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Firm Responses to Proxy Advisor Recommendations: Evidence from Supplemental Proxy Filings

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Abstract

Proxy advisors (PAs) play a central role in shareholder voting, with negative recommendations resulting in significant voting dissent. We study firms' decisions to issue supplemental proxy filings (DEFA14A) in response to PA recommendations to vote against Say-on-Pay (SOP) proposals. These filings are infrequent-about 11% of firms with unfavorable SOP recommendations file DEFA14As. However, the filings are substantial in length, discussing compensation design and pay-performance alignment, and outlining disagreements with PAs' peer group choices. The market reacts positively to DEFA14As filed in response to the most severe PA concerns. For 8% of filing firms, PAs change their Against recommendations to For, boosting SOP voting support by more than 20%. Filings do not improve voting absent a recommendation change. We conclude that while some DEFA14As communicate favorable information to the market and are successful in changing PAs' recommendations, their effectiveness is limited, likely reflecting structural issues with the proxy voting process.

Keywords: Say-on-Pay, Proxy Advisors, Proxy Filings, Shareholder Voting

JEL Classifications: G34, J33

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ABSTRACT

Proxy advisors (PAs) play a central role in shareholder voting, with negative recommendations resulting in significant voting dissent. We study firms' decisions to issue supplemental proxy filings (DEFA14A) in response to PA recommendations to vote against Say-on-Pay (SOP) proposals. These filings are infrequent—about 11% of firms with unfavorable SOP recommendations file DEFA14As. However, the filings are substantial in length, discussing compensation design and pay-performance alignment, and outlining disagreements with PAs' peer group choices. The market reacts positively to DEFA14As filed in response to the most severe PA concerns. For 8% of filing firms, PAs change their *Against* recommendations to *For*, boosting SOP voting support by more than 20%. Filings do not improve voting absent a recommendation change. We conclude that while some DEFA14As communicate favorable information to the market and are successful in changing PAs' recommendations, their effectiveness is limited, likely reflecting structural issues with the proxy voting process.

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1 Introduction

Over the past two decades, nonbinding shareholder votes have emerged as an important governance mechanism (Del Guercio et al., 2008; Cai et al., 2009; Fischer et al., 2009). Voting dissent against management's position is often costly for management and boards of directors. For example, poor voting outcomes can require increased engagement with shareholders (Dey et al., 2023) and necessitate future changes to executive compensation (Ertimur et al., 2011; Kimbro and Xu, 2016). Further, directors facing dissent at uncontested elections are more likely to depart boards, to be moved to less prominent positions on the board and have fewer opportunities in the director labor market (Aggarwal et al., 2019). Against this backdrop, proxy advisors play a key role in shareholder voting. Recommendations against the management's position on a ballot item by Institutional Shareholder Services (ISS), the most influential proxy advisory firm, move shareholder votes by 20-25%, on average (Ertimur et al., 2013; Malenko and Shen, 2016); Glass Lewis (GL) against recommendations have a smaller but still significant 13% average effect. In this study, we examine firms' decisions to respond to negative ISS and GL recommendations and the ensuing proxy advisor and shareholder reaction. Specifically, we evaluate firms' decisions to file supplemental proxy filings (DEFA14A) after receiving an *Against* recommendation on their Say-on-Pay (SOP) proposal from ISS or GL, the contents of these filings, and whether the filings mitigate negative effects of *Against* recommendations.

Among ballot items shareholders vote on, we focus on SOP recommendations for several reasons. First, unlike shareholder proposals and many management proposals that are sporadic in nature, under the Dodd-Frank Wall Street Reform and Consumer Protection Act, starting at annual meetings on and after January 21, 2011 all firms are required to hold a SOP vote at least once every three years. Over 90% of S&P 1500 firms do so annually (Ferri and Oesch, 2016). Second, CEO pay is a complex and controversial issue, which allows firms to provide alternative points of view and context in their responses. This is important, given critics claim that proxy advisors apply a "one-size-fits-all" approach when making recommendations to their clients (Gordon, 2009), especially during the busy

proxy season when they face resource constraints (e.g., Albuquerque et al., 2020). Additional critiques suggest that in some cases, proxy advisors fail to follow their own guidelines because of factual errors (e.g., not correctly identifying performance metrics) or make questionable decisions (e.g., inclusion of inappropriate peer firms) when preparing their reports (Hayne and Vance, 2019).[1]

Management and boards can take several steps to influence PAs' SOP recommendations and ensuing voting outcomes. First, when designing compensation at the beginning of the fiscal year, boards can structure contracts in a manner that reduces the risk of an *Against* recommendation and high SOP voting dissent (Hayne and Vance, 2019; Kimbro and Xu, 2016; Balsam et al., 2016). Second, after the contract term is completed, in anticipation of the upcoming SOP vote, firms can use disclosures in the proxy statement to help shape the SOP voting outcome (Hooghiemstra et al., 2017; Packard et al., 2023). If such ex ante actions are not effective in preventing an *Against* recommendation, firms have limited tools and time to alleviate the expected negative impact of the unfavorable recommendation on voting outcomes, including private engagement with (large) shareholders, which is not observable, and filing a DEFA14, the focus of our study.[2]

Whether management files a DEFA14A will depend on the perceived costs and benefits of doing so. A key benefit is the ability to address the *specific*, unexpected concerns PAs raise in their reports and explain why the compensation arrangements are appropriate. These explanations can lead to revisions in PAs' initial recommendation, which, in turn, can have a favorable impact on the voting outcome. To the extent the arguments management put forward in a DEFA14A improve investors' views of compensation, filings can reduce voting dissent even in the absence of recommendation changes. Another distinctive feature of DEFA14As, conditional on there being compelling counterarguments to the *Against* recommendation, is that management can make its case to a broad audience. This will

[1]Director elections are also on the ballot every year. However, unlike SOP, for director elections, ISS recommendations tend to be more formulaic in nature (Ertimur et al., 2018).

[2]While we cannot observe whether management and boards directly reach out to key shareholders to reduce the impact of negative PA recommendations on voting outcomes, in our empirical analyses we examine whether/how the likelihood of filing a DEFA14 varies with a firm's investor base as a proxy for the net benefits of private engagement. We also consider firms' decisions to hire a proxy solicitor to increase the retail vote, which are usually pro-management, in response to negative PA recommendations.

be efficient in instances when private communication is costly or infeasible, if for example the firm has a dispersed ownership base. Public filings are also likely to alert some investors—specifically those that subscribe to only one or neither PA—to PA recommendations. Depending on the circumstances (e.g., whether one or both PAs recommend against the SOP proposal) this information could influence investors' perceptions favorably or unfavorably. Despite potential benefits of filing a DEFA14A, firms may instead choose to communicate privately with specific larger investors in order to deliver a more targeted response and to limit leakage (to the full investor base) regarding PA recommendations and report contents. Ultimately, whether firms rely on a public DEFA14A as a response to *Against* recommendations is an empirical question.

In the first part of our empirical analyses, we examine the frequency of DEFA14A filings among firms receiving an *Against* recommendation on SOP, the determinants of firms' decision to file DEFA14As, and the contents of the filings. We construct a comprehensive sample of firms in the Russell 3000 that received an Against recommendation from ISS or GL at an annual meeting between 2011 and 2022, resulting in 3,575 firm-year observations. Then, using textual analysis and hand collected data, we identify relevant DEFA14A filings where management puts forward arguments for supporting the SOP proposal. We find a relevant supplemental filing in response to PA's *Against* SOP recommendations for 11.1% of observations in the sample.

We categorize firm-years with an *Against* recommendation into three mutually exclusive groups depending on which PA recommended against the firm: *ISS Only*, *GL Only*, or *Both*. Only 2.4% of firms in the *Glass Lewis Only* group file DEFA14As; because Glass Lewis has a smaller subscriber base and its recommendations are less influential, the cost of disclosure (alerting some investors to GL *Against* recommendations) likely outweighs the benefits (mitigating the concerns raised by GL). Supplemental filings are more common for firms in the *Both* (12.4%) and *ISS Only* (18.8%) groups. This continues to be the case in the multivariate analysis of the determinants of filing a DEFA14A. One explanation for the higher filing frequency among firms in the *ISS only* group is that these firms

want to call the attention of investors who subscribe to ISS to the *For* recommendation from Glass Lewis. We also find that firms are more likely to file a DEFA14A in the busy proxy season, consistent with PAs providing lower quality recommendations during this period, and when ISS expresses a high level of concern for the lack of alignment between pay and performance relative to peers, consistent with such concerns being more difficult for firms to anticipate, necessitating an ex post response in a DEFA14A. In addition, we find that DEFA14A filings are more likely when institutional ownership is higher, particularly when the institutional investor base is less concentrated—these investors are more likely to cast their votes than retail investors, but would be difficult to engage with through private communication channels relative to institutions that hold a large fraction of the shares.

With respect to filing contents, we find that DEFA14As are substantial in terms of length, with a mean (median) of 6,799 (2,371) words; in comparison, the Compensation Discussion and Analysis section (excluding mandatory tables) for S&P 1500 firms in the original proxy statement averaged 6,155 words in 2018 (Packard et al., 2023). We read and code the key aspects of the filings. Not surprisingly, given its key role in shaping PA recommendations and voting outcomes, compensation is the most frequently discussed topic with pay-for-performance issues representing the most common subtopic; both proxy guidelines include significant analysis of pay relative to performance. Firms also commonly discuss specific contract arrangements that are scrutinized by PAs (e.g., change-in-control payments, equity grants to incoming or outgoing CEOs) and peer group selection, the latter reflecting firms' concerns that PAs did not choose an appropriate peer group when comparing compensation and performance.[3] Firms also frequently talk about changes to future compensation designed to address concerns raised by PAs in their reports (18% of filings).

Of note, the proportion of DEFA14A filings in presentation format increases from approximately 10% to 30% from 2012 to 2022. That is, over our sample period, there is an increasing incidence of firms that appear to use presentations to investors to make a case for supporting the SOP vote and

[3]For example, see the DEFA14A filed by Ultimate Software Group in 2013:
`https://www.sec.gov/Archives/edgar/data/1016125/000089968113000393/usg-defa14a_051513.htm`.

then subsequently file the slides from their presentations, perhaps to comply with Regulation Fair Disclosure. While firms provide additional explanation around compensation in these presentations, they are less likely to explicitly mention PAs' SOP *Against* recommendations than in traditional DEFA14A filings. This disclosure strategy likely lowers the cost of informing non-subscribers about the *Against* recommendation(s). Also consistent with firms considering the cost and benefits of disclosing *Against* recommendations in their filing decisions, we find that firms in the *ISS Only* group are more likely to disclose the favorable GL recommendation in their filings than firms in the *Both* group, who more often refrain from disclosing the negative GL recommendation.

In the second part of the analyses, we focus on investors', PAs', and voting shareholders' responses to the DEFA14A filings. To evaluate the market's perception of the supplemental filings, we examine the market reaction over a two-day window around the DEFA14A filing dates. This represents a joint test of whether 1) investors are aware of these filings and access them in a timely manner and 2) the filings contain information relevant to firm valuation. While the market reaction is insignificant for the overall sample, in the *Both* subsample, we find significantly positive two-day abnormal returns of 0.61%. Ertimur et al. (2013) document a -0.52% abnormal return in the three-day window (-1,1) surrounding the release of ISS *Against* recommendations in 2011 and 2012.[4] These results suggest that the filings, on average, provide relevant information to the market for the most severe cases where both PAs express a negative opinion, by, for example, directly addressing concerns expressed by PAs (e.g., show compensation does not appear excessive if compared to an alternative peer group) or generally providing favorable information related to firm pay or performance.

We then consider whether PAs respond to supplemental filings by changing their recommendations. This could happen if, for example, the discussion in the filings addresses PAs' concerns or points out mistakes in PAs' evaluation. We identify 32 instances (8% of filings) where PAs change their initial *Against* recommendation to a *For* recommendation. Filings that are followed by recommendation

[4]We cannot examine the market reaction to the PA reports for our sample, because the dates PAs release their reports are not publicly available.

changes are more likely to discuss issues related to compensation disclosure and employment agreements (e.g., compensation paid upon termination or retirement) and less likely to focus on concerns with peer selection or performance.

Next, we examine whether supplemental filings influence SOP voting outcomes. There are two pathways through which filings could influence voting. First, if filings lead to recommendation changes by PAs the impact of the initial *Against* recommendation should be mitigated. Second, supplemental filings will improve voting outcomes (regardless of PAs' recommendation changes) to the extent they provide relevant information for investors in their evaluation of a firm's compensation structure and help mitigate the concerns the PAs raise. For example, a supplemental filing that defines the peer group differently from ISS such that relative compensation is lower compared to the ISS definition can alleviate concerns about excess compensation. Importantly, for DEFA14As to be effective, investors must also be aware of the filings before casting their votes.

Two key results emerge from our analysis of the association between supplemental filings and voting outcomes. First, in the absence of a recommendation change, firms that file DEFA14As do not experience better SOP voting outcomes. In fact, for the subsample with a negative SOP recommendation from both PAs, voting support is approximately 5% *lower* at firms that file a DEFA14A. Second, for firms where PAs change their initial *Against* recommendation to a *For* recommendation, voting support is, on average, about 25% higher. The large magnitude of the voting benefit can create a situation where firms gamble for the unlikely but substantial benefit of a recommendation change.

Endogeneity and reverse causality present challenges in interpreting the voting outcome results. Firms with more significant compensation issues may be more likely to file a DEFA14A, leading to endogeneity. Reverse causality concerns stem from the fact that, after the distribution of initial proxy materials, firms have access to voting results to date (Bach and Metzger, 2019) and firms observing greater dissent in interim vote counts may be more likely to file DEFA14As. To alleviate these concerns, we conduct additional analysis where we compare the voting outcomes of responding firms

to an entropy-balanced control sample where we balance on firm and compensation characteristics. We continue to find significant negative associations for the *ISS Only* and *Both* groups between filings without a recommendation change and voting outcomes but of somewhat smaller magnitudes.

There are several potential explanation for the the positive market reaction to DEFA14As combined with the small negative effect on voting results. First, there may be underlying differences in compensation details between treatment and control firms, even after entropy balancing, and the DEFA14A filing contains favorable news that only partially offsets the compensation concerns (i.e., the treatment firms would have had even worse voting results absent the filing). Another potential explanation is the tight window between PA reports and shareholder voting. Investors may not become aware of, access, and process the information in the supplemental filing prior to voting, especially if investors vote prior to the release of the supplemental filing.[5] The timing of filings is also important if interim voting results influence the decision to file a DEFA14A. That is, the filing may positively influence votes cast subsequently, but the net voting effect is insignificant or negative when combined with the more negative votes cast before the filing. Finally, it is possible that voters (i.e., primarily institutional investors) are different than the investors generating the market reaction and could perceive the disclosure differently.

In our final analysis, we consider whether supplemental filings are associated with future outcomes. We do not find DEFA14A filers reduce compensation or increase compensation disclosure in the CD&A relative to firms that receive an *Against* but do not file a DEFA14A. We do, however, find that these firms are less likely to receive an *Against* recommendation on SOP the following year. This is consistent with firms filing DEFA14A's being more proactive in addressing PA concerns.

Our study contributes to the literature on the mechanisms through which management influence voting outcomes. Prior studies show that management exploits the features of the voting system to obtain results in their favor, by, for example, bundling proposals to obtain shareholder approval for

[5] A 2019 Nasdaq/Chamber of Commerce survey reports that respondent firms noted that up to 40% of outstanding shares were voted in line with ISS recommendations within 48 hours of ISS issuing the recommendation.

pro-management arrangements that shareholders would not support on a stand-alone basis, opportunistically classifying proposals as "routine" to allow brokers to vote uninstructed shares in favor of management, adjusting poll-closing times to its advantage, and undertaking efforts to increase turnout among shareholders expected to vote with management (Bethel and Gillan, 2002; Bebchuk and Kamar, 2009; Listokin, 2008; Bach and Metzger, 2019; Lee and Souther, 2020). Other studies provide evidence that management discloses positive news prior to proxy contests and contentious annual meetings (DeAngelo, 1988; Dimitrov and Jain, 2011; Baginski et al., 2012) or suggest that firms interact with key investors privately (Brochet et al., 2021). We document a more direct and transparent way through which managers seek to influence voting outcomes, the filing of supplemental proxy materials providing additional explanation and context. DEFA14As may become an increasingly useful tool for management to shape voting outcomes as the recent developments in the shareholder voting landscape such as the introduction of pass-through voting bring a broader set of institutions (as well as retail investors) to the ballot. More broadly, our study is related to research on management interactions with investors, intermediaries and other stakeholders aimed to mitigate negative news or opinions. For example, Flake (2025) finds that managers interact with unfavorable analysts during earnings calls to mitigate analysts' negativity. Lee et al. (2015) and Fritsch et al. (2025) examine firms' use of social media to alleviate effects of consumer product recalls and negative media coverage of climate change incidents, respectively.

We also contribute to the literature on SOP voting, particularly studies evaluating the influence of firm disclosure on voting outcomes and the literature regarding the role and influence of PAs (e.g., Ertimur et al., 2013; Malenko and Shen, 2016; Hayne and Vance, 2019). While most studies focus on the influence of firm disclosure prior to ISS reports on ISS recommendations and voting (e.g., Balsam et al., 2016; Hooghiemstra et al., 2017; Packard et al., 2023), our focus is disclosure in response to negative PA recommendations. In this setting, firms can respond to specific concerns rather than broadly trying to explain compensation plans in a manner consistent with ISS guidelines.

Evaluating the influence of firms' voluntary responses to PA recommendations also has implications for ongoing SEC rule-making. Recently, the SEC proposed and passed a rule that would have required PAs to allow firms to review their reports before PAs made them available to investors, citing concerns about "factual errors, incompleteness, or methodological weaknesses that could materially affect the reliability of proxy voting advice" (Securities and Exchange Commission (SEC), 2020). The rule was rescinded before enforcement began and is the subject of ongoing litigation.

2 Background and Related Literature

2.1 Say-on-Pay Voting

Say-on-Pay (SOP), the nonbinding vote on executive pay mandated by the Dodd-Frank Act starting in 2011, has emerged as a key opportunity for investors to express their opinions about executive compensation. SOP proposals typically receive high levels of support, in the 88% to 92% range at S&P 1500 and Russell 3000 firms (Semler Brossy, 2023), and are rarely voted down—e.g., Ertimur et al. (2013) identify dissent over 50% at only 24 firms in a sample of 1,275. However, 22%–28% of Russell 3000 firms have experienced significant dissent (i.e., above the 30% threshold) over the 2011–2023 proxy seasons (Semler Brossy, 2023). In addition to key aspects of CEO pay such as levels, changes, and structure, firm performance and institutional ownership have emerged as key determinants of SOP voting outcomes (Ertimur et al., 2013; Collins et al., 2019; Schwartz-Ziv and Wermers, 2022).

There is mixed evidence as to whether and how SOP has influenced executive compensation in the US. For example, Ertimur et al. (2013) find more than half of the firms that receive negative SOP recommendations from ISS, which leads to higher voting dissent, report compensation changes subsequently but that the market does not react to these changes (i.e., the changes are not perceived to have value implications). Kimbro and Xu (2016) document higher SOP voting dissent is associated with lower CEO pay growth. Balsam et al. (2016) find that firms decreased CEO pay, especially for overpaid CEOs, and increased pay-for-performance sensitivity in advance of initial SOP votes in 2011. In contrast, Iliev and Vitanova (2019) evaluate differences between firms required to adopt SOP and

those that were initially exempt (based on public float) and find that pay levels increased along with the proportion of performance-based pay for SOP adopting firms.

Even if firms are able to maintain their compensation arrangements, poor SOP voting outcomes are costly. For example, firms are expected to engage with their large shareholders about pay practices following SOP votes with significant dissent (Dey et al. (2023)). Further, starting in the 2012 proxy season, ISS indicated that it will recommend withholding votes from compensation committee members at firms that fail to adequately respond to previous SOP proposals with less than 70% support.

2.2 The Role of Proxy Advisors in SOP Voting

Many institutional investors retain the services of PAs. For example, Shu (2024) estimates that as of 2021 close to 85% of mutual funds (based on AUM) were subscribed to ISS, GL, or both. Perhaps not surprisingly, PAs' recommendations play an important role in SOP voting outcomes. Ertimur et al. (2013) find that voting dissent is higher by about 25% (13%) when ISS (GL) recommends voting against the SOP proposal. Malenko and Shen (2016) show that this effect for ISS is causal. The influence of PAs likely differ across shareholders. ISS has a larger subscriber base than GL; among mutual funds data from 2021 suggests that 70% subscribe to multiple PAs, while 12% subscribe to only ISS, 3% subscribe to only GL, and 15% do not subscribe or subscribe to another PA (Shu, 2024). Further, analyses of voting patterns at the mutual fund level reveal differences across funds in the extent to which their voting aligns with those of PAs' recommendations (Bolton et al., 2020; Bubb and Catan, 2022; Iliev and Lowry, 2015). Compared to institutional investors, retail investors are less likely to have access to PAs' recommendations and, when they participate in voting, their votes are less aligned with PA recommendations (Brav et al., 2022).

Significant debate exists as to whether PAs' ultimately play a beneficial role for shareholders, in the SOP context, presumably through encouraging more efficient compensation arrangements. PAs can aggregate large amounts of data and facilitate standardized comparisons across firms. This process

benefits from economies of scale—as opposed to each investor executing similar analyses on their own or foregoing such analysis and voting with management because it is not cost-effective (Dent Jr, 2014). Moreover, PAs likely have a workforce with greater expertise in compensation relative to average investors, enabling them to parse and analyze complex contracts (Hayne and Vance, 2019). In this view, PAs primarily serve as data aggregators or information intermediaries providing inputs to resource-constrained but sophisticated investors who then make informed decisions. Ertimur et al. (2013) document a negative market reaction around the release of ISS *Against* recommendations, consistent with ISS helping investors identify firms with low-quality compensation practices.[6]

A more skeptical view of PAs raises concerns that in some cases, investors, in order to meet their fiduciary duty to cast an informed vote, blindly rely on PAs' recommendations (e.g., Choi et al., 2009). The blind reliance on PA recommendations becomes more problematic if the recommendations are flawed. Critics claim that PAs rely on a standardized "one-size-fits-all" approach that does not appropriately evaluate the nuances of complex compensation contracts or specifics of a firm's circumstances. Further concerns pertain to potential conflicts of interest, some arising from PAs (specifically, ISS) offering compensation consulting services. Other critiques suggest that PA reports contain errors and inaccuracies, especially during busy proxy seasons when PAs may be relying on inexperienced or temporary staff (Hayne and Vance, 2019).

2.3 Firms' Efforts to Influence SOP Voting Outcomes

Given unfavorable SOP voting outcomes are costly, managers have incentives to take actions to mitigate SOP voting dissent. Avoiding an *Against* recommendation is an important part of this effort. At the beginning of the fiscal year, when setting key elements of the compensation contract, boards can restructure contracts in a manner that reduces the risk of high SOP voting dissent. Changes might include altering core aspects of compensation such as pay levels or more specifically targeting

[6]Ertimur et al. (2013) cannot fully rule out the alternative explanation that the negative market reaction reflects costs negative ISS recommendations impose on firms, such as the adoption of sub-optimal compensation practices to appease ISS and activist shareholders.

contracts to PA preferences.[7] While it is difficult to identify compensation changes made specifically in response to PAs' policies, some aspects of compensation have trended towards alignment with PA guidelines. For example, the use of performance-vested equity, the only type of equity ISS classifies as performance-based (e.g., Institutional Shareholder Services(ISS), 2018), has increased substantially since the advent of mandatory SOP voting (e.g., Bettis et al., 2018; Pawliczek, 2021). Field interviews also confirm that considerations about PA policies and preferences play a role in structuring compensation contracts and the associated disclosure (Hayne and Vance, 2019). Alternatively, superior financial performance during the year will also decrease scrutiny (Ertimur et al., 2013).

Because the SOP vote pertains to the compensation for fiscal year preceding the annual meeting, the actions available to firms to influence the voting outcome become more limited as the meeting approaches— the contract term is completed (i.e., pay and performance for the previous year have already been determined). However, firms can use disclosure channels to help shape the SOP voting outcome. The primary disclosure channel for compensation information is the annual proxy statement (DEF14A), specifically within the Compensation Discussion and Analysis (CD&A) section. Substantial increases in the average length of the proxy statement in general and CD&A coincided with mandatory SOP adoption (Gregory, 2012; Packard et al., 2023). Several studies evaluate how specific aspects of proxy disclosure influence voting outcomes and ISS recommendations. For example, Balsam et al. (2016) find that a more positive tone is associated with less voting dissent. Hooghiemstra et al. (2017) find the reduced readability is associated with more (less) voting dissent when investors are sophisticated (unsophisticated) in a sample of UK firms. Other work finds that a greater volume of narrative disclosures in the proxy about compensation details (Mukhopadhyay and Shivakumar, 2020) and firm performance (Packard et al., 2023) are associated with improved SOP voting outcomes. Importantly, in preparing the CD&A section, firms must anticipate what role disclosure can play in shaping PA recommendations based on, for example, PAs' proxy voting guidelines.

[7]Former SEC Chairman Harvey Pitt expressed concerns that firms have incentives to adhere to PAs' preferred policies to avoid negative votes (Pitt, 2013).

PAs release their reports after firms file their proxy statements and as late as two weeks prior to the annual meeting.[8] At this point management is likely to (re)consider the costs/benefits of taking further action to change the PA recommendation or influence the voting outcome against the costs of not doing so (e.g., negative media attention, additional shareholder outreach, or changes to compensation following the SOP vote). There are several non-mutually exclusive alternatives available to managers who choose to take action: hiring a proxy solicitor to increase retail investor participation in voting (these investors are less likely to follow PAs and more likely to vote with management), engaging in private communications with (large) shareholders, or filing a DEFA14A. Which of these alternatives management chooses will depend on the firm circumstances, compensation characteristics, and the nature of the firm's investor base.

Our focus is the decision to file a DEFA14A. As a necessary condition for choosing this route, management must believe that they can put forward arguments, further explanations or additional information to counteract the PA recommendation. A key benefit of these filings is that they allow firms to address the *specific* concerns PAs raise in their reports (that the firm did not expect ex ante) and explain why the compensation arrangements are appropriate by pointing out errors or concerns in PA methodology or by providing additional context about compensation and performance. In likely the best case for the firm, these explanations could change PAs' views resulting in them favorably revising their initial recommendation or reports. Even absent a recommendation change, these filings could improve investors views of compensation and reduce the likelihood that they will vote against the SOP proposal.

Management of firms that believe they can present a compelling counterargument to the *Against* recommendation may alternatively or in addition provide these explanations in settings with more limited audiences (e.g., in investor presentations , private communications, etc.). The distinctive

[8]ISS states reports are available 13-30 days prior to the annual meeting, and generally 13-20 days during busy proxy season (April-June) (`https://www.issgovernance.com/file/policy/active/americas/US-Procedures-and-Policies-FAQ.pdf`). Glass Lewis states that reports are typically published two-to-three weeks prior to meeting dates (`https://www.glasslewis.com/request-a-proxy-paper-or-alert/`).

feature of the decision to file a DEFA14A is that it allows management to make its case to a broader audience. This wider availability could be efficient in instances when private communication is costly or infeasible, if for example the firm has a dispersed ownership base. Public filings are also likely to alert some investors – specifically those that subscribe to only one or neither of the PAs – to PA recommendations. Depending on the circumstances this information could influence investors' perceptions favorably or unfavorably. For example, investors that do not subscribe to either PA are likely to update their beliefs about firm compensation in a negative direction if informed about an *Against* PA recommendation in a DEFA14A. Alternatively, in a case where only ISS recommended *Against*, investors that subscribe to only ISS could update their beliefs in a positive direction after learning about GL's *For* recommendation in a DEFA14A filing. More targeted communication to specific larger investors (who generally subscribe to both PAs) would limit this leakage about PA recommendations and report contents. Ultimately, firms must balance the costs and benefits of filing a DEFA14A in making their decisions.[9]

The ability of firms to respond to PA reports emerged as a key concern for firms in recent SEC rule-making proceedings. Proposed rules (14a-2(b)(9)(ii)) would have required PAs to i) make advice available to firms at the same time or before it was available to clients and ii) provide clients with a means through which they could reasonably be expected to become aware of any written statement firms made in response to proxy advice in a timely manner (Securities and Exchange Commission (SEC), 2019). The proposed rule was amended in 2020 to allow for PAs to make advice available to firms at the same time it is made available to clients rather than in advance (Securities and Exchange Commission (SEC), 2020).

While PAs and many investors did not favor the proposed rule, many firms voiced their support citing concerns that PA reports contained errors or were based on flawed methodology (e.g., peer

[9]In our empirical analysis we include the disclosed use of proxy solicitors, allowing us to also evaluate whether management views these two mechanisms as substitutes or complements. We note that private engagement management initiates in response to Against SOP recommendations is not observable. Our empirical analyses employ measures of the composition of firms' investor base a proxy for the likelihood of private engagement.

firm selection for compensation comparison). For example, a comment letter in support of the 2019 proposed rule changes from Tom Quaadman, Executive Vice President at the Center for Capital Markets Competitiveness, part of the US Chamber of Commerce, notes several issues of concern expressed by member firms with PA reports including PAs "us[ing] incorrect data to populate the advisors' own proprietary model", "mak[ing] simple computation errors", "conjuring their own peer groups that diverge significantly from those identified by issuers or from the proxy advisor's own guidelines," and "[using] one-size-fits-all criteria [that] do not adequately account for differences among individual firms or industries" (Quaadman, 2020).[10] While the amended rules were adopted in 2020, they were never enforced and were rescinded in July 2022 (Securities and Exchange Commission (SEC), 2022). Thus, currently, there are no requirements for PAs to share reports with firms prior to publication or provide an avenue for firms to respond to the reports.[11] The final outcome, however, remains unclear as recently the fifth and sixth circuit courts (in June 2024 and September 2024 respectively) issued conflicting rulings as to whether the SEC violated agency policy when rescinding the rule in response to lawsuits filed by industry groups.[12]

In this study, we evaluate 1) what determines firm's decision to issue a supplemental proxy filing and the contents of these filings subsequent to receiving a negative SOP recommendation from ISS or Glass Lewis and 2) whether these filings are successful in mitigating the negative effects of an *Against* recommendation.

3 Data

3.1 Sample Selection

Table **1** presents our sample selection procedure. We begin with firm-years with non-missing CRSP identifiers (PERMCO) in the Voting Analytics database, which contains shareholder voting results

[10]The full comment letter archive is available at: `https://www.sec.gov/comments/s7-22-19/s72219.htm`

[11]Prior to 2021, ISS voluntarily provided advance copies of its reports to S&P 500 companies, giving them a couple of days to review the reports. ISS no longer does so (see `https://www.issgovernance.com/contact/faqs-engagement-on-proxy-research/#1574276867038-b204d1c3-a920`. Starting in 2015, Glass Lewis through its Issuer Date Report program has allowed US firms to review "key data points used by Glass Lewis" but not analysis or voting recommendations 48 hours prior to report publication (`https://www.glasslewis.com/issuer-data-report/`)

[12]See `https://news.bloomberglaw.com/esg/sec-proxy-firm-rule-reversal-mostly-struck-down-in-fifth-circuit` and `https://news.bloomberglaw.com/esg/sec-proxy-firm-rule-reversal-survives-sixth-circuit-challenge`.

for Russell 3000 companies across special and annual shareholder meetings. We next restrict the observations to SOP proposals voted upon at annual (as opposed to special) meetings held between 2011 and 2022. Then, given the focus of our study, we limit the sample to SOP proposals that received an *Against* recommendation from ISS or GL. Since GL recommendations are not publicly available we use imputed GL recommendations as computed in Zytnick (2024).[13] We next require sufficient data for control variables from Compustat, CRSP, and Thomson Reuters. We further require firms to have executive compensation data from ISS Executive Compensation Analytics (ECA). ISS ECA data covers a broader set of firms compared to Execucomp and provides compensation information disclosed in the proxy statement including total compensation as well as ISS overall and component evaluations of compensation related to Pay-for-Performance (PFP). The Overall PFP concern is an aggregate assessment by ISS of pay-for-performance concerns, while the three component evaluations represent different elements of the pay-for-performance assessment (see Appendix **A** for variable definitions; ISS does not disclose how it combines the scores/concerns to arrive at the overall score/concern level).

This above process results in a sample of 3,543 firm-year observations. Importantly, Voting Analytics captures final ISS *Against* recommendations; similarly Zytnick (2024) imputes final recommendations. We therefore take an additional step to identify firms for which one or both PAs may have initially issued an *Against* recommendation for the SOP proposal but then changed their final recommendation to *For*.

To to this, we search for keywords in DEFA14A filings of firms for which both PAs recommended *For* SOP.[14] We then manually review the resulting filings to identify firms that state one or more PAs was initially *Against* SOP.[15] Through this procedure, we identify an additional 32 observations

[13]Zytnick (2024) uses the Bayes Formula to calculate the likelihood of favorable PA recommendations based on the sponsor of the proposal, and the observed and prior probability of institutional votes given PA's recommendation. If the calculated likelihood that GL supports the proposal is greater than 90% (less than 10%), we assume that GL recommended "For" ("Against") the proposal. We validate that ISS' recommendations computed based on this methodology are consistent with actual recommendations from Voting Analytics.

[14]We search for keywords such as "ISS," "Glass Lewis," "Say-on-Pay," and "compensation" using textual analysis.

[15]We can only identify recommendation changes for firms that explicitly mention the initial *Against* recommendation in a DEFA14A filing. This will understate the recommendation changes that are triggered by DEFA14A filings to the extent there are filings where firms discuss compensation-related issues without referring to PA *Against* recommendations and PAs change their *Against* recommendation subsequently. In addition, there may be additional firms that had recommendation changes based on private communication with PAs, which is outside the scope of our study.

that initially received an *Against* recommendation from a PA but had the recommendation changed after DEFA14A filing (*Rec_Change*=1). Of these, 31 received an initial *Against* only from ISS (who then changed to *For*) and one received an initial *Against* from both PAs (who both then changed to *For*). This results in a final sample of 3,575 firm years (397 treatment observations, 3,178 control observations). Through this search procedure we also identified 19 filings that discuss compensation issues but did not appear to be associated with an initial *Against* recommendation (e.g., instances where a firm objected to a particular aspect of a PA's evaluation even though the PA recommended *For*). These 19 observations are not included in our final sample and show that compensation-related DEFA14A filings are uncommon when PAs do not recommend *Against*.[16]

The sample is approximately equally distributed among firms receiving *Against* recommendations from *ISS Only* (1,189 observations or 33%), *GL Only* (1,233 observations or 34%), and *Both* (1,153 observations or 32%)–not tabulated. This translates to a higher degree of alignment among PAs (32% =1,153/3,575) on *Against* recommendations than documented in Ertimur et al. (2013) (18%) in 2011 and 2012.

For these 3,575 observations, we obtain DEFA14A filing information from SEC index files which contain the filing date and the link to DEFA14A text files. As shown in Figure **1**, we focus on the time period between the proxy statement and the annual meeting, specifically downloading DEFA14As filed over the 90-day window prior to the annual meeting. Ideally, we would limit our attention to DEFA14As filed the period after the firm has access to the ISS and/or GL report, but the report dates are not publicly available. We then seek to identify "relevant" DEFA14A filings (those filed in response to PA *Against* recommendation for SOP) as opposed to those filed for other purposes (e.g., firms commonly file DEFA14A's to provide reminders about voting procedures). For ease of exposition, we refer to these "relevant" DEFA14A filings as "DEFA14As" or "supplementary filings" throughout the paper.

[16]We use the same keywords (e.g., ISS, Say-on-Pay) to search for 8ks filed in response PA recommendations and read these filings. While we did identify some instances where the firm filed an 8k identical to the DEFA14A around the same time, we did not locate any relevant 8ks filed in the absence of a DEFA14A or filed significantly before the DEFA14A.

To assess whether a filing is relevant, we first require DEFA14A files to contain specific keywords, such as "Say-on-Pay," "ISS (Institutional Shareholder Services)," or "Glass Lewis", and "compensation." We identify these files using textual analysis. Then, we read each filing to evaluate whether it is a response to PAs' negative SOP recommendations. We consider DEFA14As where management puts forward arguments in support of the executive compensation contract and for supporting the SOP proposal to be filed in response to PAs' negative SOP recommendations. For firms that filed multiple relevant DEFA14A's in a given year, we retain the first. This results in a treatment sample of 397 observations and a control sample of 3,178 observations, comprised of firms that received an *Against* recommendation from ISS or GL on SOP but did not file a relevant DEFA14A that year. Firms in the treatment sample are more likely to have received an *Against* recommendation from *ISS Only* (224 observations or 56% of treatment group) or *Both* (143 observations or 36%) compared to *GL Only* (30 observations or 8%). Firms that receive an *Against* recommendations from *ISS Only* are the most likely to file a DEFA14A (18.8%), followed by those in the *Both* group (12.4%), tabulated in Table **1** Panel B. The likelihood of a DEFA14A filing is low for firms that receive an *Against* recommendation from *GL Only* (2.4%).

We also search all DEFA14As for the 3,575 firm-years in the final sample filed in the 90-day period prior to the annual meeting for the phrase "proxy solicitor." This allows us to identify firms that used a proxy solicitor in the voting process, an alternative tool management can use to influence voting process. We identify a proxy solicitor for 143 observations (4% of the final sample).

3.2 Descriptive Statistics

Table **2** Panel A presents descriptive statistics for the full sample and comparisons of means by subsamples of PA *Against* recommendations. While performance, as captured by abnormal returns, is relatively similar across the three groups (*ISS Only*, *GL Only*, *Both*), firms receiving *Against* recommendations from *Both* PAs have higher total compensation, changes in compensation, compensation relative to peers (*CompRank*, which we define as pay rank relative to 10 size- and industry-matched

peers), pay relative to performance compared to peers (*RankDiff*, which we define as the difference between *CompRank* and *PerfRank*, firm performance rank compared to the 10 size- and industry-matched peers), and receive the lowest level of voting support (*Pct Voted For*) for SOP. Those in the *Both* group are also the most likely to have high levels of pay-for-performance concerns according to ISS (*High_PFP_Overall*), even compared to the *ISS Only* group.

Table **2** Panel B displays descriptive statistics separately for treatment (*SuppFiling* = 1) and control (*SuppFiling* = 0) groups, with t-tests of differences in means in the last column. We document that DEFA14A filers are, on average, larger in terms of market value, are more likely to be in the S&P 500, and have higher institutional ownership. On average, total compensation is higher for firms that file a DEFA14A; filers also have higher pay relative to performance compared to industry and size-matched peers (i.e. higher *RankDiff*). Firms that receive a high level of concern from ISS for the relative degree of compensation alignment with performance compared to peers (*High_PFP_RDA*) are more likely to file a DEFA14A. Among sample firms that received *Against* recommendations from ISS, 45% of observations (44% of non-filers and 50% of filers, untabulated) had received a high concern for pay for performance overall (*High_PFP_Overall*).[17] We also find that filers are more likely to mention the use of a *Proxy Solicitor* (11% vs. 3% for non-filers) suggesting these strategies to engage voters tend to be complements rather than substitutes. Filers on average received only 64% voting support for SOP as compared to 73% for non-filers. We also evaluate the timing of DEFA14A filing relative to the annual meeting; DEFA14As are filed 12 days before the annual meeting date on average; the median is 10 days.

4 Research Design and Results

4.1 Determinants and Filing Characteristics

To examine the determinants of filing a DEFA14A, we estimate the following baseline model using OLS:

[17] ISS evaluates other aspects of compensation for concerns such as severance payment and compensation peer group but the scores and concerns for these issues are not included in the ECA database.

$$
\begin{aligned}
SuppFiling_{i,t} = \alpha_{i,t} &+ \beta_1 ISSOnly_{i,t} + \beta_2 Both_{i,t} + \beta_3 Busy_{i,t} + \beta_4 S\&P500_{i,t} \\
&+ \beta_5 TotalCompensation_{i,t} + \beta_6 \Delta TotalComp_{i,t} + \beta_7 PctVariablePay_{i,t} \\
&+ \beta_8 InstitutionalOwn_{i,t} + \beta_{9-14} Controls_{i,t} + YearFE_t + \epsilon
\end{aligned} \tag{1}
$$

The dependent variable, *SuppFiling*, is an indicator variable equal to one if firm i filed a relevant DEFA14A in year t. We evaluate several factors that can influence a firm's decision to file. First, the perceived costs and benefits of filing a DEFA14A can vary with which PA recommended *Against* SOP. For example, because ISS' market share is greater than that of GL, when only GL issues an *Against* recommendation, management may be less concerned about the negative influence of the *Against* recommendation. We therefore include variables for which PA recommended *Against*: *ISS Only*, an indicator variable that is equal to one if only ISS recommends against voting the SOP proposal, and *Both*, an indicator variable that is equal to one if both ISS and GL recommend voting against the SOP proposal. *GL Only* is the benchmark group and is captured by the intercept.

Second, we include an indicator variable for whether the meeting takes place during the *Busy* annual meeting season. PAs may provide lower quality recommendations in this time period due to time constraints Albuquerque et al. (2020). In such cases, management is more likely to believe they can present a compelling counterargument to the *Against* recommendation, which, in turn, will lead to a higher likelihood of a DEFA14A filing. Third, we include S&P 500, an indicator variable equal to one if a firm is in the S&P 500. As we discuss in Section 2.3, before January 2021, ISS generally provided draft reports to S&P 500 firms so that they could check the factual information prior to publication. As such, these firms were more likely to have sufficient time to prepare for timely supplemental filings.

Next, we include characteristics related to CEO compensation: *Total Compensation*, change in total compensation (Δ *Total Comp*) , and the percentage of variable pay (*Pct Variable Pay*). Pay levels are positively associated with the likelihood of receiving an *Against* recommendation, but it

is not clear whether they will influence supplemental filing decisions. Because institutional investors hold more than two-thirds of the voting shares in the U.S. (Alexander et al., 2010), the likelihood of filing a relevant DEFA14A can depend on whether the filing affects the voting decisions of institutional investors. Thus, in the baseline model in Equation (1) we include percentage of institutional ownership (*Institutional Own*).

Finally, we include several variables that prior studies show to be associated with negative PA recommendations (Ertimur et al. (2013)); these factors could also influence the underlying causes of the recommendation that firms would choose to address. Specifically, we include firm's size measured by the natural log of market capitalization (*Market Value*); firm's industry adjusted return on assets (*Ind_Adj_ROA*) and the abnormal return from the prior year (*Abnormal Return*) as proxies for financial performance; book-to-market ratio (*Book-to-Market*) and leverage ratio (*Leverage*); and CEO tenure (*Tenure*). In addition, we include year-fixed effects to control for time trends.

Table **3**, Panel A, column 1 presents the results of estimating Equation (1). Several notable results emerge. First, consistent with the descriptive statistics in Table **1**, Panel B, firms that receive an *Against* recommendation from only ISS or both PA firms are more likely to file DEFA14As than those that receive an *Against* recommendation from GL only. These results are consistent with firms taking into consideration the smaller number of GL subscribers and not being as concerned with the resulting dissent. Second, firms are more likely to file a DEFA14A during the busy proxy season—the coefficient of *Busy* is positive and significant—consistent with recommendations issued during this period being of lower quality (e.g., containing factual errors). Third, larger firms, firms with greater book-to-market ratios and those with greater institutional ownership are more likely to file a DEFA14A. Importantly, we do not find much evidence that performance or the level of compensation play a role in the filing decision. These results suggest that firms' resources and the sophistication of their voter base play a role in their decisions to file a DEF14A. Importantly, typically individual investors do not have access to PA reports, which reduces the benefits of disclosure for firms with smaller institutional holdings.

In columns 2–4, we present results of alternative models that help us better evaluate the role performance, compensation, and the alignment between the two. Neither *RankDiff*, our proxy for the disconnect between pay and performance, nor *High_PFP_Overall*, which captures the cases where ISS expresses a high concern level for pay for performance, are associated with the decision to file a DEFA14A (columns 2 and 3).[18] In contrast, when we replace *High_PFP_Overall* with its three components in column 4, we find a significant positive coefficient on *High_PFP_RDA*, which captures cases where ISS expresses high concern about relative degree of alignment between pay and performance compared to peers. A potential explanation is, given ISS' peer group selection influences its views on both pay and performance, *RDA* concerns are more difficult for firms to predict as compared to absolute assessments (*PTA*, which captures the alignment between total shareholder return and pay) or assessments that just consider pay relative to peers (*MOM*). To the extent firms have a harder time anticipating these concerns, they will be more likely to respond ex-post in a DEFA14A rather than address concerns ahead of time in the CD&A section of the proxy statement.

Next, to evaluate whether supplementary filings aim to make up for deficiencies in compensation-related disclosures in the original proxy statement, we add variables that capture the length and readability of the original CD&A: the number of words in the CD&A section of the proxy statement (logged) and the FOG index, a measure of readability. Column 5 presents the results. We find CD&A words are positively associated with DEFA14A filings and do not find a significant association for the FOG index. These results are inconsistent with deficiencies in initial compensation disclosure playing a role in the decision to file a DEFA14A. Rather, the results suggest more complex compensation schemes (which lead to longer CD&As) also require greater explanation after PAs issue their recommendations.

Finally, in Column (6), we present the results after adding PA recommendations and SOP voting

[18] Given that the coefficients of *Abnormal Return*, *Total Compensation*, and *RankDiff* are all insignificant and that the coefficients of other variables are qualitatively similar in columns 1 and 2, we use the specification with *Abnormal Return* and *Total Compensation* as our "baseline" model for the rest of the analyses. Results throughout are qualitatively similar if we instead include *RankDiff*.

results from the prior year. We find that firms that received *Against* recommendations from ISS or Both PAs in the prior year are less likely to file a DEFA14A. A possible explanation is to the extent PA concerns remained the same from the prior year, these firms knew what to expect and could have addressed these issues to the best of their ability in the original proxy statement. Thus, they are less likely to have additional relevant commentary to include in a DEFA14A filing.

Note the attrition in sample sizes for the specifications we report in columns 3–6. ISS overall pay-for-performance concern is missing for for 38 firms; among firms with non-missing overall pay-for-performance concern, there are 534 observations for which ISS does not provide the concern level for pay-TSR alignment (*PTA*; ISS requires five years of data to calculate *PTA*); we are further unable to calculate *CDA_words* and *FOG index* for several firm years due to the heterogeneity in the formatting and presentation of proxy statements. Including prior year SOP votes and recommendations results in additional attrition because these variables are not available for the first year of SOP voting and intermittently for firms that hold SOP votes less than annually.

As we discuss in Section 2.3, upon receiving an *Against* recommendation for SOP, managers who choose to take action can file a DEFA14A, engage in private communications with (large) shareholders, or hire a proxy solicitor to increase retail investor voting participation. Because we cannot observe private communications with shareholders, we cannot examine management's decision to engage with (large) shareholders. Instead, we evaluate whether the composition of the shareholder base as a proxy for the likelihood of private engagement is associated with management's decision to file a DEFA14A.

Among institutions, concentrated owners are more likely to have direct access to the management and the board whereas dispersed owners may rely more on public disclosure (Ge et al., 2021). We estimate alternative versions of Equation (1) where we replace *Institutional Own* with (i) the percentage of outstanding shares held by institutions who hold 5% or more of shares (*Blockholder Own*) and other institutional owners (*Non-Blockholder Own*), and (ii) the percentage of shares held by top five institutional owners (*Top5 Own*) and other institutional owners (*Non-Top5 Own*). We also split

institutional owners into those believed to be "robo-voters" versus not (*ISS RoboVoters*, *GL RoboVoters*, *Other Institutional Own*). Robo-voters are those that almost always vote with either GL or ISS Matsusaka and Shu (2023). On one hand, a large number of robo-voters could encourage DEFA14A filing because management expects an *Against* recommendation to generate more dissent. On the other hand, management might see less benefit to filing a DEFA14A because robo-voters less likely to rely on information beyond the PA recommendation.

Panel B reports the results. In column (1), both the coefficients on *Blockholder Own* and *Non-Blockholder Own* are positive and significant; the coefficient on *Non-Blockholder Own* is significantly larger ($p<0.0001$ for F-tests, untabulated). In column (2), only the coefficient on *Non-Top5 Own* is significant and significantly larger that that on *Top5 Own* ($p<0.01$ for F-test, untabulated) We do not find a significant effect on GL or ISS RoboVoters in column (3).[19].) The results in columns (1) and (2) suggest that managers of firms with a greater non-concentrated institutional investor base are more likely to rely on filings as a too to counter negative PA recommendations; these investors are likely to vote but individual communication would less feasible than with a concentrated base.

In contrast to private engagement, in cases where firms hire a proxy solicitor subsequent to filing the original proxy statement, management typically discloses the decision to do so in a DEFA14A. We examine management's decision to do so by estimating Equation (1) with *Proxy Solicitor* as the dependent variable and report the results in Panel C. As was the case with DEFA14A filings, we find *Proxy Solicitor* use is more likely when ISS or Both PAs are *Against*, consistent with firms taking action when they expect greater voting dissent. We do not find firm characteristics or performance are associated with *Proxy Solicitor* use. Interestingly, *Proxy Solicitor* use is less likely when firm pay is high relative to peers (*High_PFP_MOM)*; since proxy solicitors are often used to drive retail vote this is consistent with trying to turn out these less sophisticated voters when PA concerns may be less obvious (i.e., not just related to pay level).

[19]We rely on 13F data, which provides institutional ownership at the manager level, for ownership classifications. We do not have access to the CRSP mutual fund database, so we are unable to split institutional ownership by specific characteristics at the fund level or use prior classifications that do so (e.g., Bubb and Catan (2022)

4.2 Filing Characteristics and Contents

To understand the information firms disclose in DEFA14As, we read each filing and code key properties. Specifically, we code the filing format (whether the firm uses a presentation/slide format, *(Presentation)*), whether the filing mentions that *ISS* or *GL* issued an *Against* recommendation for SOP (*ISS_Mention* and *GL_mention*), whether the filing mentions either PA issued an *Against* recommendation on another ballot item (*Other Against*), and whether the filing mentions prior SOP vote results (*Prior Year Vote*). We also code the content of the compensation-related discussion along several dimensions (*Peer, Compensation*, *Performance*, *Employment Agreement*, *Complex Situation*, *Future Changes*). Appendices **B** and **C** provide coding details and examples.

Table **4** presents descriptive statistics for the filing contents. Supplementary filings are substantial in length, containing 6,799 words on average (the median is 2,371). The topics firms discuss in the filings are generally aligned with key issues in ISS and GL's proxy voting guidelines. The most commonly discussed topic is *Compensation* (85% of filings) with *Pay-for-Performance* and performance metric choices and difficulty (*Metrics/Difficulty*) as the most common compensation subtopics. Other common topics include specific aspects of employment agreements such as change-in-control payments (33% of filings) and peer group considerations (27% of filings).

We also consider differences in filings across two formats: traditional document-style filings versus presentation-style filings (untabulated). On average, 22% of the filings are in presentation format as opposed to traditional document-style filings—sometimes the filings state the presentation served as the basis for discussions with investors or indicate the specific times at which the slides were presented. The presentation format has become more frequent in recent years. Notably, while firms that use the traditional filing format tend to mention PAs' SOP recommendations (88% mention *ISS* and 59% *GL* recommendation), only 22% (17%) of presentations mention *ISS* (*GL*) recommendation. Because presentations are often accompanied by verbal communication (e.g., individual conversations with investors or presentations to institutional investors), firms have the opportunity to discuss specific

PA concerns verbally while limiting written communication, which is available to a broad group of investors and other stakeholders, to an explanation of why compensation is appropriate.[20]

We do not observe large differences in the prevalence of filing topics between firms choosing the presentation format versus those using a traditional filing format, except for topics closely tied to PA guidelines that would be difficult to discuss without mentioning the recommendation (e.g., concerns about how ISS values stock option awards or selects peers that are smaller or in an unrelated industry). We also find that 18% of firms discuss plans to make changes to future compensation.[21]

We also evaluate Pearson correlations among filing topics (untabulated). Discussion of issues related to employment agreements (e.g., change-in-control, severance) is negatively correlated with other topics including peers, compensation, and performance, suggesting these contract issues represent distinct concerns from general compensation concerns. In contrast, peers and performance are positively correlated, potentially because *Peer* represents a key concern with how PAs evaluate performance; peer discussion and performance are also positively correlated with ISS' concerns about the relative degree of alignment between pay and performance (*High_PFP_RDA*). Additionally, firms are more likely to discuss compensation when pay is high relative to peers (positive correlation between *Compensation* and *RankDiff*).

4.3 Responses to Supplemental Proxy Filings

We next consider how market participants respond to supplemental proxy filings. We focus on three outcome variables: (i) short-window market reaction around the filing date (ii) recommendation changes by proxy advisors, and (iii) SOP voting outcomes.

[20] Consistent with firms considering the cost of disclosing *Against* PA recommendations to the set of shareholders that does not subscribe to both PAs, in multivariate analysis (untabulated), we find that firms in the *Both* group are less likely to disclose the GL *Against* recommendation than firms in the *ISS Only* group are to disclose the GL *For* recommendation.

[21] We do not observe significant differences across the filing topics between firms that disclosed use of a *Proxy Solicitor* and those that did not (untabulated).

4.3.1 Market Reaction

We conduct an event study around DEFA14A filing dates to examine the market reaction to the supplemental proxy filings. For us to observe a market reaction, shareholders must be aware of the filings, access them, and find the information in the filings to be relevant (i.e., the filing must change shareholders' assessment of executive compensation at the firm). Market reaction will be positive if the filings alleviate concerns raised by PAs. Filings could generate a negative market reaction if they instead draw attention to PA's concerns, for example, among investors that do not subscribe to a particular PA's reports. If investors do not access the filings or the filings do not contain relevant information (e.g., just state disagreement with the PA with no additional information or reiterate known information about compensation or firm performance), we will not observe a market reaction. Further, to the extent investors who access the filings need time to process the information therein, we will observe no or a limited market reaction in the short window around the filing date, even if shareholders ultimately factor the information into their voting decisions.

For the treatment firms in our sample we calculate raw and market-adjusted cumulative abnormal returns (CAR) over the two-day window (day of and one day after) around the DEFA14A filing date. We start the return window on the day of filing date both to avoid the market reaction to PA recommendations from confounding our return measure for firms that respond quickly and because there is no reason to expect that market participants would anticipate a supplemental filing.

Table **5** shows that for the pooled sample the mean raw returns and CARs over the two-day window are not significantly different from zero. Returns are significantly positive when *Both* PAs recommend *Against* with mean raw and abnormal returns of 0.69% and 0.61% respectively, but not significantly different from zero for the other two subsamples. DEFA14A filings of firms in the *Both* group are costly in the sense that the filings inform non-subscribers and investors that only subscribe to either ISS or GL that both PAs recommended against the SOP proposal; for these firms to disclose they must believe the benefits of the explanation they can provide can outweigh these costs. In contrast,

when, for example, firms in the *ISS Only* group file a DEFA14A, they inform non-subscribers and the relatively small group of GL subscribers of the ISS *Against* recommendation, while reaping the likely benefits of informing investors that only subscribe to ISS of the GL *For* recommendation. As such, the positive market reaction for the *Both* subsample is consistent with these firms providing explanations of their compensation schemes that investors view more favorably.

Because ISS does not provide their report dates to researchers. we cannot examine the market reaction to ISS report releases. We rely on the results in Ertimur et al. (2013) to put the returns in Panel A in context. These authors document mean abnormal returns of -0.52% for the three-day window (-1,+1) around ISS report date for firms that received ISS *Against* recommendations in 2011 and 2012; they do not find a significant market reaction around GL *Against* recommendations. This suggests that, on average, supplemental filings for firms in the *Both* group offsets the negative market effects of an *Against* recommendation.

We also evaluate market reactions to filings in a series of multivariate regressions controlling for *Abnormal Return* and *Total Compensation* and ISS pay-for-performance concerns (untabulated). Consistent with univariate analysis, we continue to find a positive market reaction for firms in the *Both* group. When we additionally include controls for filing characteristics, the results point to a more positive market reaction when the filing discusses a *Complex Situation*.

4.3.2 Recommendation Changes

Next we shift our attention to firm, compensation, and filing characteristics that are associated with PAs changing their initial *Against* recommendation to *For*. Note that we can identify recommendation changes only when the firm publicly discloses the change through a DEFA14A. We cannot observe instances where PAs change their recommendations after private communication with the firm. Such private communication may be more likely in instances where firms are able to preview draft reports ahead of time, as was the case for S&P 500 firms with ISS prior to 2022.

Table **6** Panel A presents descriptive statistics comparing the filings of firms with recommendation

changes to the rest of the filing sample. First, note that the eventual voting support is substantially higher for firms with recommendation changes (92% versus for 61% those without changes), a result we explore further in Section 4.3.3. Second, the 32 filings that resulted in a recommendation change are different in content from those that did not. On average recommendation change filings discuss fewer distinct issues (1.6 versus 2.0), are less likely to discuss compensation and peers overall but are more likely to discuss compensation disclosure (e.g., failure to provide sufficient information about metrics or targets). Recommendation change filings are more likely to discuss issues related to employment agreements including compensation paid around termination/retirement and change-in-control contract terms. In five cases, recommendation change filings include discussion of changes that were already made to contracts at the time of the DEFA14A to address PA concerns. These results suggest PAs are more open to changing their negative recommendations that stem from specific contract terms and less responsive to explanations firms provide about pay levels or concerns they raise with respect to how PAs evaluate pay-for-performance.

Table **6** Panel B presents the results for the multivariate analysis of the determinants of recommendation changes. In column 1, we include the same set of variables as in Equation (1) for the determinants of the filing decision. Column 1 shows that firms with better operating performance are more likely to have a recommendation change while those with larger changes in compensation are less likely to. We also find recommendation changes are less likely when the CEO has longer tenure, meaning the firm did not experience recent CEO turnover. This is consistent with recommendation changes frequently concerning payments related to turnover.

In column 2, we add filing characteristics. Consistent with what we documented in univariate analysis, we find filings including discussion of employment agreements are more likely to result in recommendation changes while those related to peer group selection and Complex situations are less likely to. Given that the contents of filings reflect firms' circumstances and PAs' concerns, these results are helpful in identifying topics for which which PAs can be convinced to change their recom-

mendations; our findings do not suggest that making more informative disclosures will be sufficient, in and of itself, to result in changes to PA recommendations (e.g., a firm can only discuss a termination payment in a DEFA14A if an executive was terminated and is only likely to do so if a PA expressed concern).

4.3.3 Voting Outcomes

The market reaction to supplemental filings suggests that investors access these filings and that the filings contain favorable information, at least for firms with the most severe compensation concerns (i.e., the *Both* subsample). This, in turn, suggests that the filings could positively affect voting outcomes. However, there are several reasons the association between DEFA14A filings and voting outcomes can differ from the market reaction to the filings. First, timing of the filing is likely to play a key role. If firms do not file soon enough after the PA report, it is possible that a large fraction of shareholders will have already voted, making a voting effect less likely even if the filings contain value-relevant information that generates a market reaction..In a survey of Fortune 100 companies, firms reported that they needed at least three days to respond to ISS *Against* recommendations, but that 17.7% of the total vote was voted negatively (i.e., opposite from management) within three business days of adverse ISS recommendations (Boggs, 2018).[22] This suggests some investors are robo-voting (e.g., Matsusaka and Shu, 2023) or at a minimum, primarily relying on the recommendation without significant additional analysis.

Second, because of the mechanics of proxy voting, interim voting results can influence a firm's decision to file a DEFA14A. Specifically, firms have access to interim voting results once proxy materials have been distributed. Broadridge, the market leader in voting services with a market share of 80% of outstanding shares in the US[23], enables firms to "view real-time voting results" after distribution of

[22]Similarly, in a comment letter to the SEC, GM's Corporate Secretary Rick E Hansen noted that immediately following the release of PA reports his company saw "a substantial increase in the shares voted, and voted in a way that corresponds precisely with the proxy advisors' recommendations" (Hansen, 2020).

[23]Broadridge market share as reported by FitchRatings: `https://www.fitchratings.com/research/corporate-finance/broadridge-financial-solutions-inc-24-06-2022`

the proxy statement through its issuer portal on its website ProxyVote.com and associated app, and begins providing vote reports at the broker level 15 days prior to the annual meeting.[24] This can lead to reverse causality; firms that observe significant dissent in interim results may be more likely to file a DEFA14A to improve voting results. Even if voters casting ballots after the DEFA14A filing vote more favorably, the effect on overall voting outcomes is ambiguous and depends on the proportion of votes cast before and after the filing.

Third, the investors who trade around the filing may be different from those who are more likely to vote. For example, retail investors, who tend not to vote at annual meetings, may trade around the filings while passive mutual funds may do the opposite. Further, these different types of investors may interpret the information in the filings differently, perhaps because of different levels of sophistication, leading us to observe differences in stock price reactions versus voting outcome reactions. Further, those purchasing shares around the supplemental filing date (an average of 12.9 days before the annual meeting in our sample) are likely ineligible to vote since these shares were not owned before the record date.

Finally, research design challenges make it difficult to discern the true effect of supplemental filings. Ideally, we would like to compare the voting outcomes of a firm with a filing to itself had it not filed supplementary materials. Lacking this ideal counterfactual, we instead compare firms with filings to other firms that receive *Against* recommendations but do not file DEFA14As. If firms with supplemental filings are different—in terms of firm or compensation characteristics, compensation disclosure in the proxy, or the specific concerns expressed in PA reports—from those without filings, filers would not have the same voting outcomes. For example, to the extent that firms with more problematic compensation or those for which PAs expressed more significant concerns are more likely to file DEFA14As, we can observe a negative association between filings and voting results if the filing itself has no effect or a positive effect that only partially offsets the concerns. We will observe

[24]See Broadridge promotional Issuer Guide Book and Annual Meeting Guidebook: `https://www.broadridge.com/_assets/pdf/broadridge-registered-issuer-guide-book.pdf` and `https://www.broadridge.com/_assets/pdf/broadridge-cp-guidebook-2020.pdf`. This interim vote information is not available to the general public or in common voting databases.

a similar result if firms with deficient initial proxy filings are those that file supplementary materials.

To examine the association between relevant supplemental proxy filings and SOP voting outcomes, we follow the voting outcome model in Ertimur et al. (2013) as below.

$$\begin{aligned} PctVotedFor_{i,t} = {} & \alpha_{i,t} + \beta_1 SuppFiling_{i,t} + \beta_2 ProxySolicitor_{i,t} + \beta_3 ISSOnly_{i,t} + \beta_4 Both_{i,t} \\ & + \beta_5 SuppFiling_{i,t} * ISSOnly_{i,t} + \beta_6 SuppFiling_{i,t} * Both_{i,t} \\ & + \beta_7 Busy_{i,t} + \beta_8 S\&P500_{i,t} + \beta_9 TotalCompensation_{i,t} + \beta_{10} \Delta TotalComp_{i,t} \\ & + \beta_{11} PctVariablePay_{i,t} + \beta_{12} InstitutionalOwn_{i,t} + \beta_{13-18} Controls_{i,t} \\ & + YearFE_t + \epsilon \end{aligned} \tag{2}$$

PctVotedFor is the percentage of votes cast in favor of the SOP proposal. *SuppFiling* is equal to one if the firm filed a relevant DEFA14A. We include indicators for firms receiving *Against* recommendations from *ISS Only* or *Both* PAs (with *GL Only* as the excluded group). We interact *SuppFiling* with *ISS Only* and *Both* to allow for different voting reactions across groups. β_2 captures the effect of DEFA14A filings on voting outcomes for the *GL Only* group; the combined effects of β_2 and the interaction terms represent the effects for *ISS Only* and *Both* groups. We include the same control variables from equation (1).

Table **7**, column 1 presents the results of estimating Equation (2). The results show that there is no significant association between supplemental filings and voting outcomes for the *GL Only* group–the coefficient of *SuppFiling* is insignificant—and for the *ISS Only* group (see F-test). We find a modest but significantly *negative* association for the *Both* group (see F-tests for sums of coefficients). For the *Both* group, a supplemental filing is associated with 5.63% worse voting outcome. As expected, voting outcomes are significantly worse for firms receiving *Against* recommendations from *Both* PAs (approximately 27%) or *ISS Only* (approximately 13%) as compared to *GL Only*. The results for control variables are consistent with prior literature (Ertimur et al., 2013,0). Performance is positively correlated with voting support while CEO compensation level and institutional ownership are

negatively correlated with voting support.

When we add controls for ISS concerns in column 2, we find a negative association between the concerns about high pay versus performance relative to peers, (*High_PFP_RDA*) and voting outcomes. The magnitude of the combined coefficient on *SuppFiling* and the interaction of *SuppFiling* with *Both* decrease but remain significant. This suggests that the differences in voting response are at least partially the result of underlying differences in either the concerns expressed by ISS or the related compensation issues. In column 3, we add an indicator variable for *Rec_Change* and find a significant and positive coefficient equal to 0.249 (i.e., 24.9% of votes).[25] That is, the small number of firms that are able to induce PAs to change their initial recommendation experience a voting benefit that is over 5 to 10 times larger than the small negative average effect of a supplemental filing depending on the comparison group. Even though recommendation changes are uncommon, this significant voting effect could provide strong incentives for firms to make supplemental filings. We also find a modest negative association between *Proxy Solicitor* and votes (2.3-3.3% of votes) across columns 1–3. This negative association, combined with the negative association between supplementary filings for firms that receive an *Against* from both PAs and voting outcomes - both interventions likely taken by management to try to improve vote - is consistent with reverse causality concerns we outline above. Managers are more likely to take these actions when they expect high levels of voting dissent ex ante or observe poor interim voting results.

To further account for potential differences across filing and non-filing firms, we employ entropy balancing (McMullin and Schonberger, 2020). We balance on firm and compensation characteristics (untabulated). The results in column 4 show that after entropy balancing, the combined effect for the *Both* group is slightly smaller but remains negative and significant. This suggests that differences in firm characteristics or basic compensation characteristics (e.g., total compensation) across firms are not fully driving the negative association. When we add the controls for ISS concerns in column

[25] All Rec_Change=1 firms made a supplemental filing so we do not interact with *SuppFiling*. We are also unable to interact *Rec_Change* with *ISS Only* or *Both* because all but one of the *Rec_Change*=1 observations come from the *ISS Only* group.

5[26], the magnitudes of coefficients of interest further decrease for the *Both* group. In column 6, we include *Rec_Change* and find a similar large and positive coefficient as in column 3. Overall, these results suggest that the initial negative association between filings and voting outcomes is only partially explained by underlying differences in compensation arrangements (that are not captured by standard compensation variables) or the specific ISS concerns.[27]

That we find a significant positive market reaction to some supplemental filings but a negative and economically small effect on voting outcomes (when recommendations are not changed) is consistent with the timing of filings relative to when shareholders cast their votes reducing the potential impact of DEFA14As on the eventual voting outcome and, related, interim voting results shaping managers' decisions to file DEFA14As. It could also be the case that the positive impact of filings on voting outcomes is not large enough to offset unobservable differences between filers and non-filers that lead to differences in voting outcomes. The results are also consistent with differences in how price-setting versus voting investors perceive the filings.

4.4 Additional Analysis

In additional analysis, we explore future SOP-related outcomes for treatment firms. Specifically, we examine whether DEFA14A filings are associated with changes in compensation disclosure in the proxy statement, compensation, and PAs' SOP recommendations in the following year. We estimate versions of Equation (2) where the dependent variable is alternatively the number of words in the *t+1* proxy statement (*CDA_words*), *Total Compensation* in *t+1*, and indicator variables capturing whether *ISS* and/or *GL* issues an *Against* recommendation for the *t+1* SOP vote. Table **8** presents the results. In Columns 1 and 2 we do not find any evidence of an association between DEFA14A filings in *t* and the length of the CD&A or total compensation in *t+1*.[28] In Column 3, we find that

[26]Throughout analyses, we include two separate variables, *Abnormal Return* and *Total Compensation*, or a single variable, *RankDiff*, to control for pay and performance. Consistent with our entropy balanced sample, which is balanced on *Abnormal Return* and *Total Compensation*, we include these variables in multivariate analyses after employing entropy balancing.

[27]We do not have access to data about the specific compensation concerns raised by GL.

[28]Given the timing of PA reports and DEFFA14A filings which come several months into year *t+1*, several aspects of the compensation contract may already be set giving firms less ability to make changes.

firms filing DEFA14A are less likely to receive an *Against* recommendation from any PA (i.e., either GL or ISS or Both *Against*), which is consistent with treatment firms more proactively addressing PA concerns to improve future recommendations (i.e., these firms may take other actions in addition to the filing).

5 Conclusion

Proxy advisors play an important but controversial role in shaping shareholder voting. In the face of adverse recommendations from proxy advisors, firms may seek to mitigate the expected negative consequences of such a recommendation. We explore one such response firms may make to *Against* SOP recommendations from ISS and GL, filing a supplemental proxy statement (DEFA14A).

We document that approximately 11% of firms file DEFA14As with a much higher likelihood for firms receiving an *Against* recommendation from ISS. These filings are, on average, quite long and discuss a variety of issues, including compensation, performance, and peer groups. We find significant positive market reactions in the short window around the filing for firms receiving *Against* recommendations from both ISS and GL but do not find filings positively influence voting outcomes on average after controlling for ISS concerns. We do identify a subset of filings for which PAs change their initial recommendations, resulting in a substantial voting benefit. We also find filing firms are less likely to receive an *Against* recommendation on SOP in the next year.

We contribute to the literature on the actions management take to shape voting outcomes. We also add to the literature on the determinants of SOP voting (e.g., Kimbro and Xu, 2016) and more specifically the role of proxy advisors (e.g., Ertimur et al., 2013; Malenko and Shen, 2016; Hayne and Vance, 2019) and firm disclosure in the voting process (e.g., Balsam et al., 2016). Additionally, this research should be informative to the rule-making debate surrounding firms' access and responses to proxy advisor reports recently undertaken by the SEC.

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Appendix A. Variable Definitions

Variables	Definition
Market Value	Log of market value of equity as of the end of the compensation year. (Source: Compustat)
Ind-adjusted ROA	Earnings before extraordinary items scaled by total assets (ROA) as of the end of the compensation year minus the industry mean ROA of all firms in the same two-digit SIC industry in the same fiscal year. (Source: Compustat)
Abnormal Returns	Buy-and-hold returns over the compensation year minus the value-weighted returns. (Source: CRSP)
Book-to-Market	Total asset divided by the market value of equity as of the end of the compensation year. (Source: Compustat)
Leverage	Total liabilities divided by total assets as of the end of the compensation year. (Source: Compustat)
Institutional Own	Percentage of shares outstanding held by institutional owners at the end of the compensation year. (Source: Thomson Reuters)
Blockholder Own	Percentage of shares held by institutional investors who individually own 5% or more of the firm's outstanding shares at the end of the compensation year. (Source: Thomson Reuters)
Non-Blockholder Own	Calculated as (Total Institutional Ownership - Blockholder Ownership); represents the percentage of shares held by institutional investors who individually own less than 5% of the firm's outstanding shares. (Source: Thomson Reuters)
Top5 Own	Percentage of shares held by the five largest institutional investors of the firm at the end of the compensation year. (Source: Thomson Reuters)
Non-Top5 Own	Calculated as (1 – *Top5 Own*); represents the percentage of shares held by institutional investors other than the five largest institutional investors. (Source: Thomson Reuters)
ISS RoboVoters	Percentage of shares held by funds with >1B in assets classified as ISS RoboVoters in 2021 in the Appendix of Matsusaka and Shu (2023) matched based on name to 13F manager data
GL RoboVoters	Percentage of shares held by funds with >1B in assets classified as GL RoboVoters in 2021 in the Appendix of Matsusaka and Shu (2023) matched based on name to 13F manager data
Other Institutional Own	Calculated as (1 – *ISS RoboVoters* - *GL RoboVoters*); represents the percentage of shares held by institutional investors other than ISS or GL RoboVoters.
S&P 500	Indicator equal to 1 if the firm is classified as S&P 500 firms over the compensation year, and 0 otherwise. (Source: MSP500)
Busy	Indicator equal to 1 if the annual shareholder meeting was held between April to June and 0 otherwise. (Source: Voting Analytics)
Tenure	Log of 1 plus the CEO's tenure at the end of the compensation year. (Source: Executive Compensation Analytics)
Total Compensation	Log of the total CEO compensation for compensation year *(DISCLOSED_TOTAL_Comp)* (Source: Executive Compensation Analytics)
Δ *Total Compensation*	Change in the total CEO compensation from year *t-1* to *t* divided by the total CEO compensation in year *t-1*. (Source: Executive Compensation Analytics)
Pct Variable Pay	Sum of non-fixed compensation divided by the total CEO compensation. (Source: Executive Compensation Analytics)
PerfRank	Firm performance rank in year *t*, as compared to a firm-specific peer group (including the ten industry peers from the same GICS sector that are closest in size according to *Market Value*). Firm performance is measured using raw stock returns over the prior year. This variable ranges from 1-11, with higher values associated with better relative performance.
CompRank	Total compensation rank in year *t*, as compared to a firm-specific peer group (including the ten industry peers from the same GICS sector that are closest in size according to *Market Value*). This variable ranges from 1-11, with high values associated with higher total compensation.
RankDiff	Difference between *CompRank* and *PerfRank* This variable ranges from -10 to 10. Higher values of *RankDiff* are associated with more compensation (relative to peers), given firm performance (relative to peers).
ISSOnly	Indicator equal to 1 if the firm received Against recommendation on Say-on-Pay from ISS only and 0 otherwise. (Source: Voting Analytics)
GLOnly	Indicator equal to 1 if the firm received Against recommendation on Say-on-Pay from Glass Lewis only and 0 otherwise. (Source: Zytnick (2024))

Both	Indicator equal to 1 if the firm received Against recommendation on Say-on-Pay from both ISS and Glass Lewis and 0 otherwise. (Source: Voting Analytics & Zytnick (2024))
AnyAgainst	Indicator equal to 1 if the firm received Against recommendation on Say-on-Pay from either ISS and Glass Lewis and 0 otherwise. (Source: Voting Analytics & Zytnick (2024))
*High_PFP_Overall**	Indicator equal to 1 if the ISS indicated "High" concern for PFP (Pay for Performance) Overall Quant Concern, and 0 otherwise, where the concern reflects the final concern level for the quantitive screen and indicates any pay-for-performance disconnect. (Source: Executive Compensation Analytics)
*High_PFP_RDA**	Indicator equal to 1 if the ISS indicated "High" concern for PFP RDA (Relative Degree of Alignment) Concern and 0 otherwise. RDA measures CEO pay relative to TSR (total shareholder return) compared to a group of peer firms selected by ISS. (Source: Executive Compensation Analytics)
*High_PFP_MOM**	Indicator equal to 1 if the ISS indicated "High" concern for PFP MOM (Multiple of Median) Concern and 0 otherwise. MOM is the multiple of the median of CEO pay compared to a group of peer firms selected by ISS. (Source: Executive Compensation Analytics)
*High_PFP_PTA**	Indicator equal to 1 if the ISS indicated "High" concern for PFP PTA (Pay TSR Alignment) Concern and 0 otherwise. PTA compares the trend in CEO pay to TSR trend for the firm. (Source: Executive Compensation Analytics)
SuppFiling	Indicator equal to 1 if the firm had filed a relevant DEFA14A before the annual meeting and 0 otherwise (i.e., related to ISS *Against* SOP recommendation).
Proxy Solicitor	Indicator equal to 1 if the firm filed a DEFA14A that included the phrase "proxy solicitor" between the date of the proxy statement and annual meeting.
Days(meeting date - filing date)	The difference between the annual meeting date and the DEFA14A filing date.
Total number of words	The number of words in DEFA14A
CDA_words	Log of the number of valid words in CD&A from the proxy statement.
FOG index	Following Gunning's Fog Index (1952), calculated as $0.4\left(\frac{\text{Number of Words}}{\text{Number of Sentences}} + 100 \times \frac{\text{Complex Words}}{\text{Number of Words}}\right)$
PctVotedFor	Votes voted for scaled by the sum of Voted For and Voted Against / Voted For and Voted Against and Voted Abstain / Outstanding Share according to the firm. (Source: Voting Analytics)
Voted Against	Calculated as (1- *PctVotedFor*) (Source: Voting Analytics)

*Refer to ISS US Compensation Policies (pay-for-performance screens) for more details:
https://www.issgovernance.com/file/policy/active/americas/US-Compensation-Policies-FAQ.pdf

Appendix B. Topic List

This appendix provides the list of topics manually coded in the relevant DEFA14A filings.

Topic	Definition
Number of Distinct Issues	The number of different issues with proxy advisors' Say-on-Pay recommendations disccused in DEFA14A.
Presentation	Indicator equal to 1 if the relevant DEFA14A is presented in slide format, 0 otherwise.
ISS_mention	Indicator equal to 1 if the relevant DEFA14A includes ISS' Say-on-Pay recommendation.
GL_mention	Indicator equal to 1 if the relevant DEFA14A includes Glass Lewis' Say-on-Pay recommendation.
Other Against	Indicator equal to 1 if the relevant DEFA14A includes any discussions related to proxy advisors' recommendation opposite from management on proposals other than Say-on-Pay (e.g., Against equity compensation plan, or For shareholder proposals), 0 otherwise.
Prior Year Vote	Indicator equal to 1 if the relevant DEFA14A includes prior year or years Say-on-Pay voting result, 0 otherwise.
Peer	Indicator equal to 1 if the relevant DEFA14A includes any discussion related to appropriate peer group selection for compensation and performance evaluation (e.g., size of peers relative to the firm, peer firms' industry, choosing different peer group), 0 otherwise.
Compensation	Indicator equal to 1 if the relevant DEFA14A includes any discussions related to the firm's compensation design and outcomes (e.g., realized pay relative to the reported pay, performance-based pay, metrics/difficulty, board discretion in payouts, disclosure issues), 0 otherwise.
Performance	Indicator equal to 1 if the relevant DEFA14A includes any discussions related to firm performance (e.g., ISS assessment of performance, appropriate metrics to assess performance), 0 otherwise.
Employment Agreement	Indicator equal to 1 if the relevant DEFA14A includes any discussions related to the firm's compensation related to employment agreements (e.g., Chang-In-Control payments/triggers, new CEO attraction/retention, termination/retirement), 0 otherwise.
Complex Situation	Indicator equal to 1 if the relevant DEFA14A includes any discussions related to the firm's complex situation influencing pay/performance (e.g., merger, spinoff, restructuring), 0 otherwise.
Future Changes	Indicator equal to 1 if the relevant DEFA14A includes any discussions related to the firm's plans to change future compensation, 0 otherwise.

Appendix C. Examples for Each Topic

This appendix includes excerpts from DEFA14A filings providing examples of common topics.

Peer

Royal Gold Incorporation, October 30, 2015

Proxy advisor Glass Lewis recommended a vote "for" Say on Pay, while Institutional Shareholder Services (ISS) recommended "against" this proposal. Glass Lewis compared Royal Gold's executive compensation to gold companies with market capitalizations similar to Royal Gold. Their benchmarking group comprises the peers selected by Royal Gold, and the Committee agrees that this benchmark group provides an appropriate basis for executive compensation comparison.

The Committee strongly disagrees with the ISS recommendation, which it believes to be based on a misleading comparison of Royal Gold's executive compensation against an ISS-selected group of companies that simply are not comparable from an industry, business model or market capitalization perspective.

After reviewing the information below, the Committee is confident you will agree that the ISS methodology:

- **failed to compare Royal Gold to any other company in the very unique precious metal royalty and streaming business;**
- **produced a benchmark group of twelve companies, only two of which are precious metals companies;**
- **does not acknowledge that metrics other than revenue may be appropriate peer selection tools;**
- **does not recognize that a royalty company's unique cost structure provides exceptionally high margins on smaller revenues than the selected peers;**
- **suggests that companies averaging one-eighth the market capitalization of Royal Gold are relevant benchmark peers;**
- **produced a benchmark group whose share prices have no meaningful correlation to gold prices and are generally countercyclical to precious metals company share prices— meaning that Royal Gold's shareholder returns are highly unlikely to align well with companies outside the gold industry when, as is true today, gold is depressed and the broader market is relatively stronger; and**
- **resulted in an unfair and misleading comparison of Royal Gold's executive compensation program against a benchmark peer group of companies bearing little, if any, resemblance to Royal Gold.**

Link: https://www.sec.gov/Archives/edgar/data/85535/000110465915074278/a15-22053_2defa14a.htm.

Employment Agreement

VAALCO Energy Incorporation, April 26, 2019

Potential Payments upon Termination or Change-in-Control

We entered into an Amended and Restated Executive Employment Agreement with Cary M. Bounds effective December 29, 2016, in connection with his appointment as our Chief Executive Officer that date. The initial term of this Employment Agreement commenced on December 29, 2016 and is extended for successive one-year terms if neither party gives the other party notice of their intention to terminate the Employment Agreement 60 days' prior to the end of the term. The Employment Agreement amends and replaces a prior employment agreement in effect between Mr. Bounds and our company entered into in July 2015.

The Employment Agreement provides Mr. Bounds with certain severance benefits if his employment is terminated due to his death or disability, by us without Cause (as defined in the Employment Agreement), or by Mr. Bounds for Good Reason (as defined in the Employment Agreement), including in connection with a Change in Control (as defined in the Employment Agreement). Specifically, the Employment Agreement provides that, upon a termination of Mr. Bounds' employment by us without Cause, by Mr. Bounds for Good Reason, or due to Mr. Bounds' death or disability, Mr. Bounds (or his beneficiaries) will receive, among other benefits, a cash severance payment at least equal to 50% of his annual base salary then in effect plus 50% of the greater of (i) his average annual bonus paid or payable for the preceding two calendar years and (ii) the annual bonus for the calendar year in which the termination occurs (prorated for the portion of the year actually worked). If Mr. Bounds' employment is terminated by us without Cause, by Mr. Bounds for Good Reason, or due to Mr. Bounds' death or disability, in each case within one year following a Change in Control, then we will provide Mr. Bounds (or his beneficiaries) with a cash severance payment at least equal to 150% of his annual base salary then in effect plus 150% of the greater of (i) his average annual bonus paid or payable for the preceding two calendar years and (ii) the annual bonus for the calendar year in which the termination occurs (prorated for the portion of the year actually worked).

Link:https://www.sec.gov/Archives/edgar/data/894627/000089462719000020/egy-20190426xdefa14a.htm.

Performance

Abbott Laboratories, April 5, 2018

In 2017 the Company performed at the top of its peer group with Total Shareholder Return (TSR) growth of 52% and completed all of its financial and strategic objectives. The CEO was granted LTI in 2017 at the 23rd percentile of our peer group. Abbott improved over 35 points on ISS' Key Relative Degree of Alignment test and achieved an overall "low concern" outcome on ISS' quantitative tests. It is absurd that in the face of these facts that ISS has not recommended support for Say-On-Pay. ISS's recommendations should be objective and based on facts.

Instead, ISS's recommendation on executive pay is driven by:

- **Manipulation of our peer group**—ISS altered the Company's peer group and selected inappropriate peers which do not reflect the impact of Abbott's significant increase in size following two significant acquisitions, St. Jude and Alere, during 2017. ISS added peers which do not even meet their own criteria and omitted Company selected peers if they paid relatively high while performing relatively low, thus purposely manipulating the outcome.

- **Manipulation of GAAP and non-GAAP measures**—ISS selectively uses GAAP and non-GAAP measures during its analysis. When GAAP measures are employed, ISS ignores the one-time impact of U.S. Tax Reform and thereby understates all of Abbott's financial metrics. Although they state EBITDA is the most important measure for our GICS code, they exclude its use. Abbott outperformed all of its Company and ISS peers in EBITDA growth. Inclusion of EBITDA in the analysis would have positively impacted Abbott's scoring. After excluding EBITDA, ISS then claims ROA, ROIC and ROE results are low based on the one-time GAAP-effect of U.S. Tax Reform. With such arbitrary methods, ISS artificially inflates pay and falsely asserts operating performance is lower. Moreover, ISS makes little attempt to explain the composition of, or rationale for use of, those measures.

Link:`https://www.sec.gov/Archives/edgar/data/1800/000110465918022657/a18-9600_1defa14a.htm.`

Pay-for-Performance

IDACORP, May 7, 2019

ISS's main concerns leading to lack of support for our say-on-pay proposal are that two of our five total incentive compensation goals (net income and customer satisfaction) were not sufficiently rigorous and challenging. The compensation committee established those goals with the assistance of its compensation consultant, Pay Governance LLC, and following robust discussions with management aimed at ensuring goals are challenging and require exemplary performance. The compensation committee fully considered the prior year performance results for all five of our incentive goals and incorporated that data into its overall assessment and selection of the 2018 performance goals, which involves a review of numerous other factors. IDACORP has produced outstanding performance results under all five incentive areas over the past ten years, and excellent returns for shareholders, demonstrating the effectiveness of our incentive plan design and goals.

Our Financial Performance Has Been Strong

Our company continued its strong financial performance in 2018, as demonstrated by:

- achieving the company's **11th consecutive year of earnings growth**;
- increasing our quarterly dividend from $0.59 per share to $0.63 per share, resulting in an increase in our quarterly dividend of approximately **110 percent** since the fourth quarter of 2011;
- providing a **total shareholder return (TSR) over the past three-years of 14 percent**, ranking in the 63rd percentile among our peer companies in the EEI Utilities Index; and
- receiving our second EEI Utilities Index award in the past three years for the **best TSR performance among small cap utilities** (market capitalization of less than $5 billion) over the past five years, measured as of September 30, 2018.

Our exceptional performance is represented in part in the comparison of cumulative total return chart included in our 2018 Annual Report on Form 10-K, as follows:

Link: `https://www.sec.gov/Archives/edgar/data/1057877/000105787719000085/defa14a-may720191.htm.`

Figure 1: The Timeline

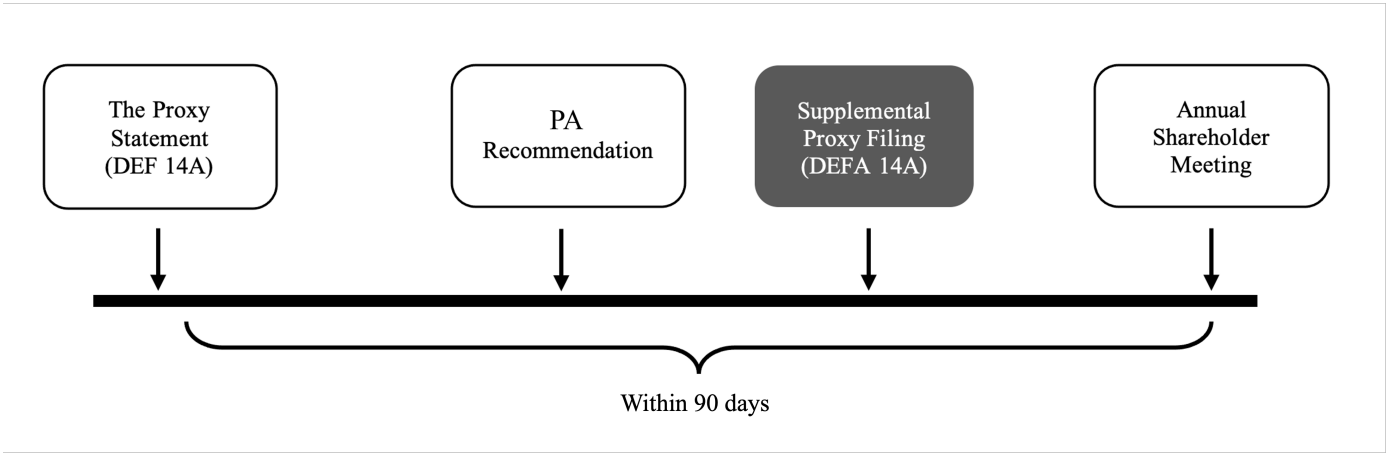


Figure 1 shows a timeline of key events leading up to the annual meeting. After firms file their DEF 14A (Proxy Statement), proxy advisors (PAs) issue their reports, including the recommendation on the Say-on-Pay proposal. Firms may file relevant DEFA14As after the PA recommendation and before their annual shareholder meeting. Proxy statements are usually filed in the 60-day window prior to the annual shareholder meetings. The timing of PA reports are not publicly available. Current ISS policy states that reports are generally issued 13 to 30 days before the annual shareholder meeting (13-20 days during busy season April-June)(Institutional Shareholder Services(ISS) (2023)).

Table 1: Sample Selection and Distribution

Table 1, Panel A presents the sample selection. Panel B presents observations for the treatment and control groups and which PA recommended *Against*.

Panel A. Sample Selection

Shareholder Meetings in Voting Analytics database from 2011 to 2022	44,372
Restrict to 'Annual' meetings	42,590
Restrict to Say-on-Pay Proposals (ISS Agenda Item ID = 'M0550')	31,341
Restrict to when either Proxy Advisor (*ISS* or *Glass Lewis*) recommended *Against*	5,806
Less: Insufficient data for controls (Compustat, CRSP, Thomson Reuters)	(860)
Less: Insufficient data for controls (Executive Compensation Analytics)	(1,403)
Initial Sample	***3,543***
Treatment group (Relevant DEFA14A Filers)	365
Control group (Irrelevant or no DEFA14A Filers)	3,178
Review DEFA14A filings for firms where either PA changed their recommendation from an initial "*Against*" to a final "*For*."	***32***
Final Sample	***3,575***
Treatment group (Relevant DEFA14A Filers)	**397**
Control group (Irrelevant DEFA14A Filers or Non-Filers)	**3,178**

Panel B. Sample Distribution

	Relevant DEFA14A Filers	Irrelevant DEFA14A or Non-Filers	Percentage of Firms with Relevant Filings
Only ISS Against	224	965	18.8%
Only GL Against	30	1,203	2.4%
Both Against	143	1,010	12.4%
Total	397	3,178	11.1%

Table 2: Descriptive Statistics

Table 2, Panel A contains descriptive statistics for all variables for the full sample, *GL Only*, *ISS Only*, and *Both* subsamples. Columns (1) to (3) report the mean for each subsample and the last three columns report the differences in mean between each subsample. Panel B contains descriptive statistics for the treatment sample, firms that filed a relevant DEFA14A (*SuppFiling=1*), and the control sample, firms that filed either an irrelevant DEFA14A or that did not file a DEFA14A (*SuppFiling=0*). The last column reports the differences in means between the treatment and the control samples. See Appendix **A** for detailed variable definitions. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 level, respectively, based on a two-tailed test.

Panel A. Distribution of Key Variables for the Full Sample and by Subsamples of PA Against Recommendations

	Full Sample						(1) GL Only	(2) ISS Only	(3) Both	(2) vs (1)	(3) vs (1)	(3) vs (2)
Variables	**n**	**Mean**	**Std. dev.**	**p25**	**Median**	**p75**	**Mean**			**Mean Differences**		
SuppFiling	3,575	0.11	0.32	0.00	0.00	0.00	0.03	0.30	0.20	0.27***	0.17***	-0.10***
Proxy Solicitor	3,575	0.04	0.18	0.00	0.00	0.00	0.02	0.04	0.04	0.02*	0.02*	0.00
Pct Voted For	3,575	0.72	0.18	0.61	0.75	0.85	0.83	0.71	0.54	-0.12***	-0.29***	-0.17***
Busy	3,575	0.83	0.38	1.00	1.00	1.00	0.82	0.84	0.83	0.02	0.01	-0.01
S&P 500	3,575	0.16	0.37	0.00	0.00	0.00	0.19	0.20	0.19	0.01***	0.00***	-0.01
Total Compensation	3,575	15.55	1.06	14.87	15.67	16.30	15.62	15.53	15.97	-0.09***	0.35***	0.44***
Δ *Total Comp*	3,575	0.73	2.32	-0.11	0.12	0.56	0.40	0.47	1.09	0.07	0.69***	0.62***
Pct Variable Pay	3,575	0.75	0.23	0.67	0.82	0.90	0.77	0.74	0.81	-0.03***	0.04	0.07***
Institutional Own	3,575	0.76	0.23	0.63	0.82	0.94	0.80	0.72	0.74	-0.08***	-0.06***	0.02
Market Value	3,575	7.59	1.79	6.28	7.49	8.66	7.92	7.69	7.87	-0.23***	-0.05***	0.18**
Ind-adjusted ROA	3,575	-0.02	0.15	-0.05	0.00	0.03	-0.02	-0.01	-0.02	0.01	0.00	-0.01**
Abnormal Return	3,575	0.00	0.54	-0.29	-0.08	0.16	0.00	-0.01	-0.04	-0.01	-0.04	-0.03
Book-to-Market	3,575	0.65	0.31	0.40	0.66	0.92	0.64	0.68	0.63	0.04***	-0.01	-0.05***
Leverage	3,575	0.61	0.28	0.41	0.61	0.80	0.61	0.61	0.60	0.00	-0.01	-0.01
Tenure	3,575	1.88	0.92	1.25	1.99	2.58	1.83	1.84	1.93	0.01	0.10***	0.09***
Blockholder Own	3,575	0.28	0.16	0.17	0.27	0.38	0.30	0.28	0.28	-0.02***	-0.02***	0.00
Non-Blockholder Own	3,575	0.49	0.17	0.37	0.50	0.61	0.52	0.51	0.51	-0.01***	-0.01***	0.00*
Top5 Own	3,575	0.33	0.11	0.27	0.33	0.40	0.35	0.33	0.33	-0.02***	-0.02***	0.00
Non-Top5 Own	3,575	0.42	0.17	0.31	0.45	0.55	0.45	0.40	0.41	-0.06***	-0.04***	0.02*
ISS RoboVoters	3,236	0.02	0.02	0.00	0.01	0.02	0.02	0.02	0.02	0.00	0.00	0.00
GL RoboVoters	3,236	0.00	0.01	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OtherInstitutionalOwn	3,236	0.73	0.22	0.61	0.80	0.91	0.78	0.70	0.72	-0.08***	-0.06***	0.02
PerfRank	3,575	5.62	3.20	3.00	5.00	8.00	5.60	5.42	5.50	-0.18	-0.10	0.08
CompRank	3,575	7.67	3.00	6.00	8.00	10.00	7.40	7.47	8.71	0.07	1.31***	1.24***
Rank Diff	3,575	2.05	4.55	-1.00	2.00	6.00	1.68	2.06	3.22	0.38	1.54***	1.16***
High_PFP_ Overall	3,537	0.40	0.49	0.00	0.00	1.00	0.17	0.47	0.61	0.30***	0.44***	0.14***
High_PFP_RDA	3,464	0.30	0.46	0.00	0.00	1.00	0.14	0.36	0.43	0.22***	0.29***	0.07***
High_PFP_MOM	3,537	0.10	0.30	0.00	0.00	0.00	0.03	0.07	0.19	0.04***	0.16***	0.12***
High_PFP_PTA	3,005	0.06	0.24	0.00	0.00	0.00	0.02	0.07	0.10	0.05***	0.08***	0.03

Table 2 (continued)

Panel B. Distribution of Key Variables for the Treatment and Control Samples

	SuppFiling = 1						SuppFiling = 0						Diff
Variables	**n**	**Mean**	**Std. dev.**	**p25**	**Median**	**p75**	**n**	**Mean**	**Std. dev.**	**p25**	**Median**	**p75**	**(Means)**
Proxy Solicitor	397	0.11	0.31	0.00	0.00	0.00	3,178	0.03	0.16	0.00	0.00	0.00	0.08***
Pct Voted For	397	0.64	0.17	0.53	0.66	0.74	3,178	0.73	0.17	0.63	0.76	0.86	-0.09***
Busy	397	0.86	0.35	1.00	1.00	1.00	3,178	0.82	0.38	1.00	1.00	1.00	0.04
S&P 500	397	0.27	0.44	0.00	0.00	1.00	3,178	0.14	0.35	0.00	0.00	0.00	0.12***
Total Compensation	397	15.91	0.86	15.32	15.95	16.51	3,178	15.51	1.08	14.80	15.62	16.26	0.40***
Δ *Total Comp*	397	0.55	1.98	-0.08	0.08	0.38	3,178	0.75	2.36	-0.12	0.12	0.57	-0.20
Pct Variable Pay	397	0.79	0.16	0.73	0.83	0.89	3,178	0.74	0.23	0.65	0.82	0.90	0.05***
Institutional Own	397	0.84	0.15	0.76	0.88	0.96	3,178	0.75	0.23	0.60	0.81	0.93	0.09***
Market Value	397	8.18	1.74	6.84	8.01	9.29	3,178	7.52	1.78	6.22	7.44	8.59	0.66***
Ind-adj ROA	397	0.01	0.10	-0.02	0.00	0.04	3,178	-0.03	0.15	-0.05	0.00	0.03	0.04***
Abnormal Return	397	-0.02	0.40	-0.25	-0.04	0.12	3,178	0.00	0.56	-0.30	-0.08	0.17	0.02
Book-to-Market	397	0.71	0.29	0.51	0.73	0.92	3,178	0.65	0.31	0.40	0.65	0.92	0.06***
Leverage	397	0.60	0.24	0.45	0.59	0.75	3,178	0.61	0.28	0.41	0.61	0.81	-0.01
Tenure	397	1.94	0.80	1.47	2.07	2.52	3,178	1.88	0.93	1.22	1.98	2.59	0.06
Blockholder Own	397	0.28	0.15	0.19	0.28	0.38	3,178	0.28	0.16	0.17	0.27	0.38	-0.001
Non-Blockholder Own	397	0.57	0.12	0.48	0.57	0.65	3,178	0.48	0.17	0.36	0.49	0.60	0.09***
Top5 Own	397	0.34	0.10	0.28	0.34	0.39	3,178	0.33	0.12	0.26	0.33	0.40	0.01
Non-Top5 Own	397	0.50	0.12	0.42	0.52	0.58	3,178	0.41	0.17	0.29	0.44	0.55	0.09***
ISS RoboVoters	357	0.02	0.02	0.01	0.01	0.02	2,879	0.02	0.02	0.00	0.01	0.02	0.00***
GL RoboVoters	357	0.00	0.01	0.00	0.00	0.00	2,879	0.00	0.01	0.00	0.00	0.00	0.00***
OtherInstitutionalOwn	357	0.81	0.15	0.73	0.85	0.93	2,879	0.72	0.23	0.59	0.79	0.91	0.09***
PerfRank	397	5.34	2.99	3.00	5.00	8.00	3,178	5.65	3.23	3.00	5.00	8.00	-0.31
CompRank	397	8.25	2.69	7.00	9.00	10.00	3,178	7.59	3.03	5.00	8.00	10.00	0.66***
RankDiff	397	2.91	4.10	0.00	3.00	6.00	3,178	1.95	4.59	-1.00	2.00	6.00	0.96***
High_PFP_Overall	396	0.53	0.50	0.00	1.00	1.00	3,141	0.39	0.49	0.00	0.00	1.00	0.14***
High_PFP_RDA	396	0.43	0.50	0.00	0.00	1.00	3,068	0.28	0.45	0.00	0.00	1.00	0.15***
High_PFP_MOM	396	0.09	0.28	0.00	0.00	0.00	3,141	0.10	0.30	0.00	0.00	0.00	-0.01
High_PFP_PTA	377	0.06	0.23	0.00	0.00	0.00	2,628	0.06	0.24	0.00	0.00	0.00	0.00

Table 3: Multivariate Analysis of the Determinants of Filing a DEFA14A

Table 3 reports the results of the multivariate analyses of the determinants of filing a DEFA14A (Equation 1). Panel A presents OLS regressions examining firm characteristics associated with filing a supplemental proxy. Columns (1)–(2) exclude ISS pay-for-performance (PFP) concerns, while Columns (3)–(6) include them. Column (3) adds the *High_PFP_Overall* indicator, and Columns (4)–(6) incorporate the separate three concerns: *High_PFP_RDA*, *High_PFP_MOM*, and *High_PFP_PTA*. Columns (5)–(6) additionally include firms' CD&A characteristics, (*CDA_words* and the *FOG index*), and Column (6) also controls for *Voted Against* and proxy advisor recommendations from prior-year. Panel B extends the baseline model by decomposing institutional ownership into different categories. Columns (1) replaces *Inst Own* with *Blockholder Own* and *Non-Blockholder Own*, and Columns (2) replaces *Inst Own* with *Top5 Own* and *Non-Top5 Own*, while Column (3) further separates institutional investors into *ISS RoboVoters*, *GL RoboVoters*, and *Other Institutional Own*. Panel C reports determinants of hiring a proxy solicitor. The dependent variable equals 1 if a firm hires a proxy solicitor in a given year. Columns (1)–(5) sequentially introduce ISS PFP concern indicators and CD&A readability measures, same as the specifications in Panel A. To control for firm's pay and performance levels, we include either *Abnormal Return* and *Total Compensation* or *RankDiff* as control variables. Standard errors are clustered by firm. See Appendix **A** for detailed variable definitions. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 level, respectively, based on a two-tailed test.

Panel A

Variables	(1) ***SuppFiling =1***	(2) ***SuppFiling =1***	(3) ***SuppFiling =1***	(4) ***SuppFiling =1***	(5) ***SuppFiling =1***	(6) ***SuppFiling =1***
ISS Only	0.1866***	0.1858***	0.1848***	0.2035***	0.2133***	0.1997***
	(13.24)	(13.20)	(12.65)	(12.43)	(12.32)	-9.2094
Both	0.1180***	0.1172***	0.1131***	0.1214***	0.1310***	0.1279***
	(9.64)	(9.73)	(8.66)	(8.30)	(8.20)	(6.57)
CDA_words					0.0279**	0.0221
					(2.13)	(1.36)
FOG index					0.0034	0.0040
					(0.88)	(0.93)
Busy	0.0271**	0.0267*	0.0259*	0.0270*	0.0315*	0.0208
	(1.98)	(1.95)	(1.87)	(1.71)	(1.94)	(1.17)
S&P 500	0.0328	0.0340	0.0307	0.0220	0.0324	0.0047
	(1.46)	(1.51)	(1.36)	(0.91)	(1.29)	(0.18)
Total Compensation	0.0096		0.0078	0.0108	0.0067	0.0102
	(1.24)		(0.99)	(1.16)	(0.65)	(0.79)
Δ *Total Comp*	-0.0044**		-0.0046**	-0.0018	-0.0006	0.0015
	(-2.07)		(-2.09)	(-0.58)	(-0.17)	(0.35)
Pct Variable Pay	0.0448	0.0502**	0.0460	0.0571*	0.0448	0.0100
	(1.58)	(2.07)	(1.60)	(1.72)	(1.25)	(0.22)
Institutional Own	0.1664***	0.1703***	0.1677***	0.1737***	0.1656***	0.1245***
	(6.48)	(6.64)	(6.46)	(5.82)	(5.04)	(3.23)
Market Value	0.0166***	0.0199***	0.0176***	0.0162**	0.0160**	0.0169**
	(2.95)	(3.81)	(3.05)	(2.44)	(2.22)	(2.11)
Ind-adjusted ROA	0.0391	0.0401	0.0439	0.0494	0.0604	0.0651
	(1.33)	(1.38)	(1.46)	(1.48)	(1.60)	(1.31)
Abnormal Return	0.0040		0.0053	0.0035	0.0036	-0.0002
	(0.48)		(0.63)	(0.36)	(0.32)	(-0.02)
Book-to-Market	0.0974***	0.0997***	0.1008***	0.0975***	0.1001***	0.0859***
	(4.56)	(4.66)	(4.63)	(3.97)	(3.78)	(2.95)
Leverage	-0.0222	-0.0181	-0.0247	-0.0274	-0.0320	-0.0164
	(-1.12)	(-0.93)	(-1.22)	(-1.15)	(-1.27)	(-0.61)
Tenure	0.0058	0.0069	0.0061	0.0056	0.0069	0.0095
	(1.03)	(1.22)	(1.07)	(0.86)	(0.99)	(1.24)
RankDiff		0.0009				
		(0.76)				
High_PFP_Overall			0.0133			
			(1.07)			
High_PFP_RDA				0.0385**	0.0418**	0.0359*
				(2.52)	(2.53)	(1.87)
High_PFP_MOM				-0.0434*	-0.0390	-0.0433
				(-1.89)	(-1.52)	(-1.35)
High_PFP_PTA				-0.0109	-0.0118	-0.0425
				(-0.44)	(-0.41)	(-1.36)
$Voted\ Against_{t-1}$						0.0944
						(1.59)
$Both_{t-1}$						-0.0708***
						(-2.80)
$ISS\ Only_{t-1}$						-0.0843***
						(-3.29)
$GL\ Only_{t-1}$						-0.0054
						(-0.30)
Year FE	YES	YES	YES	YES	YES	YES
N	3,575	3,575	3,537	3,003	2,644	1,914
Adj R^2($PseudoR^2$)	0.1159	0.1150	0.1159	0.1215	0.1280	0.1397

Table 3 (continued)

Panel B.

Variables	(1) ***SuppFiling =1***	(2) ***SuppFiling =1***	(3) ***SuppFiling =1***
ISS Only	0.1865***	0.1862***	0.1790***
	(13.28)	(13.24)	(12.27)
Both	0.1176***	0.1174***	0.1172***
	(9.67)	(9.65)	(9.06)
Busy	0.0276**	0.0277**	0.0315**
	(2.02)	(2.02)	(2.00)
S&P 500	0.0305	0.0306	0.0469**
	(1.35)	(1.36)	(1.97)
Total Compensation	0.0095	0.0094	0.0078
	(1.24)	(1.23)	(0.97)
Δ *Total Comp*	-0.0046**	-0.0043**	-0.0041*
	(-2.13)	(-2.03)	(-1.80)
Pct Variable Pay	0.0424	0.0409	0.0426
	(1.50)	(1.44)	(1.43)
Market Value	0.0125**	0.0126**	0.0144**
	(2.18)	(2.18)	(2.39)
Ind-adjusted ROA	0.0313	0.0308	0.0326
	(1.06)	(1.05)	(1.08)
Abnormal Return	0.0006	0.0023	0.0066
	(0.08)	(0.27)	(0.75)
Book-to-Market	0.0963***	0.0971***	0.0964***
	(4.53)	(4.58)	(4.28)
Leverage	-0.0205	-0.0190	-0.0186
	(-1.04)	(-0.97)	(-0.93)
Tenure	0.0055	0.0053	0.0058
	(0.98)	(0.95)	(0.97)
Blockholder Own	0.0746**		
	(2.21)		
Non-Blockholder Own	0.2603***		
	(6.41)		
Top5 Own		0.0408	
		(0.92)	
Non-Top5 Own		0.2565***	
		(6.17)	
ISS RoboVoters			0.5765
			(1.36)
GL RoboVoters			2.0311
			(1.59)
Other Institutional Own			0.1557***
			(5.35)
Year FE	YES	YES	YES
N	3575	3575	3236
Adj R^2($PseudoR^2$)	0.1192	0.1182	0.1188

Table 3 (continued)

Panel C.

Variables	(1) *ProxySolicitor =1*	(2) *ProxySolicitor =1*	(3) *ProxySolicitor =1*	(4) *ProxySolicitor =1*	(5) *ProxySolicitor =1*
ISS Only	0.0157**	0.0160**	0.0232***	0.0230**	0.0291***
	(2.03)	(2.06)	(2.78)	(2.47)	(2.91)
Both	0.0203***	0.0195**	0.0302***	0.0308***	0.0361***
	(2.59)	(2.54)	(3.49)	(3.27)	(3.62)
CDA_words					0.0201***
					(2.74)
FOG index					0.0020
					(0.75)
Busy	-0.0117	-0.0113	-0.0100	-0.0129	-0.0011
	(-1.10)	(-1.07)	(-0.94)	(-1.06)	(-0.09)
S&P 500	0.0185	0.0179	0.0170	0.0135	0.0129
	(1.22)	(1.17)	(1.12)	(0.82)	(0.72)
Total Compensation	-0.0072		-0.0038	-0.0040	-0.0023
	(-1.38)		(-0.73)	(-0.63)	(-0.37)
Δ *Total Comp*	0.0014		0.0020	0.0040*	0.0035*
	(0.95)		(1.36)	(1.80)	(1.89)
Pct Variable Pay	0.0288	0.0204	0.0253	0.0235	0.0080
	(1.48)	(1.30)	(1.28)	(1.06)	(0.32)
Institutional Own	0.0000	-0.0023	0.0041	0.0044	0.0007
	(0.00)	(-0.14)	(0.26)	(0.24)	(0.03)
Market Value	0.0020	-0.0003	0.0011	0.0022	0.0010
	(0.57)	(-0.08)	(0.30)	(0.50)	(0.21)
Ind-adjusted ROA	-0.0181	-0.0178	-0.0043	-0.0063	0.0012
	(-0.76)	(-0.77)	(-0.20)	(-0.25)	(0.04)
Abnormal Return	0.0031		-0.0023	-0.0025	0.0032
	(0.44)		(-0.37)	(-0.33)	(0.39)
Book-to-Market	0.0162	0.0205	0.0197	0.0184	
	(1.33)	(1.19)	(1.49)	(1.28)	(1.09)
Leverage	0.0138	0.0121	0.0161	0.0204	0.0156
	(1.20)	(1.11)	(1.49)	(1.64)	(1.15)
Tenure	-0.0040	-0.0045	-0.0046	-0.0045	-0.0019
	(-1.23)	(-1.37)	(-1.39)	(-1.19)	(-0.48)
RankDiff		-0.0006			
		(-0.74)			
High_PFP_Overall			-0.0210***		
			(-2.70)		
High_PFP_RDA				-0.0042	-0.0085
				(-0.47)	(-0.90)
High_PFP_MOM				-0.0373***	-0.0335***
				(-3.56)	(-2.95)
High_PFP_PTA				-0.0041	-0.0099
				(-0.25)	(-0.58)
Year FE	YES	YES	YES	YES	YES
N	3,575	3,575	3,537	3,003	2,644
Adj R^2($PseudoR^2$)	0.0188	0.0184	0.0224	0.0237	0.0305

Table 4: Descriptive Statistics for Relevant Supplementary Filings

Table 4 provides descriptive statistics for the topics of discussion observed in relevant DEFA14A filings for the treatment sample (*SuppFiling = 1*). Indented variables present the percentage of filings that include each subtopic within the broader categories of *Peer*, *Compensation*, and *Employment Agreement*. See Appendix **B** for detailed definition for each topic variable.

	SuppFiling=1 (n = 397)				
Variables	**Mean**	**Std. dev.**	**p25**	**Median**	**0.75**
Total number of words	6799.22	11361.2	1561	2371	4581
Days(Meeting Date-Filing Date)	12.19	6.97	8.00	10.00	14.00
Number of Distinct Issues	2.01	0.89	1.00	2.00	3.00
Presentation	0.22	0.42	0.00	0.00	0.00
ISS_mention	0.74	0.44	0.00	1.00	1.00
GL_mention	0.50	0.50	0.00	1.00	1.00
Other Against	0.17	0.37	0.00	0.00	0.00
Prior Year Vote	0.22	0.42	0.00	0.00	0.00
Peer	0.27	0.45	0.00	0.00	1.00
Size	0.09	0.28	0.00	0.00	0.00
Industry/Performance	0.15	0.35	0.00	0.00	0.00
Chosen Peers	0.15	0.36	0.00	0.00	0.00
Compensation	0.85	0.36	1.00	1.00	1.00
Realized/Realizable Pay	0.20	0.40	0.00	0.00	0.00
Pay for Performance	0.59	0.49	0.00	1.00	1.00
Metrics/Difficulty	0.37	0.48	0.00	0.00	1.00
Valuation	0.07	0.26	0.00	0.00	0.00
Board Discretion	0.12	0.32	0.00	0.00	0.00
Disclosure	0.09	0.29	0.00	0.00	0.00
Performance	0.24	0.43	0.00	0.00	0.00
Employment Agreement	0.33	0.47	0.00	0.00	1.00
Change in Control	0.06	0.24	0.00	0.00	0.00
Attraction/Retention	0.16	0.37	0.00	0.00	0.00
Termination/Retirement	0.06	0.23	0.00	0.00	0.00
Complex Situation	0.04	0.20	0.00	0.00	0.00
Future Changes	0.18	0.38	0.00	0.00	0.00

Table 5: Market Reaction around DEFA14A Filing Dates

Table 5 contains the results of the analyses of raw and abnormal returns of the two-day window [0,1] around the relevant DEFA14A filing dates. Each row shows the results for Pooled, Both proxy advisors, Only ISS, and Only Glass Lewis Against samples. The *Cumulative Abnormal Returns* are value-weighted returns calculated over the [0,1] trading windows around the filing date. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 level, respectively, based on a two-tailed test.

Panel A. Univariate Analysis

	Raw Return				***CAR (Cumulative Abnormal return)***			
	Mean	**Std Dev**	**Min**	**Max**	**Mean**	**Std Dev**	**Min**	**Max**
Pooled Sample	0.00167 0.95 (0.3433)	0.0349	-0.121	0.1876	0.00165 1.07 (0.287)	0.03	-0.1215	0.1622
Both Against	0.00688 2.53 (0.013)**	0.0326	-0.0817	0.1876	0.00611 2.67 (0.009)***	0.03	-0.056	0.1622
Only ISS Against	-0.0008 -0.35 (0.72)	0.0353	-0.121	0.1281	-0.0004 -0.17 (0.876)	0.033	-0.1215	0.1395
Only GL Against	-0.0047 -0.64 (0.53)	0.04	-0.085	0.085	-0.0048 -0.89 (0.382)	0.03	-0.0781	0.044

Table 6: Analysis of Recommendation Change

Table 6, provides descriptive statistics (mean values for the percentage of filings) for the topics of discussion observed in relevant DEFA14A filings, separately for whether either PA changed their initial against recommendation. Indented variables present the percentage of filings that include each subtopic within the broader categories of *Peer*, *Compensation*, and *Employment Agreement*. Table 6, Panel B presents the results of OLS regressions examining firm and filing characteristics associated with the likelihood of proxy advisors (ISS or Glass Lewis) changing their initial *"Against"* recommendation to a final *"For"* recommendation. Column (1) includes baseline model estimates, while Column (2) adds additional variables related to the filing content. Standard errors are clustered by firm. See Appendix **A** for detailed variable definitions. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 level, respectively, based on a two-tailed test.

Panel A. Summary Statistics by Recommendation Change

	Rec_Change=1	**Rec_Change=0**
	Mean	
N	32	365
Pct Voted For	92%	61%
Days(Meeting Date-Filing Date)	11.3	12.3
Number of Distinct Issues	1.59	2.04
ISS_mention	87.5%	72.3%
GL_mention	43.8%	50.7%
Other Against	18.8%	16.4%
Prior Year Vote	15.6%	23%
Peer	12.5%	29.3%
Size	0%	9.3%
Industry/Performance	3.1%	15.6%
Chosen Peers	0%	16.4%
Compensation	78.1%	86.8%
Realized/Realizable Pay	6.3%	21.1%
Pay for Performance	43.8%	61.9%
Metrics/Difficulty	46.9%	36.7%
Valuation	6.3%	7.1%
Board Discretion	31.3%	11.2%
Disclosure	28.1%	8.2%
Performance	9.4%	25.2%
Employment Agreement	62.5%	31.5%
Change in Control	15.6%	5.8%
Attraction/Retention	6.3%	17.0%
Termination/Retirement	34.4%	3.8%
Complex Situation	0%	4.7%
Future Changes	6.3%	18.9%

Table 6 (continued)

Panel B. Multivariate Analysis of the Determinants of Recommendation Change

Variables	(1) ***Rec_Change = 1***	(2) ***Rec_Change = 1***
ISS Only	0.0281***	0.0138***
	(5.63)	(4.80)
Both	0.0030*	-0.0058***
	(1.94)	(-2.69)
Busy	0.0044	0.0022
	(1.32)	(0.75)
S&P 500	-0.0041	-0.0058
	(-0.79)	(-1.12)
Total Compensation	0.0021	0.0016
	(1.12)	(0.90)
Δ *Total Comp*	-0.0014***	-0.0011***
	(-3.42)	(-2.70)
Pct Variable Pay	-0.0047	-0.0058
	(-0.55)	(-0.70)
Institutional Own	0.0167**	0.0021
	(2.10)	(0.28)
Market Value	-0.0009	-0.0010
	(-0.82)	(-0.90)
Ind-adjusted ROA	0.0282***	0.0191**
	(2.65)	(2.11)
Abnormal Return	-0.0034	-0.0031
	(-1.13)	(-1.14)
Book-to-Market	-0.0002	-0.0031
	(-0.03)	(-0.56)
Leverage	-0.0011	0.0012
	(-0.23)	(0.27)
Tenure	-0.0041**	-0.0043***
	(-2.49)	(-2.72)
Presentation		-0.0234
		(-0.98)
ISS_mention		0.1282***
		(3.47)
GL_mention		-0.0596*
		(-1.68)
Other Against		0.0018
		(0.05)
Prior Year Vote		-0.0115
		(-0.39)
Peer		-0.0528**
		(-2.04)
Compensation		0.0238
		(0.70)
Performance		-0.0291
		(-1.31)
Employment Agreement		0.0568*
		(1.91)
Complex Situation		-0.0885***
		(-3.84)
Future Changes		-0.0303
		(-1.24)
N	3,575	3,575
R-squared	0.0276	0.1323

Table 7: Voting Outcome and DEFA14A Filings

Table 7 reports OLS estimates of Equation (2), where the dependent variable is (*Pct Voted For*). Columns (1)–(3) use the full sample; Columns (4)–(6) replicate (1)–(3) in the entropy-balanced sample. Columns (1) reports the result of regressions without ISS pay-for-performance (PFP) concerns. Columns (2) reports the result of regression with ISS pay-for-performance (PFP) concerns. Column (3) reports the result of regressions with *Rec_Change*. To control for firm's pay and performance levels, we include either *Abnormal Return* and *Total Compensation* as control variables. Year-fixed effects are included in all regressions, and standard errors are clustered by firm. See Appendix **A** for detailed variable definitions. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 level, respectively, based on a two-tailed test.

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	***PctVotedFor***	***PctVotedFor***	***PctVotedFor***	***PctVotedFor***	***PctVotedFor***	***PctVotedFor***
SuppFiling	-0.0109	-0.0071	-0.0115	-0.0201	-0.0140	-0.0191
	(-0.70)	(-0.45)	(-0.74)	(-1.24)	(-0.83)	(-1.23)
ProxySolicitor	-0.0326***	-0.0234*	-0.0328***	0.0091	0.0011	0.0069
	(-2.64)	(-1.85)	(-2.81)	(0.54)	(0.07)	(0.48)
ISS Only	-0.1326***	-0.1278***	-0.1325***	-0.1316***	-0.1256***	-0.1297***
	(-23.82)	(-21.19)	(-23.81)	(-20.86)	(-18.22)	(-20.95)
Both	-0.2675***	-0.2690***	-0.2676***	-0.2843***	-0.2791***	-0.2845***
	(-38.29)	(-35.71)	(-38.27)	(-37.54)	(-33.18)	(-38.16)
*SuppFiling*ISSOnly*	0.0138	0.0183	-0.0211	0.0186	0.0215	-0.0191
	(0.75)	(1.00)	(-1.19)	(0.97)	(1.08)	(-1.05)
*SuppFiling*Both*	-0.0454**	-0.0373*	-0.0477**	-0.0215	-0.0174	-0.0267
	(-2.17)	(-1.76)	(-2.31)	(-1.03)	(-0.80)	(-1.32)
Rec_Change			0.2494***			0.2534***
			(15.79)			(19.03)
Busy	0.0193**	0.0210**	0.0188**	0.0242**	0.0237**	0.0204**
	(2.44)	(2.49)	(2.39)	(2.50)	(2.40)	(2.31)
S&P 500	-0.0047	0.0005	-0.0029	0.0049	0.0042	0.0082
	(-0.50)	(0.05)	(-0.31)	(0.50)	(0.44)	(0.93)
Total Compensation	-0.0165***	-0.0095	-0.0167***	-0.0279***	-0.0261***	-0.0285***
	(-2.75)	(-1.47)	(-2.79)	(-3.77)	(-3.67)	(-4.35)
Δ *Total Comp*	0.0016	0.0008	0.0019	-0.0001	-0.0002	0.0012
	(1.21)	(0.51)	(1.43)	(-0.08)	(-0.10)	(0.72)
Pct Variable Pay	-0.0425**	-0.0525**	-0.0408**	-0.0441*	-0.0694***	-0.0285
	(-2.05)	(-2.35)	(-1.96)	(-1.70)	(-2.64)	(-1.23)
Institutional Own	-0.1495***	-0.1440***	-0.1503***	-0.0661**	-0.0458*	-0.0641***
	(-9.86)	(-8.25)	(-10.00)	(-2.39)	(-1.88)	(-2.70)
Market Value	0.0041	0.0012	0.0047	0.0058	0.0054	0.0090**
	(1.34)	(0.37)	(1.54)	(1.27)	(1.36)	(2.17)
Ind-adjusted ROA	0.0135	0.0406**	0.0077	0.0031	0.0501	-0.0383
	(0.70)	(2.01)	(0.40)	(0.08)	(1.40)	(-1.05)
Abnormal Return	0.0153***	0.0136***	0.0160***	0.0134	0.0063	0.0197*
	(3.46)	(2.72)	(3.66)	(1.06)	(0.49)	(1.69)
Book-to-Market	-0.0498***	-0.0476***	-0.0481***	-0.0589***	-0.0657***	-0.0505***
	(-4.33)	(-4.01)	(-4.20)	(-4.08)	(-4.51)	(-3.83)
Leverage	0.0147	0.0139	0.0142	0.0268*	0.0304**	0.0231*
	(1.38)	(1.22)	(1.34)	(1.87)	(2.12)	(1.77)
Tenure	-0.0095***	-0.0100***	-0.0084***	-0.0219***	-0.0218***	-0.0154***
	(-3.11)	(-3.14)	(-2.78)	(-4.92)	(-4.89)	(-3.82)
High_PFP_RDA		-0.0224***			-0.0274***	
		(-3.81)			(-3.39)	
High_PFP_MOM		-0.0135			-0.0177	
		(-1.10)			(-1.04)	
High_PFP_PTA		0.0129			0.0225	
		(1.05)			(1.15)	
F-Tests:						
*SuppFiling + SuppFiling*ISSOnly=0*	0.0023	0.0112	-0.0326***	-0.0015	0.0075	-0.0382
*SuppFiling + SuppFiling*Both=0*	-0.0563***	-0.0444***	-0.0592***	-0.0416**	-0.0314*	-0.0458*
Year FE	YES	YES	YES	YES		
N	3,575	3,003	3,575	3,575	3,003	3,575
Adj R^2($PseudoR^2$)	0.4788	0.5100	0.4941	0.5199	0.5437	0.5855

Table 8: DEFA14A Filings and Future Outcomes

Table 8 presents regression results examining whether DEFA14A filings are associated with changes in compensation disclosure, compensation levels, and proxy advisor (PA) recommendations in the following year. The dependent variables include the number of words in CD&A (CDA_words_{t+1}) in column (1), total compensation ($Compensation_{t+1}$) in column (2), and indicators for receiving an *Against* recommendation from any PA, ISS only, GL only, or both in year *t+1*, shown in columns (3) through (6), respectively. Control variables include filing of relevant DEFA14A in year *t*, ($SuppFiling_t$), firm characteristics (*t+1*), pay-for-performance (PFP) concerns (*t+1*) and the value of each dependent variable in year *t*. Year-fixed effects are included in all regressions, and standard errors are clustered by firm. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 level, respectively, based on a two-tailed test.

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	***CDA_words***$_{t+1}$	***Total Compensation***$_{t+1}$	***Any Against***$_{t+1}$	***ISS Only***$_{t+1}$	***GL Only***$_{t+1}$	***Both (t+1)***
$SuppFiling_t$	-0.1671	0.0376	-0.1386***	0.0089	-0.0218	-0.1257***
	(-1.06)	(1.11)	(-4.40)	(0.38)	(-1.03)	(-6.94)
$ISS\ Only_t$			-0.0944***	0.1300***	-0.2449***	0.0205
			(-3.66)	(7.42)	(-11.91)	(1.16)
$Both_t$			0.0876***	0.0475***	-0.1252***	0.1654***
			(3.36)	(3.29)	(-5.59)	(7.07)
CDA_words_t	0.5896***					
	(21.73)					
$Busy_{t+1}$	0.1686	-0.0969***	-0.0210	-0.0041	0.0134	-0.0304
	(1.34)	(-2.86)	(-0.79)	(-0.25)	(0.61)	(-1.45)
$S\&P\ 500_{t+1}$	-0.1002	0.1374**	0.0157	0.0039	0.0089	0.0029
	(-0.62)	(2.24)	(0.45)	(0.19)	(0.32)	(0.13)
$Total\ Compensation_t$		0.4248***				
		(6.89)				
$Total\ Compensation_{t+1}$	-0.0472		0.0291**	-0.0006	0.0009	0.0289***
	(-1.30)		(2.15)	(-0.08)	(0.08)	(2.63)
$\Delta\ Total\ Comp_{t+1}$	0.0569		0.0285***	0.0022	0.0025	0.0238***
	(1.56)		(3.48)	(0.36)	(0.31)	(2.67)
$Pct\ Variable\ Pay_{t+1}$	-0.2356	2.7278***	0.1334**	-0.0104	0.0959*	0.0480
	(-0.94)	(8.92)	(2.12)	(-0.20)	(1.91)	(0.95)
$Institutional\ Own_{t+1}$	1.6644***	-0.2042*	-0.2459***	-0.0673	-0.0045	-0.1741***
	(6.07)	(-1.68)	(-4.23)	(-1.61)	(-0.09)	(-3.59)
$Market\ Value_{t+1}$	0.1674***	0.0945**	-0.0216**	-0.0023	-0.0060	-0.0132*
	(3.80)	(2.38)	(-2.29)	(-0.40)	(-0.82)	(-1.81)
$Ind\text{-}adjusted\ ROA_{t+1}$	0.5444***	0.2151***	-0.0699	0.0030	-0.0706	-0.0022
	(2.91)	(2.63)	(-1.07)	(0.07)	(-1.15)	(-0.04)
$Abnormal\ Return_{t+1}$	-0.0524	0.0518*	-0.0036	0.0074	-0.0170	0.0060
	(-0.54)	(1.65)	(-0.18)	(0.62)	(-1.14)	(0.42)
$Book\text{-}to\text{-}Market_{t+1}$	-0.0988	0.2729***	0.0103	0.0440*	0.0109	-0.0446
	(-0.57)	(3.58)	(0.27)	(1.84)	(0.34)	(-1.39)
$Leverage_{t+1}$	0.1195	0.3053***	0.0475	0.0246	0.0328	-0.0098
	(1.00)	(3.47)	(1.25)	(1.17)	(0.81)	(-0.45)
$Tenure_{t+1}$	-0.0395	0.1078***	0.0305***	0.0026	-0.0080	0.0359***
	(-0.83)	(4.59)	(2.78)	(0.37)	(-0.84)	(4.06)
$High_PFP_RDA_{t+1}$			0.1747***	0.0907***	-0.0614***	0.1454***
			(7.55)	(4.97)	(-3.16)	(7.26)
$High_PFP_MOM_{t+1}$			0.2148***	0.0339	-0.1374***	0.3183***
			(5.31)	(0.93)	(-4.04)	(6.40)
$High_PFP_PTA_{t+1}$			0.0029	0.0735*	-0.0825**	0.0119
			(0.06)	(1.67)	(-2.48)	(0.26)
Year FE	YES	YES	YES	YES	YES	YES
N	2,734	2,803	2,344	2,344	2,344	2,344
Adj R^2($PseudoR^2$)	0.3979	0.5997	0.1488	0.0690	0.1071	0.1962

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