensation committee, we measure its quality using the average *compensation committee tenure*, which prior work links to higher CEO pay (Vafeas, 2003).

5.2. Value Implications of Increased Shareholder Engagement

An assumption in both ISS policies and our analyses and is that increased engagement is a desirable firm response to a low SOP vote. In this subsection, we review this assumption by assessing potential economic consequences to firms of increased engagement after ISS treatment.

5.2.1. Event Study

We first conduct an event study of shareholder returns around the announcement of the SOP voting results, where ISS treatment is revealed. Table A-4 in the appendix presents a timeline of events for a representative firm. For these tests, we anticipate that receiving low SOP voting support signals dissatisfaction with the firm, and therefore expect a potentially negative shareholder response. If shareholders view ISS treatment as value-adding, we expect a positive response to falling just below the 70% SOP voting threshold compared to those just above.

However, it might be unclear to shareholders whether managers will respond to ISS's treatment differentially by strengthening engagement. Thus, it is possible that shareholders will only respond to receiving treatment when the credibility of ISS's threat of recommending against the board is clear. For example, when ISS recommends against an SOP vote and the firm is subsequently treated with a vote just under 70%, then investors might expect a greater engagement response. Thus, we would expect a positive market response for firms that had *both* received a negative SOP vote recommendation from ISS prior to the vote and received just below the 70% threshold of SOP voting support to receive treatment. In these cases, shareholders might anticipate that ISS will increase its scrutiny of the firms' engagement response given the increasingly tangible threat of economic sanctions via voting recommendations.

To test this hypothesis, we analyze the abnormal stock price response to the vote disclosure using the following framework. First, we compute firm-level stock returns by calculating the compounded daily returns during the 3-day and 5-day period centered on the date the firm first releases the SOP voting results in an SEC 8-K filing (Item 5.07). We then calculate an *abnormal stock return* by subtracting the compounded returns on the CRSP value-weighted index return with distributions during the same period. We then implement OLS regressions using this equation:

$$Abnormal\ returns_{it} = \alpha + \beta_1 ISS\ treatment_{it} \times ISS\ against_{it\,it} + \beta_2 ISS\ against_{it} + \beta_3 ISS\ against_{it} + \beta_4 Vote\ for\ SOP\%_{it} + \varphi_j + \mu_t + \varepsilon_{it}\,, \quad (3)$$

where *ISS treatment* equals 1 for firms that receive between 67.50% and 69.99% SOP voting support; and 0 for firms that receive 70.00% to 72.50%; *ISS against* equals 1 if ISS recommends voting "Against" Say-On-Pay; and *Vote for SOP%* is the disclosed percentage of shareholder votes that support the SOP proposal. The variable of interest is the interaction term, *ISS treatment* × *ISS against*, which equals 1 for firms that are both treated with a below 70% vote and receive an ISS recommendation to vote against SOP prior to

the meeting. Similar to other regressions, we include industry fixed effects (φj) using one-digit SIC codes to control for time-invariant unobserved heterogeneity across industries, and fiscal year fixed effects (μt) to control for time trends that affect all firms. The results are presented in Table 9.

[Insert Table 9 here]

Columns (1) through (4) include the full sample of treatment and control firms with available return information. Columns (1) and (2) show no relation between ISS treatment alone and abnormal returns. Consistent with our prediction in Columns (3) and (4), the coefficient on the interaction term, *ISS treatment* × *ISS against* is positive and statistically significant at the 10% level or better for both event windows. None of the other coefficients are statistically different from zero. These results imply that shareholders view strengthened engagement as value-adding when coupled with a clear threat of economic sanctions by ISS. The result is also economically meaningful as the returns equate to abnormal shareholder returns between 2% and 3%. In Columns (5) and (6), we exclude 28 observations with potentially "contaminated" 8-K filings that contain other value-relevant information that could influence the returns. These include 8-K filings of Item 1.01 (Material Agreements) and 2.02 (Financial Results). The results are similar for this cleaner subsample. Taken together, these results suggest that ISS-induced engagement can be value-adding, especially when coupled with a greater threat of ISS sanctions on future votes.

5.2.2. Ex-Post Implications of Shareholder Engagement

To better understand the source of value increase, we next examine the ex-post association between shareholder engagement and several firm outcomes. These tests are based on two-stage least-squares specifications in which the first stage models shareholder engagement as a function of ISS treatment and the second stage tests the effect of instrumented engagement on firm outcomes.

We explore proxies of these potential outcomes in Table 10: information asymmetry, stock liquidity, shareholder activism, managerial myopia, and director monitoring. For each proxy, we calculate the yearly values ending one month or quarter prior to the low SOP vote as a baseline control. We then test our proxies using the following setup. In the first stage we estimate:

$$Engagement_{it+1} = \alpha + \beta_1 ISS\ treatment_{it} + X_{it} + \varphi_j + \mu_t + \varepsilon_{it}\ , \quad (4a)$$

where the dependent variable is the engagement indicator, which is instrumented by *ISS treatment*, a vector of firm-level controls (X_{it}), industry fixed effects (φj), and fiscal year fixed effects (μt) identical to Eq. (1). We then use the exogenous variation in instrumented engagement near the ISS threshold in the second stage by estimating this equation:

$$Outcome_{it+1} = \alpha + \beta_1 \widehat{Engagement}_{it} + Outcome_{it} + X_{it} + \varphi_j + \mu_t + \varepsilon_{it}\ , \quad (4b)$$

where the variable of interest is variation in instrumented engagement. We control for the lagged dependent variable, $Outcome_{it}$, and a vector of firm-level controls (X_{it}), industry fixed effects (φj), and fiscal year fixed

effects (μt). We measure most outcomes for the one- and two-years period starting the month or quarter after the low SOP vote, except for activism, which we extend to four years since variation could take longer to manifest. Importantly, any spillovers of ISS treatment in year t+1 are likely related to altering *engagement* rather than pay since compensation contracts take longer to adjust.

[Insert Table 10 here]

In Panel A, we first examine whether enhanced disclosures and one-on-one conversations with shareholders has a beneficial spillover on information asymmetry and stock liquidity. If engagement enhances information processing and engenders a better understanding of a firm's strategy, we expect reductions in *bid-ask spreads* and *stock illiquidity* (Merton, 1987; Balakrishnan et al., 2014; Lee and Zhong, 2021), which we define in Appendix C. Column (1) shows that firms with greater instrumented engagement have a marginally significant decline in average *bid-ask spreads* in the first year following the SOP vote. Similarly, Column (3) reports that stock illiquidity declines significantly in the first year after the low SOP vote that results in ISS treatment. Both improvements remain significant through the end of year two.[23]

Greater engagement could generate shareholder support for management's policies and, in turn, deter activism (Fairfax, 2013; Brav et al., 2020). Using Schedule 13D data, we create a *shareholder activism* indicator that equals 1 for years that any investor discloses the possibility of influencing firm policy (Brav et al., 2008). We cumulate activism each year starting in year t+1 and control for the baseline level in year t prior to the low vote to estimate the change. Column (5) shows a decline in activism in the first year after ISS treatment. Activism continues to decline in years t+2 to t+4.

Shareholder engagement could also induce myopic managerial behavior to meet expectations and/or lead to reduced board monitoring if directors are busy with engagements. To test for myopic behavior, we measure changes in *R&D intensity* and *CapEx intensity* (Bushee, 1998). To test for monitoring changes, we create an indicator variable if the firm has a *financial restatement* during the year; or just *meets or beats* the analyst consensus earnings values (Degeorge et al., 1999). The results in Panel B show no evidence of myopia or reduced board monitoring.

6. Conclusion

Our study examines whether PA influence in general, and ISS in particular, can shape firms' shareholder engagement behaviors. We exploit a quasi-natural experiment when firms receive a low SOP

[23] In the Internet Appendix, we show that that these measures decline when using the ISS treatment variable rather than instrumented engagement. We also report a decline in analyst forecast errors in year t+1 for ISS-treated firms. Since engagement might convey information that triggers Regulation Fair Disclosure (Reg FD) disclosures, we also test and find a marginal increase in Reg FD filings after ISS treatment, which is consistent with SEC guidance that Reg FD should not deter investor dialogue (http://www.sec.gov/divisions/corpfin/guidance/regfd-interp.htm).

vote. Characteristics of firms with SOP voting support near 70% are similar, except that ISS conducts a qualitative review of a firm's shareholder engagement efforts and related disclosures at the next annual meeting when support falls below this threshold, suggesting random exposure to ISS treatment near the cutoff. Our analyses lead to two main conclusions.

First, we find that ISS treatment results in a swift and substantive increase in the propensity and intensity of shareholder engagement after the low vote, especially when they have poorer ex-ante governance. We provide rich and novel evidence on the breadth and depth of increased engagement. Further, the elevated engagement level persists for several years beyond the next annual meeting when these firms are likely no longer facing additional ISS scrutiny, implying a positive spillover on firms' shareholder engagement policies. This shift in engagement behavior seems to be an artifact of ISS's market power, as the persistence does not extend to GL's threshold.

Second, we find that firms align their compensation and disclosures changes to the topics of concerns raised by shareholders during engagement. ISS-treated firms make substantive changes in compensation benchmark practices and reduce overall CEO pay. Within the components of pay, ISS-treated firms have significantly greater declines in stock-based pay and bonuses, both of which were more frequently noted as shareholder concerns. Shareholders of ISS-treated firms fail to raise compensation transparency concerns at a greater rate and, accordingly, we find no evidence that these firms differentially alter the length or complexity of their pay disclosure, but the tone becomes more positive. Ex-post analyses suggest that greater shareholder engagement increases firm value and has capital market benefits.

Overall, our findings contribute to the literature on the economic role of PAs, including the influence on executive compensation and disclosure (e.g., Ertimur et al. 2013; Hayne and Vance, 2019; Faulkender and Yang, 2013). They also speak to the emerging line of inquiry on the economic consequences of firm-investor interactions (e.g., Lee and Zhong, 2021). Our result that ISS serves an important and potential value-added role of facilitating greater shareholder engagement can also inform current policy debates on the strong influence of ISS on shareholder voting outcomes (Malenko and Malenko, 2019), and is likely to be of interest to academics, regulators, and market participants.

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Appendix A: Timeline of Events

Table A-1. Shareholder Engagement Timeline

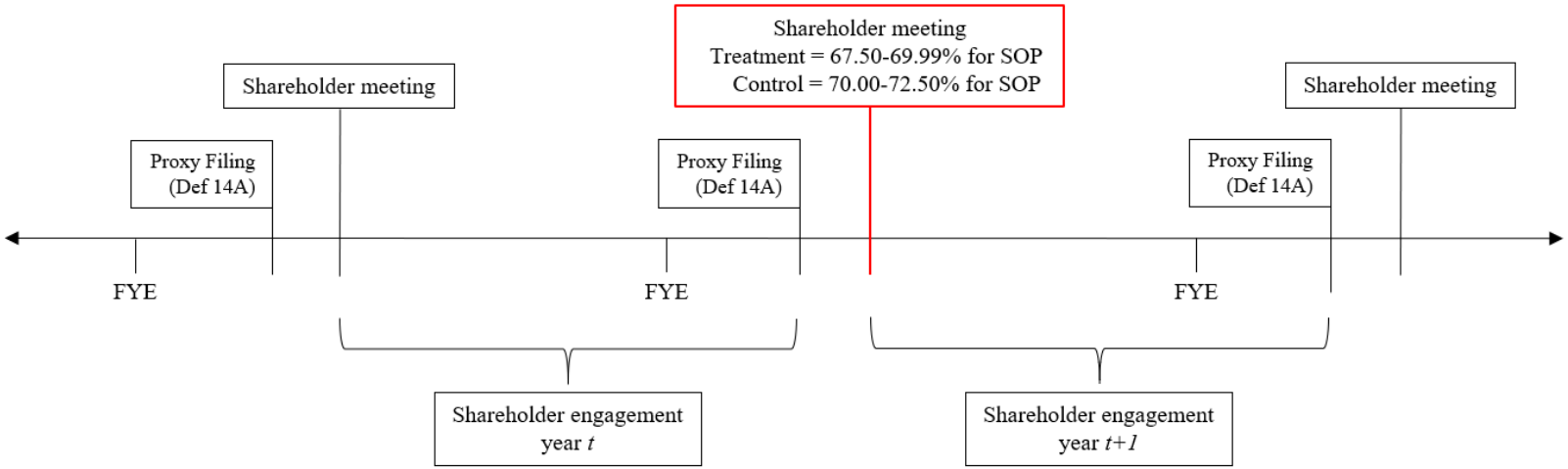
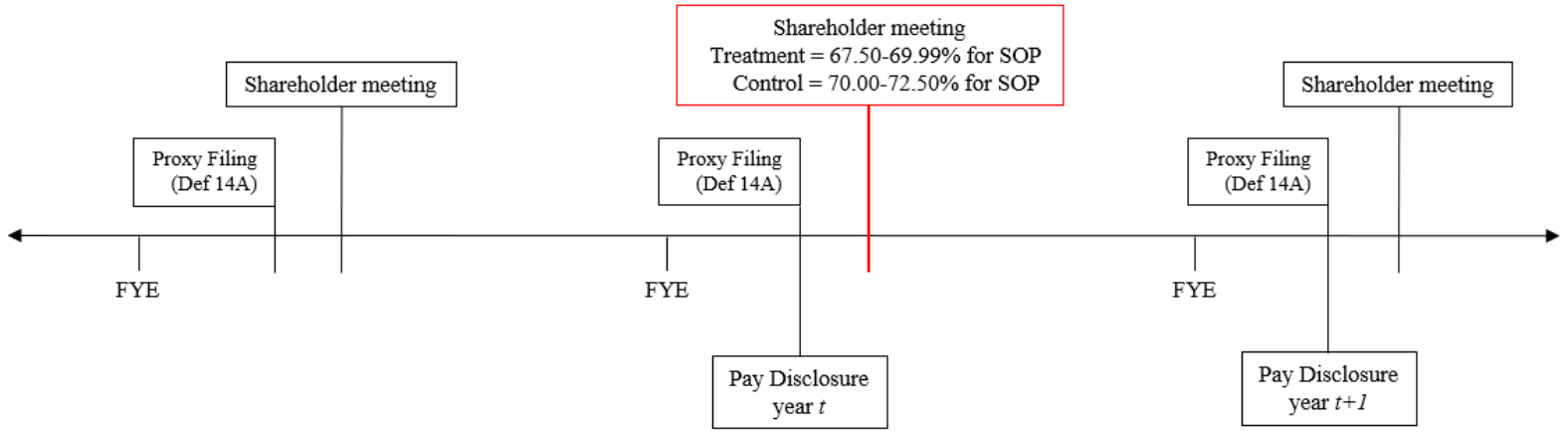


Table A-2. CEO Pay Disclosure Timeline



Appendix A (Continued)

Table A-3. CEO Pay Timeline

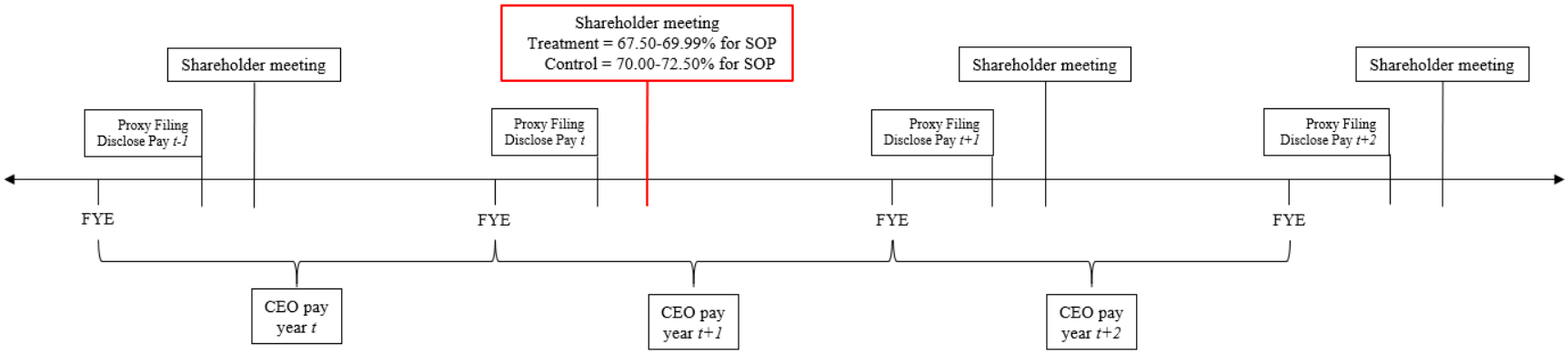
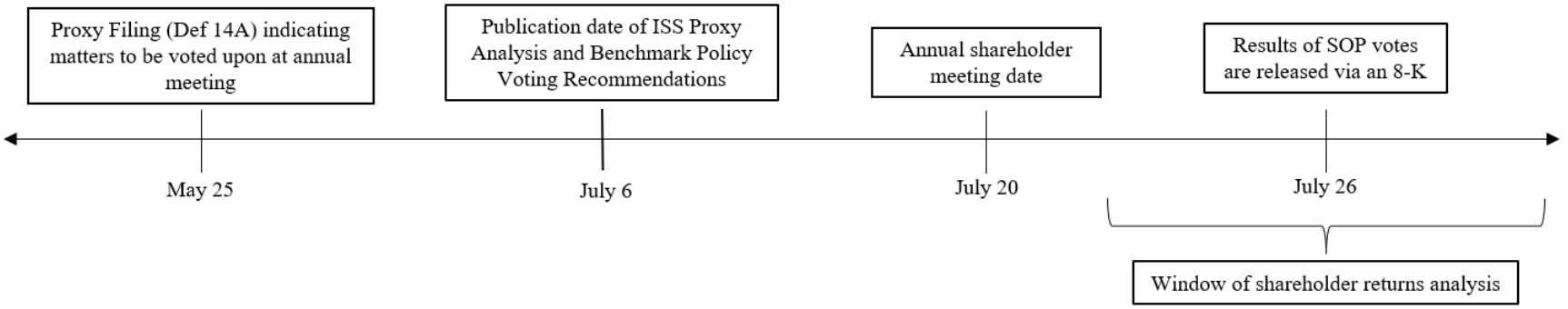


Table A-4. Example of Shareholder Vote Timeline for Event Study



Appendix B: Examples of Shareholder Engagement

Table B-1: Seacoast Banking Corporation of Florida's 2017 Proxy Statement

Shareholder Engagement and Board Responsiveness

The company engages with our shareholders to ensure that the Board and management are aware of and address issues of importance to our investors. We regularly meet with various institutional shareholders and welcome feedback from other shareholders, which is considered by the Board or appropriate Board committee.

The company communicates with shareholders in a number of ways:

- Discussing important business developments and answering shareholder questions at annual meetings;
- Holding conference calls regarding quarterly earnings and significant corporate developments;
- Through this proxy statement, chairman's letters, news releases, website, participation in industry conferences, and other periodic events.

The Company's Corporate Governance Guidelines provide for a process by which shareholders may communicate with the Board, a Board committee or the non-management directors as a group, or other individual directors. Shareholders who wish to communicate with the Board of Directors, a Board committee, the Lead Independent Director, other directors or an individual director may do so by sending written communications addressed to the Board of Directors, a Board committee or such group of directors or individual director, c/o Corporate Secretary, Seacoast Banking Corporation of Florida, 815 Colorado Avenue, P.O. Box, 9012, Stuart, Florida 34995. All communications will be compiled by the Company's Secretary and submitted to the Board of Directors, a committee of the Board of Directors or the appropriate group of directors or individual director, as appropriate, at the next regular meeting of the Board.

Since 2009 the Company has annually included in its proxy statement a separate advisory vote on the compensation paid to its executives, as disclosed in the Compensation Discussion and Analysis, the compensation tables and related proxy disclosure, commonly known as a "say-on-pay" proposal. Independent surveys have shown that an annual vote is the preferred frequency of most institutional investors. Our Board also endorses an annual vote as we believe it gives shareholders an opportunity to voice their concerns with respect to executive compensation. Shareholder support of our say-on-pay proposal at our 2016 annual meeting declined compared to prior years. (See "Outcome of our 2016 Say-On-Pay vote" in the table below.) Shareholder support of directors standing for re-election at the 2016 annual meeting also dropped compared to prior year. To better understand shareholder interests and concerns, we expanded our shareholder outreach in 2016, taking the following actions:

- Members of our Board and executive management team met in-person and by phone with shareholders representing a significant portion of Seacoast's outstanding unaffiliated shares.
- In March 2016, the Company entered into an Observer Rights Agreement with one of our largest shareholder, Basswood Capital Management, L.L.C. ("Basswood") and Matthew Lindenbaum, a principal of Basswood, pursuant to which we gave Mr. Lindenbaum the right to attend all meetings of our Board of Directors in a non-voting observer capacity, and to receive materials provided to board members, subject to certain exceptions. The agreement can be terminated by either party at any time, but remains in effect. Mr. Lindenbaum's viewpoint on matters impacting institutional investors has been very insightful and beneficial to the Company.
- We have hosted visits with a number of large investors at our facilities in Stuart to provide them with a better understanding of the depth and talent of our management team, the execution of our balanced strategy and our progress in creating shareholder value.
- We hosted an Investor Day and webcast on February 22, 2017, where Seacoast's management team provided a detailed update of the Company's strategy and long-term vision.

In these meetings, our shareholders expressed a wide range of viewpoints relating to our performance, compensation, governance and other matters. This engagement process was very informative and constructive.

Below are highlights of the feedback we have received from shareholders and our Board's response:

What We Heard	Our Board's Response
Improve financial performance to deliver results expected from acquisitions	*Delivered Promised Results.* Achieved our 2016 earnings target of $1.00 fully diluted adjusted earnings per share[1] ("EPS") despite economic headwinds. Improved adjusted efficiency ratio[1] by 12% year over year, and from 74.9% in fourth quarter of 2014 to 60.8% in the fourth quarter of 2016.
Higher stock ownership by management and directors	*Replacing Cash Bonuses with Equity.* Replaced 2016 cash bonuses paid to executive officers for achievement of performance objectives with performance based and performance-contingent stock awards. All of our directors are paid a stock retainer; several participated in our recent capital raise.
Reduce Board tenure and the risk of entrenchment	*Three New Directors.* In 2016, our Board appointed two new directors, Timothy S. Huval and Herbert Lurie, further enforcing its commitment to a balanced mix of new directors with fresh perspectives and, for continuity, seasoned, experienced directors with deep knowledge of the Company and its markets. In 2017, our Board has nominated another new Board member, Alvaro Monserrat, to replace a longer-tenured director. In addition, two long-tenured directors rotated off the CGC in 2016 and one short-tenured director was added, resulting in the majority of the CGC now comprised of short-tenured directors.

[1] Non-GAAP measure; refer to Appendix A - Informtion Regarding Non-GAAP Financial Measures.

What We Heard	Our Board's Response
Concerns regarding our severance payments under Change-in-Control agreements and award agreements	*Modifications to Existing Named Executive Officer ("NEO") Change-in-Control ("CIC") Agreements.* In September 2016, we entered into new CIC agreements with our NEOs which: i) eliminate excise tax gross-up payments, and ii) do not provide benefits that are paid before a CIC closes or if the acquirer retains the executive. Since 2015, our equity award agreements require a CIC and job loss or failure of the acquirer to convert awards into new issuer awards before vesting occurs.
Outcome of our 2016 Say-On-Pay vote	At our 2016 annual meeting of shareholders, our say-on-pay proposal received the support of 67.6% of the votes cast. In contrast, since 2009, our previous annual say-on-pay proposals received support of over 94% of the votes cast. Our CGC considered the vote in relation to: 1) the alignment of our compensation program with the long-term interests of our shareholders, 2) the evolution of our business strategy with emerging opportunities and in fulfilling customer demand for innovative products and services, and 3) the relationship between risk-taking and the incentive compensation provided to our executives. The CGC will continue to evaluate and refine our executive compensation plan to place greater emphasis on creating shareholder value, long-term performance and profitability based on emerging opportunities.
Suggestion to better articulate our business strategy	We have redoubled our efforts in our quarterly communications with shareholders and investors, and our enhanced our investor outreach, to convey our balanced business strategy of: 1) organic growth, 2) accretive and thoughtful M&A, and 3) innovation and digitally-engaged distribution. We formed the S&I Committee to provide oversight of these efforts.

The Board and the CGC will continue to monitor best practices, future advisory votes on executive compensation and other shareholder feedback to guide it in addressing issues of importance to our investors.

Source: https://www.sec.gov/Archives/edgar/data/730708/000114420417019335/v463271_def14a.htm

Appendix B (Continued)

Table B-2: Ventas, Inc.'s 2017 Proxy Statement

Responsive Redesign Following 2016 Advisory Vote on Executive Compensation and Stockholder Outreach

We submit an advisory vote to our stockholders on an annual basis to approve our executive compensation. At our 2016 Annual Meeting of Stockholders, holders of 68% of the shares represented at the meeting voted to approve, on an advisory basis, our executive compensation. Although a significant majority continued to support our executive compensation program, the result of the 2016 vote was in contrast to the strong support we received in prior years, specifically 95% in 2015 and 90% in 2014. The level of support declined despite (a) the absence of material changes to our general executive compensation program between the 2015 and 2016 Annual Meetings, (b) in the view of our Board, the consistent strong alignment between our executive pay and performance (see "Strong Pay-for-Performance Alignment" chart above) and (c) the significant reduction in long-term equity incentive awards granted to our Named Executive Officers in early 2016 resulting from our bottom quartile TSR performance as measured against our peer group for the one- and three-year measurement periods ending December 31, 2015, despite our outstanding long-term TSR outperformance.

We have continued to gain valuable insight from engaging with our stockholders on a consistent basis. We have conducted broad investor outreach programs on three separate occasions. In late 2015 and early 2016, the Chair of our Compensation Committee, our independent compensation consultant to the Compensation Committee and members of our Legal team reached out to 27 of our largest stockholders (holding more than 60% of our outstanding shares of common stock) to discuss our executive compensation program and invited such stockholders to provide us with feedback on our executive compensation program and corporate governance practices.

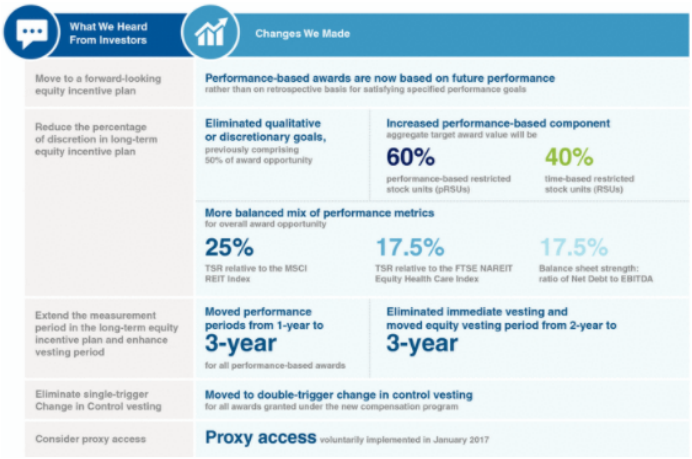
After filing our 2016 Proxy Statement, the Chair of our Compensation Committee, our independent compensation consultant to the Compensation Committee and members of our Legal team again reached out to our 30 largest stockholders (holding more than 60% of our outstanding shares of common stock) during April 2016 to discuss, and solicit feedback regarding potential changes to, our executive compensation program. We invited such stockholders to provide us with constructive comments regarding our executive compensation program and corporate governance practices.

In early 2017, a combination of the Chair of our Compensation Committee and members of our Legal team again reached out to our 32 largest stockholders (holding 60% of our outstanding shares of common stock) to discuss, and solicit feedback regarding our executive compensation program. We invited such stockholders to provide us with constructive comments regarding our executive compensation program and corporate governance practices.

Based on these discussions, we learned that our stockholders:

- ✓ generally approve of the overall structure of our executive compensation program and diversity of goals, particularly our use of balanced metrics of growth, risk management and capital structure to mitigate risk and promote responsible, sustained long-term growth;
- ✓ generally approve of our implementation of the executive compensation program, the factors considered and the decisions made under the program;
- ✓ generally approve of our proxy disclosures regarding our executive compensation program and corporate governance best practices;
- ✓ generally support our pay-for-performance alignment; and
- ✓ generally endorse our corporate governance practices.

We also received constructive feedback from our investors. After careful consideration of this feedback, we have decided to make significant and responsive modifications to our executive compensation program, beginning with the 2017 compensation cycle.



The key features of the new program are consistent with the feedback we have received from our largest stockholders and are described in detail below in the section entitled, "Going Forward: Responsive Redesign of Long-Term Incentive Compensation."

We believe this redesigned program enhances alignment of pay and performance, is responsive to investor feedback and provides simpler, clear objectives, while achieving our goals of attracting, retaining and motivating talented executives and rewarding superior performance in the context of our business risk environment.

Source: https://www.sec.gov/Archives/edgar/data/740260/000110465917021407/a17-2391_1def14a.htm#ResponsiveRedesignFollowing2016A_120349

Appendix C: Variable Definitions

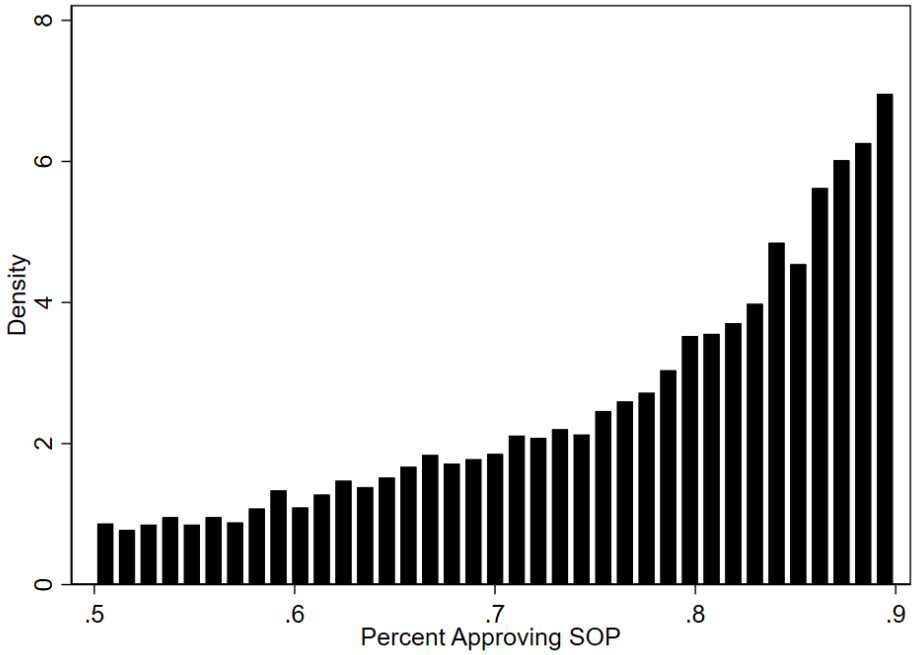
Variable	Definition
Firm characteristics	
Size	Natural log of total assets
Market-to-book	Market value of equity plus debt divided by total assets
Return-on-assets	Earnings before interest, taxes, depreciation, and amortization divided by total assets
Leverage	Long-term debt plus long-term debt in current liabilities divided by total assets
Sales growth	Year-over-year growth in total revenue
Abnormal returns	Annual common stock return less the return of the value weighted CRSP index during the fiscal year
Stock return volatility	Standard deviation of the monthly stock returns during the fiscal year
Operating loss	Equals 1 if the firm has a non-missing value of tax loss carry-forward in Compustat during the fiscal year
CD&A exempt	Equals 1 if the firm meets the SEC's definition of a Smaller Reporting Company and is exempt from the CD&A disclosure
ISS recommendation	Equals 1 if ISS recommends voting "For" Say-On-Pay
Ln(analysts)	Log transformation of one plus the number of analysts providing earnings per share forecasts during the four quarters prior to the annual meeting, from IBES
Institutional ownership	The percent of shares held by institutions with more than $100 million in assets under management as reported on SEC Form 13-F, from Thomson
Forced CEO turnover	Equals 1 for firms with non-voluntary CEO separation during the fiscal year
Engagement	
Engagement indicator	Equals 1 if the proxy statement mentions any of the engagement keywords engage*, feedback* and conversation* within 100 characters on either side of the shareholder keywords shareholder*, stockholder*, or investor*
Engagement count	A count of the number of engagement keywords near shareholder keywords in the proxy statement
Engagement references SOP	Equals 1 if the shareholder engagement discussion in the proxy statement references the SOP vote from the prior year
Engagement table	Equals 1 if the firm provides a tabular summary of investor concerns and the board response in the proxy statement
Shareholders contacted	The percent of shares outstanding held by investors that were contacted in response to a low SOP vote, from the proxy statement
Shareholders spoken with	The percent of shares held by investors spoken with after a low SOP vote, from the proxy statement
Shareholder concerns	
Number of concerns	A count of the number of unique disclosed concerns raised by shareholders during the engagement after a low SOP vote
CD&A Transparency	Equals 1 if investors raised concerns with transparency of compensation practices or objectives
Peer Group	Equals 1 if investors raised concerns with the selection of the peer group for purposes of determining executive compensation
Compensation & Incentives	Equals 1 if investors raised concerns about equity grants, pay-for-performance, financial metrics for bonuses, and stock ownership
Pay Equity	Equals 1 if investors raised concerns about executive pay equity
Other	Equals 1 if investors raised other concerns about firm performance, board oversight, or other aspects of compensation or firm outcomes

Appendix C (Continued)

Variable	Definition
Pay disclosure	
CD&A length	Number of words in the CD&A section of the proxy statement
CD&A complexity	Number of seven-character words scaled by the number of sentences in the CD&A section of the proxy statement (i.e., readability index or RIX)
CD&A tone	Percent of positive words using the number of Loughran-McDonald (LM) financial-positive words in the CD&A section of the proxy statement scaled by the total number of words in the LM dictionary
Peer count	A count of the number of compensation peer firms in the CD&A
CEO pay	
Total pay	Total CEO compensation from the Summary Compensation Table
Equity pay	Sum of CEO stock and option awards from the Summary Compensation Table
Non-equity pay	Sum of CEO salary, bonus, non-equity incentives, change in pension value, and other compensation from Summary Compensation Table
Salary	CEO salary from the Summary Compensation Table
Bonus	CEO bonus from the Summary Compensation Table
Stock awards	CEO stock awards from the Summary Compensation Table
Option awards	CEO option awards from the Summary Compensation Table
Non-equity incentive	CEO non-equity incentives from the Summary Compensation Table
Pension	Change in CEO pension value from the Summary Compensation Table
Other compensation	Other CEO compensation from the Summary Compensation Table
Board monitoring	
Board independence	The ratio of the number of independent directors to the total number of directors
Compensation committee tenure	Average board service length (in years) for compensation committee members
Ex-ante partitions	
High abnormal stock return	Equals 1 if the firm's abnormal stock return is higher than yearly sample median value in the fiscal year just prior to the low SOP vote
High board independence	Equals 1 if the firm's percentage of independent directors is higher than yearly sample median value at the time of the low SOP vote
High compensation committee tenure	Equals 1 if the average tenure of the compensation committee members is higher than yearly sample median value at the time of the low SOP vote
High institutional ownership	Equals 1 if the percentage of shares held by institutional investors is higher than the yearly sample median value in the fiscal year just prior to the low SOP vote
Ex-post benefits and costs	
Bid-ask spreads	The daily closing ask price less the closing bid price divided by the midpoint of the closing ask and bid prices in CRSP
Stock illiquidity	The log transformed value of the absolute daily returns scaled by trading volume from CRSP (Amihud and Noh, 2021)
Shareholder activism	Equals 1 if an investor files a Schedule 13D filing with the SEC that contains the intent or possibility of influencing firm policy or engaging with management or board members of the firm
R&D intensity	R&D expenses divided by total assets (zero if missing)
CapEx intensity	Capital expenditures divided by total assets (zero if missing)
Meets or beats	Equals 1 if the firm reports earnings per share that meet or beat the analyst consensus value by $0.01 or less, from IBES
Restatements	Equals 1 if the firm announces a financial restatement during the year, from Audit Analytics

Figure 1. Say-On-Pay (SOP) Voting Support

Panel A. SOP voting support between 50% and 90% for annual meetings over 2011 to 2019



Panel B. SOP voting support between 67.5% and 72.5% for annual meetings over 2011 to 2019

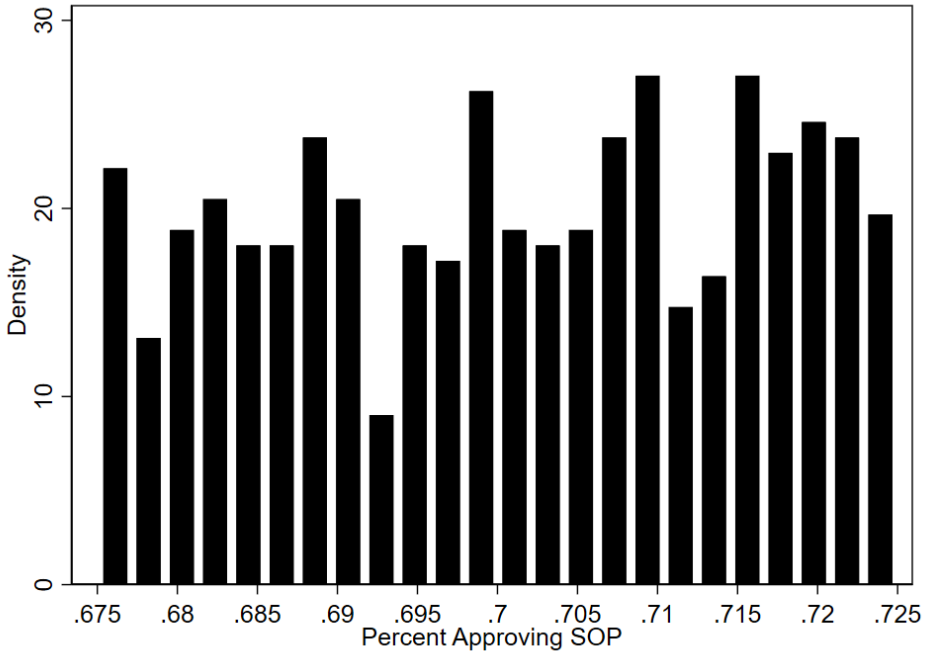
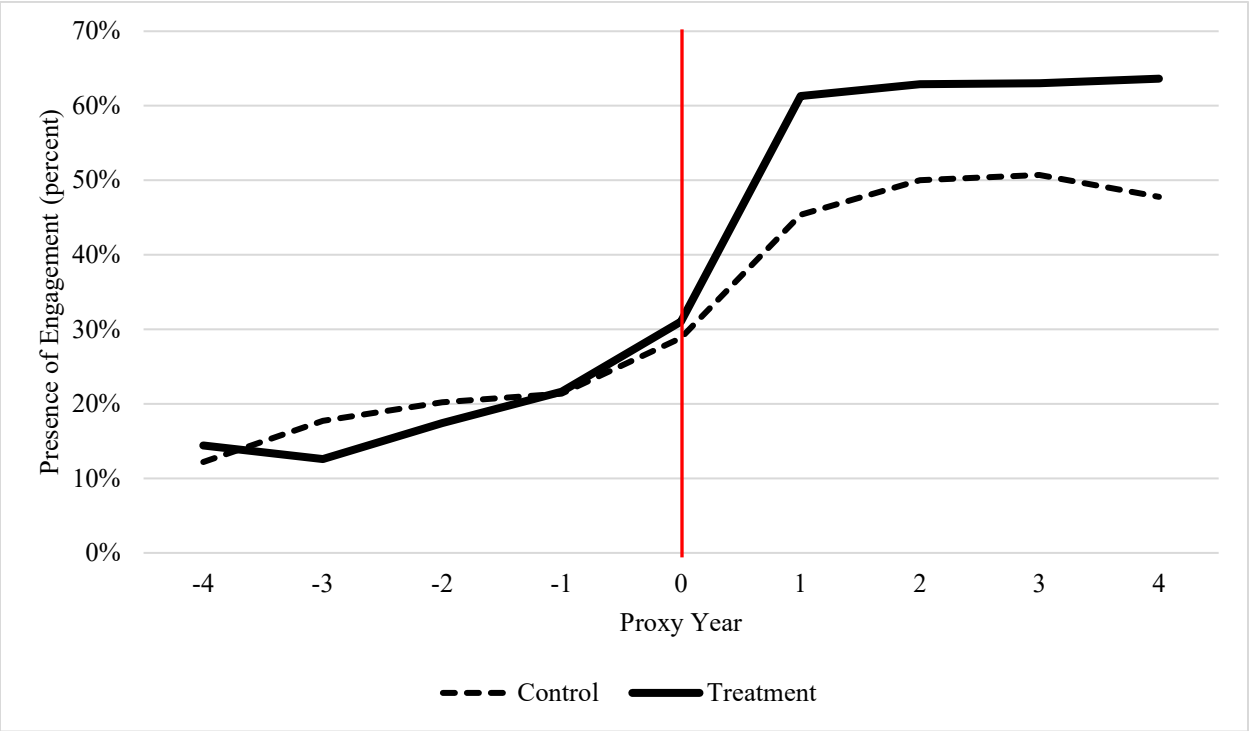
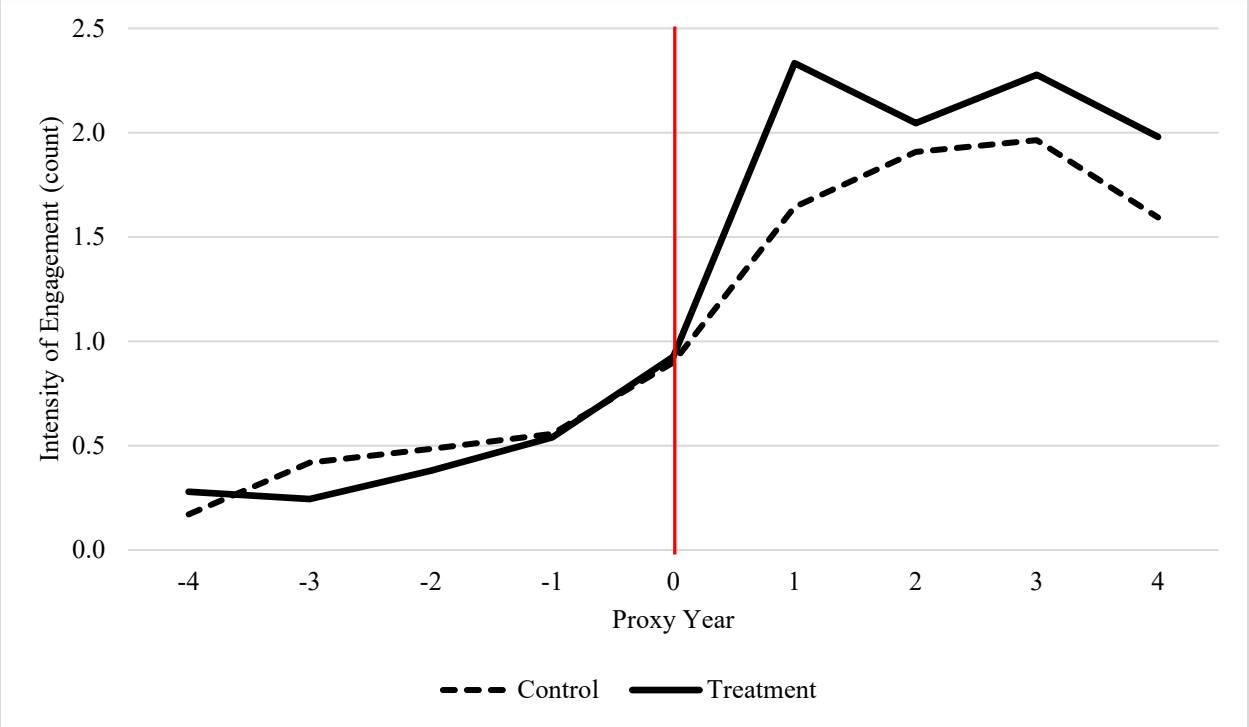


Figure 2. Trends of Shareholder Engagement with ISS Treatment

Panel A. Shareholder engagement indicator for ISS treatment and control firms



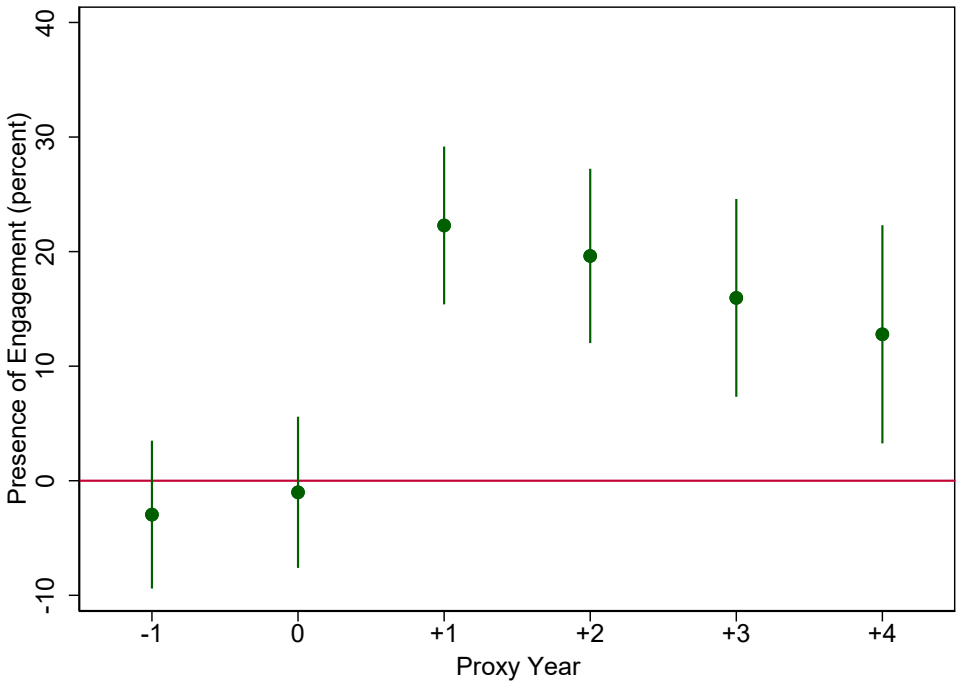
Panel B. Shareholder engagement count for ISS treatment and control firms



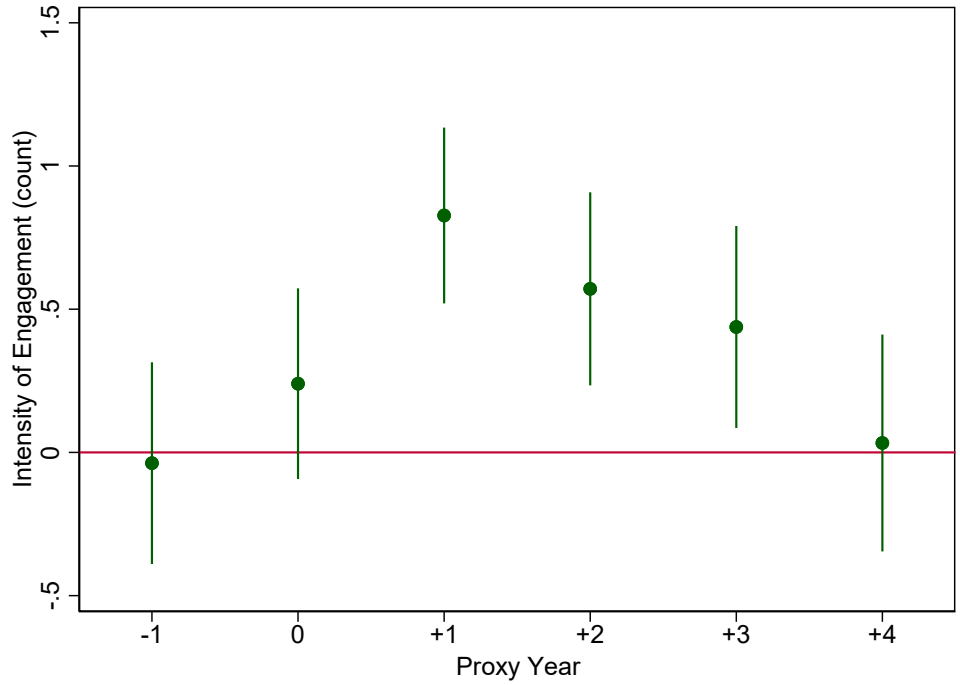
These figures graph the *engagement indicator* (Panel A) and *engagement count* (Panel B) for the ISS treatment and control firms relative to the year of the low SOP vote.

Figure 3. Coefficient Plots of Shareholder Engagement with ISS Treatment

Panel A. Coefficient plots of shareholder engagement indicator with ISS treatment



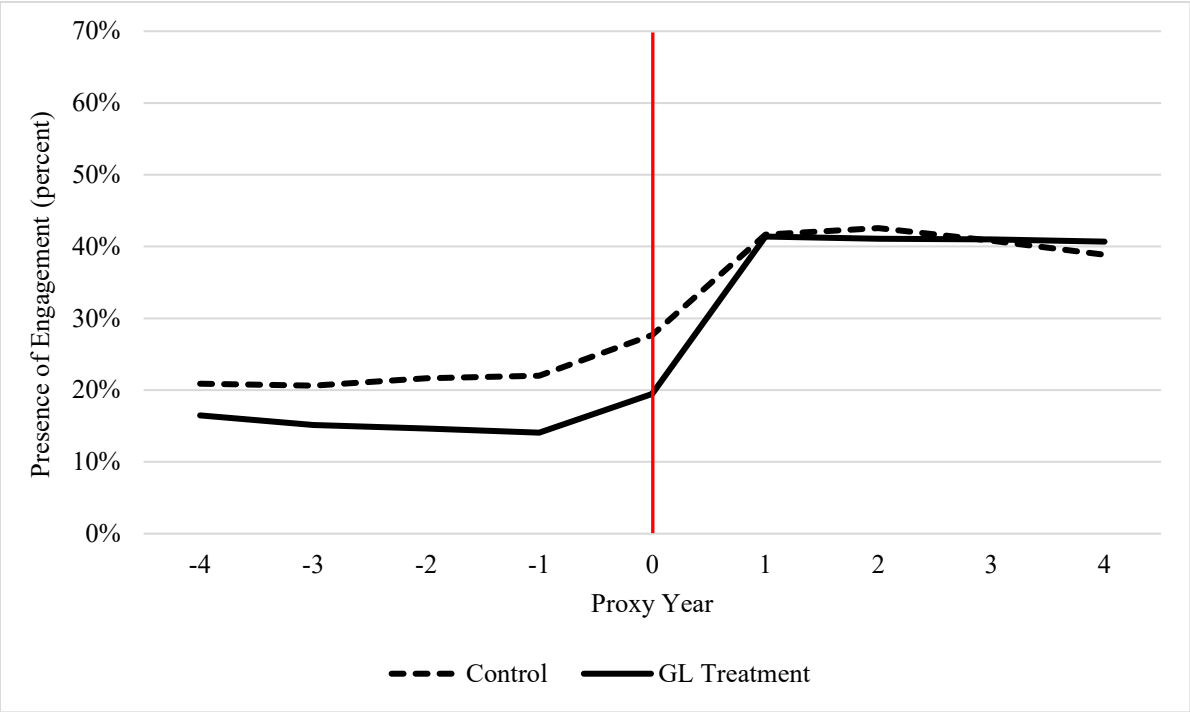
Panel B. Coefficient plots of shareholder engagement count with ISS treatment



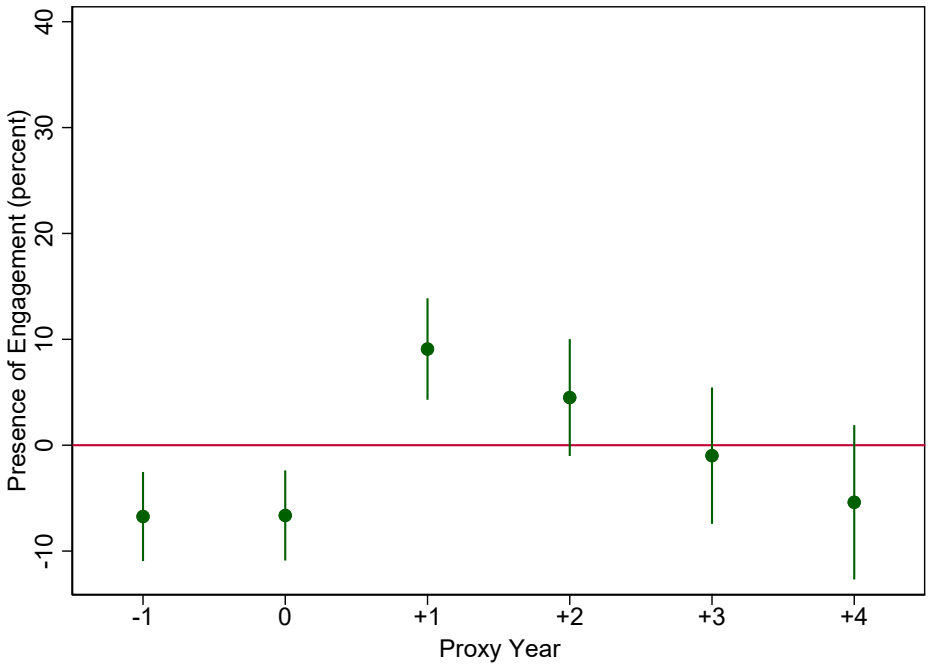
These figures graph the panel regression coefficient plots of ISS treatment on the *engagement indicator* (Panel A) and *engagement count* (Panel B) from Table 3.

Figure 4. Shareholder Engagement with Glass Lewis Treatment

Panel A. Shareholder engagement for Glass Lewis (GL) treatment and control firms



Panel B. Coefficient plots of shareholder engagement indicator with Glass Lewis treatment



These figures graph the *engagement indicator* for the Glass Lewis (GL) treatment and control firms relative to the year of the low SOP vote in Panel A. Panel B graphs the panel regression coefficient plots of GL treatment on the *engagement indicator* from Table 4.

Table 1. Similarity of Treatment and Control Sample

	(1)	(2)	(3)	(4)
	Treated (N=209)	Control (N=217)	Difference	*t*-statistic
Shareholder voting				
Say-on-Pay voting support $_{t-1}$	0.837	0.844	-0.007	0.382
Say-on-Pay voting support $_{t}$	0.688	0.713	-0.025***	36.536
Firm characteristics $_{t}$				
Size	7.303	7.220	0.083	0.418
Market-to-book	1.478	1.519	-0.040	-0.203
Return-on-assets	0.005	0.000	0.005	0.215
Leverage	0.221	0.224	-0.003	-0.146
Sales growth	0.067	0.079	-0.012	-0.200
Abnormal stock return	-0.068	-0.072	0.004	0.112
Stock return volatility	0.124	0.135	-0.011	-1.418
Operating loss	0.641	0.677	-0.036	-0.789
CD&A exempt	0.072	0.083	-0.011	-0.431
ISS recommendation	0.311	0.350	-0.039	-0.859
Ln(analysts)	1.619	1.572	0.047	0.443
Institutional ownership	0.419	0.463	-0.044	1.124
Forced CEO turnover	0.019	0.018	0.001	0.054
Shareholder engagement $_{t}$				
Engagement indicator	0.311	0.288	0.022	0.479
Engagement count	0.926	0.899	0.027	0.139
Pay Disclosure $_{t}$				
CD&A length (000s)	7.234	7.005	0.229	0.673
CD&A complexity	12.787	12.636	0.151	0.760
CD&A tone	0.011	0.011	0.000	0.211
Peer count	17.571	19.403	-1.831	-1.048
CEO pay $_{t}$				
Ln(CEO total pay)	14.827	15.099	-0.272	-1.511
Ln(CEO equity pay)	12.887	13.331	-0.444	-1.031
Ln(CEO non-equity pay)	13.948	14.209	-0.262	-1.369
Board monitoring $_{t}$				
Board independence	0.807	0.808	-0.001	-0.050
Compensation committee tenure	9.062	9.499	-0.438	-0.683

This table compares univariate differences in SOP voting, firm characteristics, shareholder engagement, pay disclosure, CEO pay, and board monitoring during the pre-assignment period *prior* to receiving 67.5% to 72.5% SOP voting support in year t. *Treated* includes firms with 67.50% to 69.99% SOP voting approval. *Control* includes firms with 70.00% to 72.49% SOP voting approval. ***, **, * denote the difference in Column (3) is significant at the 1%, 5%, and 10% level, respectively, using two-tailed *t*-tests.

Table 2. Shareholder Engagement

Panel A. Summary statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample	Treated			Control		
Shareholder engagement $_{t+1}$	Mean	Mean	Median	SD	Mean	Median	SD
Engagement indicator	0.529	0.613	1	0.488	0.454	0	0.499
Engagement count	1.972	2.333	1	3.261	1.644	0	2.700
Δ Engagement indicator	0.233	0.301	0	0.483	0.171	0	0.448
Δ Engagement count	1.069	1.409	0	2.907	0.761	0	2.123
Engagement references SOP	0.545	0.598	1	0.491	0.493	0	0.501
Engagement table	0.103	0.134	0	0.341	0.074	0	0.262
Shareholders contacted	0.150	0.204	0	0.306	0.100	0	0.211
Shareholders contacted (nonzero)	0.577	0.622	0.65	0.153	0.508	0.50	0.134
Shareholders spoken with	0.117	0.158	0	0.231	0.078	0	0.172
Shareholders spoken with (nonzero)	0.419	0.426	0.45	0.170	0.407	0.42	0.144

Panel B. Correlation matrix

	Shareholder engagement $_{t+1}$	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	Engagement indicator	1.00							
(2)	Engagement count	0.62*	1.00						
(3)	Δ Engagement indicator	0.56*	0.22*	1.00					
(4)	Δ Engagement count	0.43*	0.76*	0.47*	1.00				
(5)	Engagement references SOP	0.67*	0.51*	0.31*	0.32*	1.00			
(6)	Engagement table	0.28*	0.43*	-0.01	0.27*	0.31*	1.00		
(7)	Shareholders contacted	0.35*	0.37*	0.16*	0.32*	0.38*	0.39*	1.00	
(8)	Shareholders spoken with	0.29*	0.39*	0.06	0.33*	0.39*	0.41*	0.43*	1.00

Table 2 (Continued)

Panel C. Tests of shareholder engagement				
	(1)	(2)	(3)	(4)
Dependent variable:	Engagement Indicator	Engagement Count	Δ Engagement Indicator	Δ Engagement Count
ISS treatment	0.167***	0.400***	0.148***	0.317***
	(3.54)	(3.09)	(3.54)	(2.64)
Size	0.066***	0.133**	0.033**	0.058
	(3.68)	(2.36)	(2.08)	(1.13)
Market-to-book	0.011	0.031	0.014	0.055**
	(0.89)	(1.42)	(1.24)	(2.46)
Return-on-assets	-0.150	0.206	-0.107	0.253
	(-1.19)	(0.53)	(-0.96)	(0.75)
Leverage	-0.054	-0.100	-0.173*	-0.207
	(-0.48)	(-0.38)	(-1.74)	(-0.82)
Sales growth	0.021	0.057	-0.016	0.088
	(0.53)	(0.74)	(-0.46)	(1.51)
Abnormal returns	-0.010	-0.122	0.013	-0.204
	(-0.16)	(-0.71)	(0.24)	(-1.22)
Stock return volatility	0.266	1.637	0.067	0.642
	(0.71)	(1.12)	(0.20)	(0.52)
Operating loss	0.004	0.217	-0.017	0.161
	(0.08)	(1.42)	(-0.34)	(1.11)
CD&A exempt	-0.306***	-1.717**	-0.264***	-1.541**
	(-2.69)	(-2.12)	(-2.63)	(-1.98)
ISS recommendation	-0.042	-0.027	-0.035	-0.088
	(-0.79)	(-0.18)	(-0.74)	(-0.64)
Ln(analysts)	0.045	0.176**	0.042	0.149**
	(1.56)	(2.46)	(1.64)	(2.31)
Institutional ownership	0.102	0.705***	0.082	0.620***
	(1.46)	(3.57)	(1.34)	(3.55)
Forced CEO turnover	0.042	0.018	0.046	0.105
	(0.25)	(0.06)	(0.31)	(0.42)
Regression	OLS	Poisson	OLS	Poisson
Lagged dependent value	No	No	Yes	Yes
Year, Industry FE	Yes	Yes	Yes	Yes
Firms	390	390	390	390
Adjusted (Pseudo) R^2	0.184	0.238	0.362	0.303

Table 2 (Continued)

Panel D. Shareholder engagement details

Dependent variable:	(1) Engagement References SOP	(2) Engagement Table	(3) Shareholders Contacted	(4) Shareholders Spoken With
ISS treatment	0.124***	0.071**	0.079***	0.070***
	(2.94)	(2.50)	(3.12)	(3.32)
Size	0.098***	0.027**	0.027***	0.040***
	(6.07)	(2.49)	(2.83)	(5.07)
Market-to-book	0.024**	0.009	0.019***	0.012**
	(2.02)	(1.15)	(2.82)	(2.23)
Return-on-assets	-0.071	-0.014	-0.022	-0.000
	(-0.62)	(-0.18)	(-0.34)	(-0.01)
Leverage	-0.055	0.049	-0.054	0.019
	(-0.54)	(0.72)	(-0.85)	(0.37)
Sales growth	0.025	0.042*	0.050**	0.010
	(0.68)	(1.73)	(2.23)	(0.56)
Abnormal returns	0.011	-0.009	-0.037	0.015
	(0.18)	(-0.23)	(-1.05)	(0.53)
Stock return volatility	0.129	0.224	-0.034	0.153
	(0.40)	(1.02)	(-0.19)	(1.02)
Operating loss	0.115**	-0.011	0.033	-0.001
	(2.25)	(-0.31)	(1.07)	(-0.04)
CD&A exempt	-0.215**	0.033	-0.018	0.029
	(-2.26)	(0.51)	(-0.35)	(0.69)
ISS recommendation	-0.007	-0.032	-0.003	-0.048*
	(-0.15)	(-0.97)	(-0.09)	(-1.94)
Ln(analysts)	0.044*	0.024	0.016	0.022*
	(1.72)	(1.39)	(1.02)	(1.66)
Institutional ownership	0.141**	0.077*	0.004	0.051
	(2.25)	(1.83)	(0.09)	(1.53)
Forced CEO turnover	0.257*	0.025	-0.109	0.335***
	(1.66)	(0.24)	(-0.90)	(3.34)
Regression	OLS	OLS	OLS	OLS
Year, Industry FE	Yes	Yes	Yes	Yes
Firms	426	426	267	267
Adjusted R^2	0.280	0.128	0.200	0.372

This table tests the relation between ISS treatment and subsequent shareholder engagement in year t+1. Panel A presents summary statistics. Panel B presents pairwise correlations. * denotes 10% level significance or better. Panels C and D present regressions of shareholder engagement using estimates of Eq. (1). ***, **, and * indicate significance at the 1%, 5%, and 10% level using two-tailed tests. All regressions include fiscal year and industry fixed effects. Columns (3) and (4) of Panel C include the lagged dependent variable in year t as a control. We define variables in Appendix C.

Table 3. Shareholder Engagement Over Time

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Engagement Indicator			Engagement Count		
ISS treatment	0.186***			0.631***		
	(8.30)			(5.97)		
ISS treatment $^{-1}$		-0.032	-0.030		0.057	-0.037
		(-1.08)	(-0.75)		(0.32)	(-0.18)
ISS treatment ^{0}		-0.000	-0.010		0.255	0.240
		(-0.00)	(-0.25)		(1.51)	(1.19)
ISS treatment $^{+1}$		0.203***	0.223***		0.865***	0.827***
		(6.36)	(5.32)		(5.65)	(4.43)
ISS treatment $^{+2}$		0.174***	0.196***		0.589***	0.571***
		(4.80)	(4.24)		(3.43)	(2.79)
ISS treatment $^{+3}$		0.139***	0.160***		0.503***	0.438**
		(3.38)	(3.04)		(2.74)	(2.04)
ISS treatment $^{+4}$		0.106**	0.128**		0.184	0.033
		(2.33)	(2.21)		(0.93)	(0.14)
Size			0.045			0.205*
			(1.55)			(1.79)
Market-to-book			-0.004			-0.016
			(-0.48)			(-0.41)
Return-on-assets			-0.041			-0.916**
			(-0.57)			(-2.45)
Leverage			-0.104			-0.734***
			(-1.26)			(-2.64)
Sales growth			-0.004			-0.078*
			(-0.28)			(-1.91)
Abnormal returns			0.014			0.138**
			(0.66)			(2.22)
Stock return volatility			-0.485			-10.176***
			(-0.92)			(-3.39)
Operating loss			-0.013			0.224
			(-0.33)			(1.01)
ISS recommendation			0.015			0.282***
			(0.76)			(4.06)
Ln(analysts)			-0.017			-0.198**
			(-0.70)			(-1.97)
Institutional ownership			0.052			0.452
			(0.57)			(1.40)
Forced CEO turnover			-0.061			-0.311
			(-0.66)			(-0.93)
Regression	OLS	OLS	OLS	Poisson	Poisson	Poisson
Firm, Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm Years	3,040	3,040	2,087	2,125	2,125	1,557
Adjusted (Pseudo) R^2	0.525	0.526	0.536	0.445	0.450	0.460

This table presents panel regressions of the relation between ISS treatment and shareholder engagement. Columns (1) to (3) present tests of *engagement indicator*. Columns (4) to (6) test *engagement count*. The *ISS treatment* coefficient in Columns (1) and (4) represent ISS treatment × the post-treatment period. ***, **, and * indicate significance at the 1%, 5%, and 10% level using two-tailed tests. All regressions include firm and year fixed effects. We define variables in Appendix C.

Table 4. Glass Lewis and Placebo Tests

	(1)	(2)	(3)	(4)	(5)	(6)
	Glass Lewis		Placebo-90%		Placebo-50%	
Dependent variable:	Engagement Indicator	Engagement Count	Engagement Indicator	Engagement Count	Engagement Indicator	Engagement Count
Treatment^{-1}	-0.064**	-0.015	-0.036**	-0.158	-0.183**	0.077
	(-2.50)	(-0.10)	(-2.48)	(-1.00)	(-2.52)	(0.23)
Treatment^{0}	-0.063**	0.144	-0.054***	-0.091	-0.332***	0.007
	(-2.42)	(0.94)	(-3.73)	(-0.65)	(-4.47)	(0.02)
Treatment^{+1}	0.094***	0.038	0.013	0.055	0.037	0.303
	(3.20)	(0.22)	(0.86)	(0.39)	(0.46)	(0.90)
Treatment^{+2}	0.047	0.022	-0.004	-0.080	-0.020	0.159
	(1.41)	(0.11)	(-0.21)	(-0.53)	(-0.22)	(0.41)
Treatment^{+3}	-0.009	-0.353	-0.013	-0.076	0.021	0.155
	(-0.23)	(-1.60)	(-0.67)	(-0.44)	(0.17)	(0.37)
Treatment^{+4}	-0.054	-0.216	-0.014	-0.273	-0.057	-0.003
	(-1.21)	(-0.85)	(-0.68)	(-1.55)	(-0.36)	(-0.01)
Size	-0.045**	0.043	0.007	0.015	0.140***	-0.442**
	(-2.38)	(0.38)	(0.63)	(0.14)	(2.84)	(-2.15)
Market-to-book	-0.006*	0.006	0.012***	0.000	0.017*	0.036
	(-1.83)	(0.30)	(3.79)	(0.01)	(1.68)	(0.80)
Return-on-assets	-0.005	0.030	0.055*	-0.522*	0.015	-1.947
	(-0.19)	(0.18)	(1.73)	(-1.66)	(0.10)	(-1.41)
Leverage	0.038	0.158	0.114***	0.352*	-0.290	0.269
	(0.72)	(0.51)	(3.58)	(1.70)	(-1.27)	(0.43)
Sales growth	-0.002	0.056	0.001	0.012	0.004	0.035
	(-0.17)	(0.92)	(0.18)	(0.24)	(0.19)	(0.35)
Abnormal returns	0.003	0.029	-0.005	0.057	0.006	0.044
	(0.19)	(0.37)	(-0.66)	(1.10)	(0.21)	(0.64)
Stock return volatility	0.506	2.599	-0.325	-1.987	-0.616	-0.180
	(1.40)	(1.21)	(-1.54)	(-0.66)	(-0.50)	(-0.03)
Operating loss	-0.039	-0.098	0.027**	0.034	0.076	0.734**
	(-1.43)	(-0.64)	(2.17)	(0.25)	(1.18)	(2.37)
PA recommendation	0.014	0.123	0.006	0.254***	-0.019	0.414***
	(1.10)	(1.56)	(0.74)	(4.12)	(-0.53)	(3.02)
Ln(analysts)	-0.029	-0.265**	0.010	-0.033	0.041	0.159*
	(-1.48)	(-2.30)	(0.86)	(-0.59)	(0.67)	(1.89)
Institutional ownership	-0.075	0.405	0.011	0.030	-1.171***	2.008
	(-1.10)	(0.82)	(0.19)	(0.05)	(-3.39)	(1.58)
Forced CEO turnover	0.051	-0.290	0.008	0.216*	0.073	0.090
	(0.95)	(-0.97)	(0.34)	(1.67)	(0.41)	(0.28)
Regression	OLS	Poisson	OLS	Poisson	OLS	Poisson
Firm, Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm Years	2,316	1,350	6,242	2,990	513	364
Adjusted (Pseudo) R^2	0.709	0.398	0.810	0.421	0.697	0.512

This table presents panel regressions of the relation between Glass Lewis (GL) and placebo treatment and subsequent shareholder engagement. In Columns (1) and (2), the *Treatment*$^{+/-n}$ indicator is the event-time *GL treatment* indicator from Eq. (2b). In Columns (3) to (6), the *Treatment*$^{+/-n}$ indicator is the *placebo indicator* from Eq. (2c), which equals 1 if the *SOP voting support* is below 90% in Columns (3) and (4) and 50% in Columns (5) and (6). ***, **, and * indicate significance at the 1%, 5%, and 10% level using two-tailed tests. All regressions include firm and year fixed effects. We define variables in Appendix C.

Table 5. Shareholder Concerns

Panel A. Summary statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample	ISS Treated			Control		
	Mean	Mean	Median	SD	Mean	Median	SD
Count of concerns	0.662	0.761	0	1.029	0.567	0	0.768
Count of concerns (nonzero)	1.508	1.656	1	0.904	1.352	1	0.584
Topics							
CD&A Transparency	0.080	0.062	0	0.242	0.097	0	0.296
Peer Group	0.085	0.115	0	0.320	0.055	0	0.229
Compensation & Incentives	0.385	0.426	0	0.496	0.346	0	0.477
Pay Equity	0.012	0.024	0	0.153	0.000	0	0.000
Other	0.101	0.134	0	0.440	0.069	0	0.254

Table 5 (Continued)

Panel B. Regression analyses

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Count of Concerns	CD&A Transparency	Peer Group	Comp. & Incentives	Pay Equity	Other
ISS treatment	0.390***	-0.035	0.058**	0.089**	0.025**	0.079**
	(3.38)	(-1.34)	(2.20)	(2.00)	(2.35)	(2.29)
Size	0.190***	0.024**	0.021**	0.053***	0.011***	0.033**
	(4.22)	(2.40)	(2.04)	(3.15)	(2.80)	(2.50)
Market-to-book	-0.049	-0.002	-0.001	-0.006	0.001	-0.001
	(-1.31)	(-0.28)	(-0.13)	(-0.50)	(0.27)	(-0.11)
Return-on-assets	0.442	-0.075	-0.012	0.060	-0.023	0.020
	(0.91)	(-1.05)	(-0.17)	(0.50)	(-0.81)	(0.22)
Leverage	-0.259	-0.112*	0.041	0.053	-0.024	-0.125
	(-0.92)	(-1.77)	(0.65)	(0.50)	(-0.92)	(-1.50)
Sales growth	0.072	-0.002	0.048**	-0.015	-0.007	-0.004
	(0.88)	(-0.07)	(2.11)	(-0.40)	(-0.72)	(-0.14)
Abnormal returns	0.181	-0.030	0.026	0.033	0.006	0.034
	(1.14)	(-0.83)	(0.71)	(0.54)	(0.38)	(0.70)
Stock return volatility	2.123**	-0.026	-0.004	0.362	0.009	0.456*
	(2.09)	(-0.13)	(-0.02)	(1.05)	(0.11)	(1.71)
Operating loss	0.080	0.009	-0.048	0.062	-0.000	0.044
	(0.62)	(0.29)	(-1.48)	(1.16)	(-0.00)	(1.05)
CD&A exempt	-1.501**	-0.020	0.016	-0.121	0.043*	0.017
	(-2.11)	(-0.34)	(0.27)	(-1.21)	(1.82)	(0.21)
ISS recommendation	-0.071	0.004	0.032	-0.064	0.001	-0.015
	(-0.45)	(0.12)	(1.07)	(-1.26)	(0.12)	(-0.37)
Ln(analysts)	0.218***	0.031*	0.011	0.096***	-0.011*	0.006
	(2.68)	(1.96)	(0.69)	(3.61)	(-1.77)	(0.29)
Institutional ownership	0.491***	0.026	0.091**	0.039	0.012	0.103**
	(2.76)	(0.68)	(2.32)	(0.59)	(0.75)	(2.01)
Forced CEO turnover	0.523***	0.163*	0.139	0.121	-0.001	0.021
	(2.68)	(1.68)	(1.43)	(0.74)	(-0.03)	(0.17)
Regression	Poisson	OLS	OLS	OLS	OLS	OLS
Year, Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Firms	426	426	426	426	426	426
Pseudo (Adjusted) R^2	0.164	0.055	0.087	0.164	0.024	0.067

This table tests the relation between ISS treatment and issues raised by shareholders during the subsequent engagement in year t+1. Panel A presents summary statistics. Panel B presents regression results. ***, **, and * indicate significance at the 1%, 5%, and 10% level using two-tailed tests. All regressions include fiscal year and industry fixed effects. We define variables in Appendix C.

Table 6. Changes in Pay Disclosure

	(1)	(2)	(3)	(4)	(5)
	Compensation Discussion & Analysis			Peer Count	
Dependent variable:	Δ Length t+1	Δ Complexity t+1	Δ Tone t+1	Δ t+1	Δ t+2
ISS treatment	-0.005	0.000	0.059***	-0.065**	-0.137***
	(-0.19)	(0.00)	(3.05)	(-1.97)	(-2.76)
Size	0.023*	-0.006	0.003	0.041***	0.052***
	(1.92)	(-1.62)	(0.34)	(3.09)	(3.67)
Market-to-book	-0.016***	-0.003	0.010*	0.007	-0.001
	(-3.61)	(-1.36)	(1.95)	(0.79)	(-0.07)
Return-on-assets	-0.015	-0.002	-0.001	-0.256***	-0.330***
	(-0.24)	(-0.06)	(-0.02)	(-3.35)	(-3.60)
Leverage	-0.057	-0.009	-0.005	-0.072	-0.190**
	(-1.04)	(-0.42)	(-0.11)	(-1.15)	(-2.22)
Sales growth	0.016	0.006	0.031**	0.020	0.021
	(1.25)	(0.78)	(2.02)	(1.04)	(1.28)
Abnormal returns	0.017	0.008	0.065**	0.031	0.042
	(0.37)	(0.67)	(2.44)	(0.82)	(0.92)
Stock return volatility	0.246	-0.174**	-0.225	-0.010	-0.108
	(1.00)	(-2.04)	(-1.21)	(-0.04)	(-0.36)
Operating loss	0.062**	0.004	-0.027	-0.067*	0.020
	(2.12)	(0.40)	(-1.18)	(-1.68)	(0.35)
ISS recommendation	0.011	-0.030***	-0.040*	-0.015	-0.014
	(0.36)	(-2.98)	(-1.81)	(-0.43)	(-0.33)
Ln(analysts)	0.022	0.001	-0.020*	0.017	0.002
	(1.41)	(0.27)	(-1.71)	(0.98)	(0.08)
Institutional ownership	0.070**	-0.021*	0.047*	-0.057	0.036
	(1.98)	(-1.67)	(1.70)	(-1.35)	(0.62)
Forced CEO turnover	-0.107*	-0.031	0.028	-0.038	0.101
	(-1.65)	(-1.05)	(0.44)	(-0.51)	(0.57)
Regression	Poisson	OLS	OLS	Poisson	Poisson
Lagged dependent value	Yes	Yes	Yes	Yes	Yes
Year, Industry FE	Yes	Yes	Yes	Yes	Yes
Firms	344	344	344	306	283
Pseudo (Adjusted) R^2	0.665	0.667	0.608	0.477	0.092

This table tests the relation between ISS treatment and subsequent changes in CEO pay disclosure. Columns (1) to (3) presents tests of the CD&A disclosure. *Length* is the number of words. *Complexity* is the number of seven-character words scaled by the number of sentences. *Tone* is the percent of positive words using the number of Loughran-McDonald Financial-Positive words. Columns (4) and (5) tests for changes in CEO peer firms referenced in the CD&A. ***, **, and * indicate significance at the 1%, 5%, and 10% level using two-tailed tests. All regressions include the lagged dependent variable in year t as a control, and fiscal year and industry fixed effects. We define variables in Appendix C.

Table 7. Changes in CEO Pay

Panel A. Overall CEO compensation

Dependent variable:	(1) Δ CEO Total Pay	(2) Δ CEO Equity Pay	(3) Δ CEO Non-Equity Pay
ISS treatment	-0.225*	-2.016***	0.019
	(-1.77)	(-3.16)	(0.27)
Size	-0.065	-0.112	-0.026
	(-1.29)	(-0.44)	(-0.93)
Market-to-book	-0.012	-0.108	-0.010
	(-0.37)	(-0.65)	(-0.55)
Return-on-assets	-0.015	-0.989	-0.059
	(-0.04)	(-0.56)	(-0.31)
Leverage	-0.027	-1.523	0.072
	(-0.07)	(-0.83)	(0.36)
Sales growth	0.089	0.454	-0.022
	(0.82)	(0.82)	(-0.36)
Abnormal returns	-0.216	0.666	-0.119
	(-1.26)	(0.77)	(-1.26)
Stock return volatility	-1.590	-2.642	0.006
	(-1.56)	(-0.51)	(0.01)
Operating loss	0.275*	1.846**	0.005
	(1.67)	(2.22)	(0.05)
CD&A exempt	-0.405	-4.796***	-0.213
	(-1.28)	(-3.01)	(-1.22)
ISS recommendation	0.052	1.273*	0.060
	(0.36)	(1.75)	(0.75)
Ln(analysts)	0.010	0.025	-0.020
	(0.13)	(0.07)	(-0.47)
Institutional ownership	0.016	0.565	0.163
	(0.09)	(0.59)	(1.56)
Forced CEO turnover	-0.701	-2.776	-0.028
	(-1.47)	(-1.15)	(-0.11)
Regression	OLS	OLS	OLS
Year, Industry FE	Yes	Yes	Yes
Firms	331	331	331
Adjusted R^2	0.017	0.029	0.052

Table 7 (Continued)

Panel B. CEO pay components

Dependent variable:	(1) Δ Salary	(2) Δ Bonus	(3) Δ Stock Awards	(4) Δ Option Awards	(5) Δ Non Equity Incentive	(6) Δ Pension	(7) Δ Other Comp.
ISS treatment	0.077	-1.016*	-1.865***	-1.228*	0.472	0.082	-0.001
	(0.86)	(-1.68)	(-2.99)	(-1.86)	(0.84)	(0.21)	(-0.00)
Size	0.021	0.072	-0.401	-0.106	-0.381*	0.161	0.010
	(0.60)	(0.30)	(-1.61)	(-0.40)	(-1.70)	(1.04)	(0.09)
Market-to-book	-0.007	-0.041	-0.166	0.044	-0.035	0.085	-0.038
	(-0.29)	(-0.26)	(-1.02)	(0.26)	(-0.24)	(0.84)	(-0.54)
Return-on-assets	-0.198	-0.923	-2.523	-0.837	-0.259	-0.280	-1.021
	(-0.81)	(-0.56)	(-1.47)	(-0.46)	(-0.17)	(-0.26)	(-1.37)
Leverage	0.055	-1.666	-1.501	-2.860	1.037	-0.133	1.656**
	(0.21)	(-0.96)	(-0.84)	(-1.51)	(0.64)	(-0.12)	(2.12)
Sales growth	0.006	0.312	0.230	0.239	0.155	-0.263	-0.144
	(0.08)	(0.60)	(0.43)	(0.42)	(0.32)	(-0.79)	(-0.61)
Abnormal returns	0.064	-0.574	0.871	0.214	-0.327	-0.483	-0.807**
	(0.53)	(-0.70)	(1.03)	(0.24)	(-0.43)	(-0.93)	(-2.20)
Stock return volatility	1.152	-4.062	-4.189	-0.887	0.351	-3.380	-2.518
	(1.60)	(-0.83)	(-0.83)	(-0.17)	(0.08)	(-1.09)	(-1.15)
Operating loss	-0.123	0.516	1.970**	0.158	-0.230	-0.216	0.442
	(-1.06)	(0.66)	(2.42)	(0.18)	(-0.32)	(-0.43)	(1.25)
CD&A exempt	-0.059	-0.214	-3.820**	-3.021*	-1.129	-0.780	0.720
	(-0.26)	(-0.14)	(-2.45)	(-1.83)	(-0.81)	(-0.81)	(1.06)
ISS recommendation	0.133	1.190*	2.008***	-0.626	0.515	0.035	-0.053
	(1.31)	(1.73)	(2.82)	(-0.83)	(0.81)	(0.08)	(-0.17)
Ln(analysts)	0.041	0.036	0.416	-0.181	0.343	-0.034	0.063
	(0.76)	(0.10)	(1.09)	(-0.45)	(1.00)	(-0.15)	(0.38)
Institutional ownership	0.100	0.565	0.810	0.855	-0.336	0.116	0.337
	(0.75)	(0.62)	(0.87)	(0.86)	(-0.40)	(0.20)	(0.83)
Forced CEO turnover	0.153	2.576	-2.345	-6.280**	-2.520	-0.892	-0.221
	(0.45)	(1.13)	(-0.99)	(-2.52)	(-1.19)	(-0.61)	(-0.21)
Regression	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Year, Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firms	331	331	331	331	331	331	331
Adjusted R^2	0.119	0.034	0.054	0.005	0.018	0.112	0.081

This table tests the relation between ISS treatment and subsequent CEO pay changes in year t+2 to the low Say-On-Pay vote. Panel A presents regressions of changes in total CEO compensation. Panel B presents regressions of changes in CEO pay components. ***, **, and * indicate significance at the 1%, 5%, and 10% level using two-tailed tests. All regressions include fiscal year and industry fixed effects. We define variables in Appendix C.

Table 8. Heterogenous Treatment Effects

Panel A: Engagement indicator

Ex-ante partition:	(1) Abnormal Stock Returns	(2) Board Independence	(3) Compensation Committee Tenure	(4) Institutional Ownership
ISS treatment	0.294***	0.298***	0.029	0.313***
	(6.53)	(4.94)	(0.47)	(6.97)
ISS treatment × High value	-0.132**	-0.128	0.378***	-0.169***
	(-2.16)	(-1.46)	(4.37)	(-2.85)
Regression	OLS	OLS	OLS	OLS
Controls	Yes	Yes	Yes	Yes
Fully Interacted	Yes	Yes	Yes	Yes
Firm, Year FE	Yes	Yes	Yes	Yes
Observations	1,890	1,019	1,009	2,047
Adjusted R^2	0.548	0.531	0.539	0.535

Panel B: Engagement count

Ex-ante partition:	(1) Abnormal Stock Returns	(2) Board Independence	(3) Compensation Committee Tenure	(4) Institutional Ownership
ISS treatment	1.189***	1.058***	-0.031	1.197***
	(5.30)	(3.92)	(-0.17)	(5.04)
ISS treatment × High value	-0.762***	-0.794**	1.264***	-0.663**
	(-2.83)	(-2.43)	(4.23)	(-2.42)
Regression	Poisson	Poisson	Poisson	Poisson
Controls	Yes	Yes	Yes	Yes
Fully Interacted	Yes	Yes	Yes	Yes
Firm, Year FE	Yes	Yes	Yes	Yes
Observations	1,890	823	818	2,047
Pseudo R^2	0.548	0.433	0.428	0.535

This table presents panel regressions of the heterogeneous effect of ISS treatment on subsequent shareholder engagement. In Panel A, the dependent variable is *engagement indicator*, which we test using OLS regressions. In Panel B, the dependent variable is *engagement count*, which we test using a Poisson regression. In each panel, we fully interact the regression model with a *high value* indicator that equals 1 if the ex-ante values of *abnormal stock returns*, *board independence*, *compensation committee tenure*, and *institutional ownership* are above the yearly median sample value, and otherwise 0. The variable of interest is the interaction of *ISS treatment × High value*, which indicates whether ISS treatment has a heterogenous effect on firms with higher ex-ante values of these partitioning variables. ***, **, and * indicate significance at the 1%, 5%, and 10% level using two-tailed tests. All regressions include firm and year fixed effects. We define variables in Appendix C.

Table 9. Abnormal Stock Returns around SOP Vote Disclosure

	(1)	(2)	(3)	(4)	(5)	(6)
	All SOP Vote Results				Removing Contaminated Disclosures	
Abnormal returns period:	3-day [-1,+1]	5-day [-2,+2]	3-day [-1,+1]	5-day [-2,+2]	3-day [-1,+1]	5-day [-2,+2]
ISS treatment × ISS against			0.019*	0.029**	0.021*	0.032**
			(1.72)	(1.99)	(1.95)	(2.14)
ISS treatment	0.004	0.001	-0.008	-0.019	-0.010	-0.019
	(0.38)	(0.06)	(-0.63)	(-1.13)	(-0.78)	(-1.07)
ISS against	0.010*	0.006	0.002	-0.007	-0.000	-0.011
	(1.80)	(0.73)	(0.20)	(-0.68)	(-0.05)	(-1.01)
Vote for SOP %	0.266	0.216	0.278	0.224	0.429	0.446
	(0.73)	(0.43)	(0.77)	(0.45)	(1.19)	(0.90)
Regression	OLS	OLS	OLS	OLS	OLS	OLS
Year, Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Observations	399	399	399	399	371	371
Adjusted R^2	-0.016	-0.025	-0.001	-0.008	0.005	-0.012

This table reports OLS regressions of abnormal stock returns around the announcement of Say-On-Pay (SOP) voting results for the sample. We compute firm-level stock returns by calculating the compound daily returns during the 3-day and 5-day period centered on the date the firm first releases the SOP voting results in an SEC 8-K filing (Item 5.07). We then generate an abnormal return by subtracting the compound returns on the CRSP value-weighted index return with distributions during the same period. Columns (1) through (4) include the full sample of treatment and control firms with available return information. Columns (3) and (4) exclude "contaminated" 8-K filings that contain other information items, such as material contracts or earnings information. *ISS treatment* equals 1 for firms that receive between 67.50% and 69.99% SOP voting support; and 0 for firms that receive 70.00% to 72.50%. *ISS against* equals 1 if ISS recommends voting "Against" Say-On-Pay. The variable of interest is the interaction term, *ISS treatment × ISS against*, which equals 1 for firms that are both treated with a below 70% vote and receive an ISS recommendation to vote against SOP prior to the meeting. *Vote for SOP%* is the disclosed percentage of shareholder votes that support the SOP proposal. ***, **, and * indicate significance at the 1%, 5%, and 10% level using two-tailed tests. All regressions include year and industry fixed effects.

Table 10. Ex-Post Implications of Shareholder Engagement

Panel A. Tests of information asymmetry, liquidity, and activism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Δ Bid-Ask Spreads %		Δ Stock Illiquidity		Δ Shareholder Activism			
Period:	+1 year	+2 years	+1 year	+2 years	+1 year	+2 years	+3 years	+4 years
$\widehat{Engagement}$	-0.451*	-0.457*	-0.993**	-1.327**	-0.293*	-0.583**	-0.811**	-0.988**
	(-1.93)	(-1.76)	(-1.99)	(-2.09)	(-1.69)	(-2.09)	(-2.27)	(-2.35)
Regression	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Lagged dependent variable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year, Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firms	391	391	391	391	391	391	391	391

Panel B. Tests of myopic behavior and monitoring outcomes

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Δ R&D Intensity		Δ CapEx Intensity		Δ Meets or Beats		Δ Financial Restatements	
Period:	+1 year	+2 years	+1 year	+2 years	+1 year	+2 years	+1 year	+2 years
$\widehat{Engagement}$	0.014	-0.007	0.010	0.078	-0.335	-0.203	0.119	0.110
	(0.27)	(-0.07)	(0.54)	(1.64)	(-1.06)	(-0.67)	(0.73)	(0.55)
Regression	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Lagged dependent variable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year, Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firms	391	391	391	391	352	352	391	391

This table tests the association between instrumented shareholder engagement and ex-post outcomes using 2SLS regressions. In Panel A, we test for changes in information asymmetry, stock illiquidity, and activism. In Panel B, west test for changes in myopic behavior and monitoring outcomes. All regressions instrument for shareholder engagement in the first stage using *ISS treatment* and a vector of firm controls and fixed effects. In the second stage, we test for changes in firm outcomes using instrumented engagement, standard controls and fixed effects, and the lagged dependent variable in year *t*. ***, **, and * indicate significance at the 1%, 5%, and 10% level using two-tailed tests. We define variables in Appendix C.

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