

Are ISS Recommendations Informative? Evidence from Assessments of Compensation Practices

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Abstract

Using detailed information on Institutional Shareholder Services (ISS) assessments of firms' compensation practices, we examine whether these assessments identify poor compensation practices as measured by subsequent performance. While prior research provides consistent evidence of an association between shareholder voting outcomes and ISS recommendations, the evidence is mixed over whether their recommendations convey information about poor compensation policies. We find that ISS "Against" recommendations and negative assessments are associated with worse future accounting performance, consistent with ISS being able to detect low quality compensation packages. However, workload compression has an effect, as we find that the relation between assessments and future performance is stronger during the off season (i.e. for firms with non-December fiscal year end).

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1. Introduction

Proxy advisors issue recommendations to institutional investors on how to vote on the nomination of board members and on corporate governance issues, such as executive compensation contracting. Research shows that ISS recommendations have a significant influence on Say-on-Pay voting outcomes (e.g., Ertimur, Ferri and Oesch (2013), Malenko and Shen (2016)) and, consequently, on firm's governance choices (see Copland, Larcker and Tayan (2018) for a review). These advisors have come under greater scrutiny recently, the subject of potential legislative and Securities and Exchange Commission (SEC) reforms, as a result of their increasingly prominent role in influencing corporate governance practices.¹ The growth of passive investing is associated with fund managers' greater reliance on proxy advisors to inform them on how to vote on shareholder proposals (Gramm and Solon, 2018).² Thus proxy advisors, in particular Institutional Shareholder Services (ISS), are regarded as powerful. As a consequence of their influence, management and shareholder activists lobby ISS to endorse their respective positions. As mentioned by Delaware's Vice-Chancellor Leo Strine regarding the influence of ISS:

[P]owerful CEOs come on bended knee to Rockville, Maryland, where ISS resides, to persuade the managers of ISS of the merits of their views about issues like proposed mergers, executive compensation, and poison pills. They do so because the CEOs recognize that some institutional investors will simply follow ISS's advice rather than do any thinking of their own.

ISS could exploit its influential position by issuing negative recommendations so that companies feel compelled to buy its consulting services (Knutson (2018), Hayne and Vance

¹ In 2017, the House of Representatives passed The Corporate Governance Reform and Transparency Act (H.R. 4015). If enacted, the bill would require, among other things, proxy advisors to disclose any conflicts of interest and make their methodologies for formulating recommendations publicly available. In November 2019, the SEC issued proposed rule 34-87457, which would require, among other things, proxy advisors to disclose conflicts of interest, allow companies to review and comment on recommendations, and provide links to a company's statement on the recommended if requested by the company.

² In 2003, the SEC required that institutional investors disclose their proxy voting policies or whether they rely on the voting policies developed by an independent party, such as proxy advisors (<https://www.sec.gov/rules/final/33-8188.htm>).

(2019)). Compounding the potential conflicts of interest are concerns that proxy advisors have limited accountability. Proxy advisors do not own equity in the companies in which they provide voting advice, nor do they have any fiduciary duty to the shareholders of those companies. Moreover, ISS is a dominant firm in the advisory industry and thus the lack of competitive pressure and market discipline can impact the quality of their services.³ Researchers, including Larcker, McCall, and Ormazabal (2015) argue that proxy advisors' compensation assessments and voting recommendations are not useful as they induce firms to adopt compensation contracts that reduce shareholder value. While prior work has documented strong associations between proxy advisors' recommendations and voting outcomes (see, for example, Ertimur, Ferri and Oesch (2013), Malenko and Shen (2016)) there is limited evidence about whether their recommendations actually identify low quality compensation practices. We aim to fill this void in the literature.

A challenge in our research design is defining low quality compensation practices. Compensation contracts are multifaceted (level of pay, form of pay, performance measures used to determine pay, etc.) and often idiosyncratic to particular strategic choices of organizations or to CEO abilities, making it difficult for the researcher to define an objective benchmark for compensation quality.⁴ Additionally, ISS recommendations involve evaluating aspects of compensation practices (e.g. communication practices of compensation committees, or policies related to CEO succession and change in control) that are not directly reflected in the level of pay or the components of the compensation contract. For these reasons, we take a different approach

³ ISS has a large market share and is considered the most influential proxy advisor (Choi, Fisch and Kahan, 2009; Alexander, Chen, Seppi and Spatt, 2010)

⁴ For example, several models estimate "excess" compensation (pay higher than the estimated amount obtained by regression analyses based on economic and market characteristics of large samples of organizations). In our context, using this measure would be inappropriate for at least two reasons. First, pay level is just one component of compensation quality taken into consideration by ISS. Second, what appears to be "excess" compensation might reflect appropriate compensation for more talented executives or outstanding levels of goal achievement that are not captured by regression models due to measurement error (omitted variables).

to identify low quality practices. Assuming that firm performance is influenced by the quality of its compensation practices, we expect that firms with low quality compensation practices exhibit lower performance. Furthermore, as we describe in greater detail later, we choose accounting performance as our measure of performance to avoid confounding problems that stock returns raise when used to proxy for future firm performance in this setting. For example, investors might react to the issuance of an unfavorable recommendation rather than to the underlying compensation quality. Additionally, as total shareholders returns represent one of the most prominent performance metrics included in executive compensation contracts, as well as one of the metrics that ISS recommends, it is possible that ISS recommendations might be endogenously related to firms' market performance.

We obtain granular data on ISS ratings of individual executive pay practices (i.e. "Levels of Concern"), comprehensive relative evaluations of firm compensation quality (i.e., overall compensation "Quality Scores"), and the ultimate Say-on-Pay (SOP) recommendations for a sample of 13,273 firm-year observations from 2011 to 2016. Using this data, we examine whether negative assessments of compensation are associated with lower future accounting performance. If accounting performance is influenced by the quality of the compensation practices, a negative association between ISS negative assessments and accounting performance suggests that ISS unfavorable evaluations identify low quality compensation practices.

We first document, consistent with prior research, that ISS overall voting recommendations are associated with SOP voting outcomes. In examining the more granular assessments, we find that shareholders incorporate only a subset of the information evaluated by ISS. Although we find that compensation Quality Scores, capturing suboptimal or, in ISS words, "riskier" pay practices, are associated with voting outcomes, only concerns about pay-for-performance and the

compensation committee communications practices are associated with shareholder SOP voting outcomes.⁵

Addressing our main research question—i.e. whether these assessments indeed identify compensation packages that are suboptimal—we find that an overall “Against” SOP recommendation is associated with worse future accounting performance. With respect to ISS’s more granular assessments, we find that concerns about pay-for-performance, compensation committee communication, and relative evaluations summarized through the compensation Quality Score appear to be effective at detecting suboptimal compensation practices.

Building on research that documents how workload compression can affect the evaluation of financial statements (see, for example, Gunny and Hermis, 2018), as well as recent qualitative work highlighting operational constraints faced by proxy advisory firms during the busy season (Hayne and Vance, 2019), we examine whether the effectiveness of ISS assessments is influenced by their availability of resources. We provide empirical evidence showing that ISS appears to identify poor compensation practices mainly for the subsample of observations that have a non-December fiscal year end (FYE). This result suggests that during the proxy season when ISS is busier (evaluating firms with December FYE, which represent the majority of ISS’s coverage) and more constrained regarding resources needed to analyze firms’ compensation packages, their recommendations are of lower quality.

Although the literature documents a strong association between ISS recommendations and SOP voting outcomes, there is not a one-for-one correspondence between the recommendation and the passage of the SOP ballot item.⁶ We exploit this discordance to evaluate whether shareholders

⁵ ISS refers to “riskier” pay practices when qualifying pay practices that are suboptimal or of low quality according to their methodology. Throughout the paper we follow their nomenclature.

⁶ Many investors use proxy advisors’ recommendation as one of the inputs into their own evaluation of the firm’s compensation practices (Hayne and Vance, 2019).

perform better evaluations of pay practices relative to ISS. We find that ISS unfavorable assessments are consistently associated with poor performance, independently from the outcome of the Say-on-Pay vote. That is, even when shareholders pass SOP, a negative recommendation by ISS is associated with lower levels of performance that are indistinguishable from cases where the SOP vote did not pass. As before, this result is strongest for non-December fiscal year end firms.

We subject our results to a variety of robustness tests, including analyses of the association between ISS recommendations and future performance between firms matched on economic and governance characteristics, subsample analyses to identify the influence of particular industries or extreme poor performance, and placebo tests assigning ISS recommendations randomly to firm/year observations.

Collectively, our study contributes with new evidence to the literature and informs the debate over the concerns of proxy advisor activities. Our findings suggest that ISS evaluations can identify low quality compensation practices which are, in turn, reflected in future firm performance. Our findings that these results are stronger for firms with “off season” fiscal year ends suggests that ISS assessments are potentially more informative to shareholders when the proxy advisor can devote more resources to the analysis of firm disclosures. Therefore, our results also contribute to the literature examining how busyness can influence evaluative activities.

Section 2 provides background information and develops our research question. Section 3 describes the research design. Section 4 discusses the empirical results. Section 5 concludes.

2. Background and Research Questions

Proxy advisors sell services to investors, including research and analyses of firms’ corporate governance, voting guidelines, and recommendations on how to vote at annual meetings on specific items on the ballot. The rise of investor activism and the recognition of corporate

governance as a major corporate risk has led to an increase in the demand for proxy advisor's services (Barr and Burton, 2007). In essence, proxy advisors act as information intermediaries, as they synthesize information from public sources for investors (Ertimur et al. 2013). However, their motives for making recommendations have come under scrutiny (e.g., Rose, 2010 and Li, 2016).⁷ As ISS has no fiduciary duties towards the firms they analyze, there are concerns regarding the quality of the services they provide, if investors were to follow the recommendations of ISS without any independent assessment (Belinfanti, 2010). Examining mutual fund voting on proxy ballot items from 2006-2010, Iliev and Lowry (2014) document that only 25% of the funds in their sample appear to rely on ISS recommendations. They also document that funds for which the benefits of independent assessment outweigh the costs appear to be “actively voting”, thus not necessarily following ISS recommendations. Iliev, Kalodimos, and Lowry (2018) provide more direct evidence of investor research by examining the extent to which mutual funds access proxy statements. Using download data from the SEC, they find that the largest 5 fund companies access the proxy statements for 24% of their portfolio firms prior to the annual meeting and interpret this as direct evidence that these institutions conduct their own research. In tests examining management proposals for which votes narrowly passed or narrowly failed (their definition of a controversial issue), they find that institutional investor votes against the ISS recommended position are positively associated with quantity of proxy statement views. The authors interpret this as evidence that investor research is related to their vote.

Further compounding the concerns about ISS assessments is the opacity of the processes and methods used to derive recommendations. Iliev and Lowry (2014) provide evidence that for some types of proxy ballot questions, namely compensation and governance policies, ISS appears

⁷ For example, in 2013, the US Securities and Exchange Commission fined ISS \$300,000 for breach of confidentiality with respect to clients' proxy voting information: <https://www.sec.gov/news/press-release/2013-2013-92htm>.

to issue blanket recommendations. Alternatively, Choi, Fisch, and Kahan (2009) argue that the majority of policy guidance provided by proxy advisors suggests that they evaluate a variety of performance and governance factors in an undisclosed way and their recommendations may be company-specific, making it difficult to understand the details behind the recommendation. Similarly, Ertimur, et al. (2013) find that ISS does not appear to follow a “one-size fits all” recommendation approach, making the lack of transparency more salient. In examining reports behind ISS recommendations regarding compensation plans for 1,275 firms (from the S&P 500) at annual meetings that occurred between January and November 2011, they find that firms with similar compensation attributes (for example, lacking a clawback policy) have received both “for” and “against” recommendations.⁸ While this evidence is consistent with firm-level assessments that might better identify poor compensation practices, it also makes their processes less transparent.

Despite the opacity behind ISS processes, prior research provides strong evidence that there is an association between proxy advisor recommendations and voting outcomes related to a variety of proxy questions such as director elections and incentive plans (see, for example, Cai, Garner and Walking (2009) and Morgan, Poulsen, and Wolf (2006)). In particular, research has documented a strong association between proxy advisory recommendations and outcomes in the context of Say-on-Pay votes. For example, Ertimur et al. (2013) find that an upper bound estimate of the sensitivity of shareholder voting to ISS recommendations is approximately 34%. They further find that ISS influence varies with the rationale behind the recommendations. In particular, they find that ISS identification of multiple “high level of concerns” is associated with greater shareholder dissenting Say-on-Pay votes. Within the compensation categories, they find that when

⁸ The authors also examine Glass Lewis reports for the same firms. As we do not have access to Glass Lewis reports, we limit our discussion of their results to ISS reports to align with our sample.

ISS identifies only one high level of concern, the concerns related to severance and pay-for-performance are associated with higher dissent. They interpret their evidence as consistent with shareholders incorporating some of their own research in assessing compensation plans. Providing evidence of a causal interpretation, Malenko and Shen (2016) use a regression discontinuity design approach and document that an ISS “negative” recommendation leads to a 25% reduction in support for Say-on-Pay voting proposal.

Given the influence of ISS on shareholder voting, it is, therefore, important to understand whether ISS can identify poor compensation practices. However, drawing causal inferences for this question can also be difficult. First, a lack of a counterfactual measure of “optimal” compensation makes it difficult to benchmark the “correct” assessment. Second, there is the issue of potential correlated omitted variables. The factors that influence ISS recommendations may also influence firm value but, because they are unobservable to the researcher, it is challenging to attribute causality to the ISS recommendation. Nonetheless, researchers have taken different approaches.

Larcker, McCall, and Orzamabal (2015) examine 2,008 firms (from the Russell 3000) holding Say-on-Pay votes in 2011. They examine compensation changes in response to proxy advisor policy recommendations. They find that firms that are likely to receive “Against” recommendations are more likely to change their compensation policies ex-ante to align with proxy advisor suggested policies. However, the authors find a negative stock market reaction to SEC filings reporting these compensation changes. They interpret this evidence as suggesting that firms make suboptimal changes in response to proxy advisor recommendations and that such recommendations destroy firm value.

Larcker, McCall, and Ormazabal (2013) examine proxy advisor recommendations related to stock option repricing. Analyzing 264 repricing programs announced between 2004 and 2009, the authors find that stock price reactions to the option repricing announcement and the subsequent operating performance are lower for firms whose repricing program more closely align to proxy advisor guidelines.⁹ They interpret their findings as proxy advisor recommendations, at least regarding stock option repricing, not being value-increasing for firms.

Ertimur et al. (2013) examine market reactions to unexpected ISS recommendations and to changes to compensation contracts made by firms that are motivated by non-binding Say-on-Pay votes. They find that unexpected “Against” recommendations give rise to negative market reactions. In contrast, for a sample of 147 firms announcing changes to compensation plans the market reaction is not significant, even within the subset of firms who receive a “For” recommendation after previously receiving an “Against” recommendation by proxy advisors. They interpret this, together with other findings in their study, as evidence that the primary role of proxy advisors is to synthesize information for investors and not to identify and promote superior compensation practices.

Outside of the realm of executive compensation, there is also mixed evidence on whether proxy advisor recommendations identify future value in firms. Alexander, et al. (2010) examine advisor recommendations in corporate proxy contests. They find that a voting recommendation in favor of a dissident board team yields positive announcement returns, which they attribute to a “certification” effect – that is, the recommendation conveys information about the value the dissident team will bring to the firm. Daines, Gow and Larcker (2010) examine whether corporate

⁹ ISS guidelines include favoring plans in which the program extend vesting periods, exclude officers and directors, exchanges equivalent value, and does not include options that recently been in-the-money or that were recently granted.

governance ratings are associated with subsequent indicators of poor governance. In the context of ISS ratings (referred to as CGQ – Corporate Governance Quality), they find no relation between CGQ and future restatements, future class action lawsuits, future ROA or future credit ratings. They find some evidence that CGQ is associated with lower future Tobin’s Q and has a weak ability to predict future stock returns. The authors infer that ratings, including CGQ, contain “a large amount of measurement error” and “boards of directors should not implement governance changes solely for the purpose of increasing their ranking”.¹⁰

In sum, empirical evidence indicates that proxy advisor recommendations have significant influence on shareholder voting and may be a catalyst for change in firms’ governance practices. However, research also suggests that their recommendations are not necessarily helpful in identifying poor governance practices, thus influencing firms to make changes that may be simply window-dressing or worse, value-destroying. Given that investment firms continue to rely on proxy advisors’ recommendations (Rose and Sharfman, 2015), we revisit the issue of whether ISS recommendations are useful to shareholders by identifying firms with suboptimal CEO pay packages.

To address this question, we examine a large sample of firms exhibiting significant within-firm time-series variation, for which we obtained from ISS their overall SOP recommendation, as well as their more granular evaluations of firms’ executive compensation practices. These evaluations include ratings of “Levels of Concern” regarding components of the executive pay contract and related activities of the compensation committee, as well as compensation “Quality Scores” representing relative evaluations of pay packages across firms within market indices.¹¹

¹⁰ See Daines, et al. (2010), pages 460-461.

¹¹ See information on ISS Governance Quality Scores at <https://www.issgovernance.com/esg/rankings/governance-qualityscore/>.

Using this data, we estimate the relation between ISS assessments and future accounting performance. Our research design attempts to address two challenges. First, defining an “optimal” compensation practice for a firm is inherently difficult. Therefore, we rely on the notion that less-than-optimal practices should be associated with worse performance, acknowledging that our tests reflect this joint hypothesis. Second, we depart from prior studies by using accounting performance and not stock returns. Stock returns reflect shareholder reactions to the ISS assessment, and the ensuing effects of that assessment, without necessarily providing an independent signal of whether the assessment is appropriate. That is, shareholders may be responding to potential fall out of a firm receiving an “Against” recommendation despite the “Against” recommendation not being justified by the firm’s compensation policies.¹² Even if an “Against” recommendation is warranted (i.e., the compensation package is suboptimal), future stock returns may be unaffected; investors would impound the future performance implications of low-quality compensation practices at the ISS recommendation announcement. Since we are unable to obtain information on the timing of the release of ISS recommendations, we cannot directly test any announcement effect. Such limitation makes it difficult for us to observe a clear signal of investors’ assessments through stock returns. Finally, total shareholder returns (TSR) is a metric by which ISS evaluates firms’ pay-for-performance practices, leading to a potential endogenous relation between ISS assessments and firm performance.

To avoid these difficulties, we use return on assets as our measure of performance. Accounting performance reflects the effect of compensation practices uncontaminated by how investors may view ISS recommendations, correctly or incorrectly. Further, it does not have the

¹² A constraint limiting the assessment of market reactions to ISS recommendations is that ISS is unable to share with us the dates at which they issue the proxy report to their clients. Their policy is to issue the proxy report between eight and thirty days prior to the annual shareholder meeting.

self-fulfilling feedback concern of stock returns; absent changes to compensation policy, future return on assets will be unaffected by any announcement implications of unfavorable assessments. Finally, accounting performance is unaffected by changes in investors' assessments of the risk of the firm, which is important if ISS recommendations change how investor perceive firm risk. For these reasons, accounting performance is a cleaner measure of future performance. Thus, if ISS research can identify sub-optimal compensation practices and if these practices are associated with poor performance, we should document a positive association between ISS unfavorable compensation assessments and poor future performance.¹³

As prior research has documented that some investors do their own research and vote differently than ISS recommendation, we exploit this discordance to provide additional evidence on whether ISS can identify sub-optimal compensation practices. If ISS against recommendations identify poor practices, then among firms whose shareholders vote in favor of the pay package, firms receiving an "Against" recommendation should exhibit worse future accounting performance relative to those receiving "For" recommendations.

3. Methodology

3.1. Sample and Data

We obtained detailed compensation assessment information from ISS for companies included in the Russell 3000 index over the period 2010 to 2016. Our sample includes 3,676 unique firms and 16,480 firm/year observations (see Table 1 for information on the sample composition).¹⁴

¹³ We eliminate firms that appear to have changed compensation policies as a result of ISS assessments. Including these firms may bias against finding a result if firms are adjusting pay package after observing the ISS recommendation and the SOP vote (e.g. yielding better incentive alignment) and perform better. Including them weakens our results but does not materially alter our inferences.

¹⁴ ISS back- and forward-fills information about firms that exit or enter the sample included in the Russell 3000, which explains why the number of unique firms is greater than 3000.

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ISS assessment information includes firm ratings based on ISS “Levels of Concern” and “Quality Scores” on compensation. Levels of Concern assess the risk associated with specific characteristics of executive compensation and with related governance practices of the compensation committee for each covered firm in each year. These five characteristics include: (1) pay for performance components of executive compensation contracts, (2) non-performance pay characteristics, (3) the composition of the compensation peer group selected by the compensation committee, (4) the definition of severance and change-in-control provisions, and (5) the communication practices of the compensation committee. ISS expresses its level of concern with respect to each of these practices using a three-point scale – low, medium, and high.

Different from Levels of Concern, which are expressed at an absolute level, ISS Compensation Quality Scores represent a *relative* evaluation of firm compensation practices. Quality Scores are generated each year by ranking firms, within a size index, into deciles based on an overall compensation assessment. Firms associated with low compensation risk (less likely to have suboptimal compensation practices) are ranked in the top deciles (i.e. 1, 2, or 3), while those that exhibit greater risk (more likely to have suboptimal compensation practices) are ranked in the bottom deciles (8, 9, or 10). ISS publishes Quality Scores for a number of governance characteristics and practices, including executive compensation, overall assessments of the board, audit risk and oversight practices, shareholder rights, and the firm’s governance in its entirety. More recently, ISS has begun publishing Quality Scores on environmental, social and governance (ESG) practices.¹⁵ To facilitate comparison with Level of Concern information, we aggregate the compensation Quality Score (hereafter *QSComp*) to range from 1 to 3, with a value of 1 capturing

¹⁵ These evaluations are not part of our study.

compensation practices associated with low risk (i.e. quality score is 1, 2, or 3), a value of 2 capturing medium risk in compensation practices (i.e. a quality score of 4, 5 or 6), and value 3 capturing high risk compensation practices (i.e., a quality score of 8, 9 or 10).¹⁶

Finally, ISS provides an overall recommendation with respect to the Say-on-Pay (SOP) vote. The recommendation can be “For” or “Against” a firm’s compensation package as reported in the Compensation Discussion and Analysis (CD&A) section of the proxy statement.¹⁷

Table 2 Panel A reports the descriptive statistics for all our variables of interest. We report absolute values of the Quality Scores. Consistent with the within-sample ranking of the Quality Score, the average (median) quality score is close to 5.5. At least 50% of firm year observations rank “low” on each of the Levels of Concerns. Among the Levels of Concern, ISS expresses high concerns most frequently about severance and change-in-control provisions (variable *SevCICConcern*), with a sample average of 1.498. Concerns about performance-based pay (variable *P4PConcern*) and compensation committee communications (variable *CCCommConcern*) are the next most frequent, with sample averages of 1.392 and 1.380, respectively. Finally, we note that ISS SOP recommendations against pay packages (variable *ISSAgainst*) are a relatively infrequent event. In our sample, an average of 11.6% of firm-year observations receive an “Against” recommendation.

Table 2 Panel B reports changes in ISS assessments. Each of the assessments exhibits some variation from the prior year, with *QSComp* and *P4PConcern* having the highest proportion of changes at 43% and 33%, respectively, of observations changing from the prior year, calculated

¹⁶ To keep a relatively equal number of firms in each category, we exclude firms in decile 7. Our results are unchanged if we exclude firms in decile 4 and redefine medium risk as firms in deciles 5, 6 and 7.

¹⁷ We exclude from our sample all cases in which the ISS recommendation relative to Say-on-Pay was to abstain from the vote (i.e. “abstain”, “do not vote”, or “withhold”).

as the proportion of off-diagonal observations. At the other extreme, *NPPConcern* assessments have little variation with only 7% of observations being different from the prior year.

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Table 3 reports the pairwise Pearson correlations between all our variables of interest. As we would expect, Levels of Concerns are positively correlated with the compensation Quality Score (*QSComp*). Interestingly, though, the correlations are low in magnitude. The Level of Concern about compensation committee communications (*CCCommConcern*) has the highest correlation with *QSComp* at 0.383, followed by the Level of Concern about performance-pay (*P4PConcern*) at 0.278. It is also interesting to note that the correlation between the compensation Quality Score and the likelihood of an “Against” recommendation is only 0.241 (recall that high Quality Scores reflect greater risk assessed by ISS). Correlations among the Levels of Concerns are also relatively low, though positive, consistent with these concerns reflecting different characteristics of pay practices. Examining the correlation between Levels of Concern and ISS “Against” recommendation (*ISSAgainst*), the concern exhibiting the greatest correlation (0.708) relates to pay for performance (*P4PConcern*).

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3.2. Research Design

Our research design comprises three sets of tests. First, to calibrate our data relative to prior research, we examine whether there is an association between ISS assessments and SOP voting outcomes. We extend this analysis to the granular components of ISS assessments in addition to their overall SOP recommendation. Second, we examine whether ISS assessments identify suboptimal compensation policies. That is, we explore the predictive ability of these assessments with respect to subsequent firm accounting performance. In particular, we draw from prior research

that documents how workload compression (“busyness”) affects evaluations by auditors (Lopez and Peters, 2012) and SEC staff (Gunny and Hermis, 2018) and consider whether ISS evaluations are similarly affected. Based on qualitative data collected via structured interviews of stakeholders involved in the relation between firms and proxy advisors, Hayne and Vance (2019) report that proxy advisory firms are subject to intense workloads during the busy season, whereby analysts work 12 to 16 hours per day (including the weekends) analyzing complex proxy statements and process between 1 and 12 reports per day. Interviewed board members expressed concerns about the lack of expertise of some of the proxy advisors’ temporary or seasonal workers hired during the busy season, the fact that proxy advisors have little time to process thousands of proxy statements, and the potential negative impact that such constraints might have on the quality of their analyses (Hayne and Vance, 2019). We build on these qualitative findings and analyze whether the ability of ISS to identify suboptimal compensation policies differs between firms that have a December fiscal year end (FYE) and those that do not. To the extent that ISS is able to devote more resources and time to non-December FYE firms, we expect the quality of their assessments and recommendations to be higher.

Finally, we examine the implications of discordance between ISS recommendations and SOP vote outcomes. In considering the information value of ISS assessments for shareholders, we explore whether firms with pay packages receiving an “Against” ISS recommendation have significantly lower accounting performance compared to firms that do not (i.e., for which ISS issued a “For” recommendation) regardless of whether shareholders approve a pay package or not (passed or failed the SOP vote). This allows us to examine whether ISS assessments are able to identify suboptimal compensation policies when ISS and shareholders disagree.

3.2.1 ISS Assessments and SOP Vote Outcomes

While the literature documents that ISS SOP recommendations have some influence on the outcomes of SOP votes, we revisit this relation using a greater level of granularity in an attempt to explore the underlying inputs to shareholder voting behavior. Therefore, we first validate that our data is consistent with prior research with respect to the relation between ISS recommendations and SOP vote outcomes by estimating the following model:

$$Pass_{i,t} = \alpha + \sum_j \beta_j ISSAssessment_{i,t} + \sum_m \gamma_m Controls_{i,t} + \sum_n \delta_n FixedEffects + \varepsilon \quad (1)$$

In Eq. (1), *Pass* is an indicator variable assuming value 1 if the SOP vote passes (i.e. the percentage of favorable votes cast exceeds the threshold set by the firm, which is typically, but not always, 50%) and zero otherwise. Practitioners and compensation consultants often refer to a norm whereby a SOP vote that receives less than 80% of favorable votes is considered to be a negative outcome and a warning to the board that the shareholders are unhappy with their practices. Accordingly, we also estimate Eq. (1) using, as a dependent variable, *HighPass80%*, an indicator variable assuming value 1 if the SOP vote passes with more than 80% favorable votes, and zero if the SOP vote passes, but the percentage of favorable votes is less than or equal to 80% (this variable is undefined for SOP votes that do not pass).¹⁸

Our main variable of interest is *ISSAssessment*, which takes on several different specifications. In the first specification, the variable is the overall ISS recommendation, captured by the indicator variable *ISSAgainst*. Based on prior literature, we expect a negative and significant coefficient, indicating that ISS recommendations are associated with worse SOP vote outcomes—

¹⁸ We set a threshold at 80% based on several conversations with practitioners (compensation consultants and board compensation committee members) who identified such threshold as a practice norm whereby a SOP vote receiving less than 80% should be considered as a warning to the board. Ertimur et al (2013) refer to ISS guidelines identifying 70% as a threshold determining the need for a board to make changes to its compensation practices. In particular, the authors report how ISS would assign an “Against” recommendation to firms that received less than 70% support in the previous year’s SOP vote and failed to adopt changes in the compensation package. In untabulated tests we change the threshold defining our High Pass variable to reflect 70% favor. Our results are consistent with the reported ones. Additionally, in further untabulated robustness test, we redefine this variable including the observations where the vote did not pass and code them as zero. Our inferences remain the same.

– that is, SOP votes should be less likely to pass in firms receiving “Against” recommendations. In the second specification, we include the Compensation Quality Score, *QSComp*. Given that our study focuses on exploring the relation between ISS evaluation of compensation practices and outcomes of the Say-on-Pay vote, we focus on the Quality Score related to compensation practices.¹⁹ In the last specification, we include the Levels of Concern: *P4PConcern*, *NPPConcern*, *PeerGroupConcern*, *SevCICConcern*, and *CCCommConcern*.²⁰ If these ISS assessments inform SOP votes or are, at least, consistent with shareholder preferences with respect to compensation practices, we expect negative and significant associations between these assessments and shareholder SOP voting outcomes. That is, the higher the risk assessed by ISS with respect to the compensation practices of a firm, the lower will be the probability of a favorable Say-on-Pay vote outcome.

We control for firm economic and governance characteristics that are associated with poor compensation practices in prior literature (e.g., Core and Guay 1999, Core et al. 1999). We include proxies for firm size such as *LogMktVal*, the natural logarithm of the market capitalization of each firm at the end of each fiscal year, and *LogSales*, the natural logarithm of net sales reported by each firm in each fiscal year. *MTB* measures the market-to-book ratio which is commonly used to represent the investment opportunities associated with the firm in a given year. We include lagged values of industry adjusted ROA (*AbnROA*) to control for previous accounting performance, and the standard deviation of ROA (*SDAbnROA*) over the three years ending with year *t* to control for its variability. Governance characteristics include those associated with the CEO, such as

¹⁹ In robustness tests, we will include all Quality Score assessments, to rule out the possibility that the SOP vote is influenced by shareholders’ evaluations of other governance characteristics and practices.

²⁰ In untabulated tests we also estimate a comprehensive model with all the assessments included and find results that are largely consistent with the estimations reported in this paper. Because of the redundancy between ISS assessments about aspects of the same compensation contract, we chose to report the three specifications described here.

DualCEO, an indicator variable equal to one if the CEO is also the Chairman of the board, and zero otherwise, *CEOTenure*, which measures the tenure (in years) of the CEO at the particular firm, and *NewCEO*, an indicator variable that is equal to one if the CEO is in her first year at the firm, and zero otherwise. Other governance characteristics include *InsiderPct*, the percentage of outstanding shares held by insiders to the organization, *BlockholdersPct*, the percentage of outstanding shares held by institutional investors holding at least 5% of the shares, and board-related characteristics, such as *BoardSize*, the number of directors on the board, *BusyNEDirectors*, the percentage of non-executive board members that sit on three or more other boards, and *GenderRatio*, the percentage of directors that are female. All variables are defined in Appendix A.

We estimate Eq. (1) using a linear probability model with robust standard errors, which we cluster by firm to account for the correlations across repeated compensation assessments for the same firm. To account for unobservable macroeconomic factors associated with particular periods of time, we include year fixed effects. We also include industry fixed effects to account for industry specific norms relative to compensation and governance practices and for the fact that ISS develops its compensation evaluation policies taking into considerations a number of economic characteristics, including industry.²¹ In all our analyses we winsorize all continuous variables at the 1st and 99th percentile to exclude the influence of potential outliers on our results.

3.2.2 ISS Assessments and Firm Accounting Performance

Having documented the relation between ISS assessments and SOP voting, we next examine whether ISS activities are, in fact, informative about poor pay practices. As discussed earlier, ours is a joint test based on the assumption that low quality compensation practices are

²¹ We include firms operating in regulated industries because ISS claims to take industry characteristics into consideration when evaluating compensation practices (see <https://www.issgovernance.com/file/policy/executive-summary-of-key-2017-updates-and-policy.pdf>). Our results are similar if we exclude firms in energy, financial services, telecommunications and utilities (see our discussion in section 4.5 for additional details).

associated with poor future accounting performance. Thus, if ISS can identify sub-optimal compensation plans, then poor scores, high concerns, and “Against” recommendations should be associated with lower future performance. We measure firm performance using industry-adjusted accounting performance (*AbnROA*). We then estimate the following model describing the relation between the three types of ISS compensation assessments and firm accounting performance:

$$AbnROA_{i,t} = \alpha + \sum_j \beta_j ISSAssessment_{i,t} + \sum_m \gamma_m Controls_{i,t} + \sum_n \delta_n FixedEffects + \varepsilon \quad (2)$$

As before, we estimate the relation between performance and three sets of ISS assessments: Levels of Concern (*P4PConcern*, *NPPConcern*, *PeerGroupConcern*, *SevCICConcern*, and *CCCommConcern*), compensation Quality Score (*QSComp*), and the SOP recommendation (*ISSAgainst*). We estimate using OLS, with similar specifications, including control variables, to those described for the estimation of Eq. (1). If ISS assessments identify low quality compensation practices, we expect to find negative correlations between those assessments and *AbnROA*.

To account for the variation in information processing costs during the busy season compared with other times, we repeat all our main tests on two subsamples: firms with December fiscal year end and firms with fiscal year ending in any other month. When we estimate Eq. (2) for the subsample of firms that end their fiscal year in months other than December, we include controls for the fiscal year end month, to allow for any performance differences that may be correlated with fiscal year ends. We expect to find a stronger relation between ISS assessments and accounting performance for the non-December fiscal year end firms if workload compression makes it harder for ISS to evaluate pay practices.

Eq. (2) examines the relation between accounting performance during fiscal year *t* and ISS assessments about compensation practices from fiscal year *t-1* but made available to investors during the same fiscal year *t*. ISS evaluations are predominantly based on the content of the

Compensation Discussion and Analysis (CD&A) section of the proxy statement, which reports information about compensation of the CEO, CFO, and the three highest paid executives of the firm for the fiscal year just completed ($t-1$). Shareholders SOP advisory votes are related to those same pay packages.²² Despite the backward-looking timeframe of the information included in the proxy statement, it is expected that the board of directors will communicate in the same document any material changes to the structure of executive compensation for the upcoming fiscal year. In absence of disclosure of any material changes, shareholders will interpret the CD&A not only as an ex-post description of past pay practices, but also as an ex-ante declaration of pay practices that the board intends to apply in the upcoming fiscal year. Therefore, the SOP vote provides shareholders with an opportunity to not only affirm or protest pay received by executives in the prior fiscal year, but also affirm or protest planned changes, or lack thereof, regarding compensation practices for the upcoming year.

Appendix B provides a timeline that reflects the flow of information. For a December fiscal year end firm, the proxy statement for the 2015 fiscal year will be filed two to four months after the fiscal year end, in our example March 2016. The annual shareholder meeting, during which shareholders will provide the non-binding Say-on-Pay vote, will typically occur two to three months after the proxy filing date, June 2016 in our example.

3.2.3 ISS/Shareholders Agreement/Disagreement

As further validation of whether ISS recommendations are informative about poor performance practices, we examine the discordance between ISS recommendations and voting outcomes. If ISS recommendations identify sub-optimal compensation policies, then

²² Say-on-Pay is a non-binding advisory vote to be cast annually in correspondence with the annual shareholders meeting. This advisory vote became required with the adoption of the Dodd-Frank Wall Street Reform and Consumer Protection Act, passed into law in 2010.

recommendations that are against a pay package should predict poor future performance, regardless of whether the SOP vote results passes or not. For approximately 10% of our sample, we observe passing SOP votes despite an “Against” ISS recommendation (see Appendix C, Panel A). We leverage the variation in the agreement between ISS and shareholders and partition our sample into three categories – cases in which SOP passes and ISS recommends “For”, which we label as “For/For” and indicate with a binary variable FF ; cases in which SOP passes despite ISS recommending “Against” (that is – shareholders and ISS disagree), which we label as “For/Against” and indicate with the binary variable FA ; and cases in which shareholders and ISS “agree against”, that is - SOP does not pass and ISS recommended “Against”– a situation that we label “Against/Against” and indicate with the binary variable AA .²³ We estimate the following model to examine the relation between accounting performance and agreement/disagreement between shareholders and ISS:

$$AbnROA_{i,t} = \alpha + \beta_1 AA_{i,t} + \beta_2 FA_{i,t} + \sum_k \gamma_k Controls_{i,t} + \varepsilon, \quad (3)$$

where firm/year observations associated with favorable agreement between ISS and shareholders (FF) serve as the reference case. If ISS “against” recommendations reflect compensation practices that lead to poor future accounting performance, we expect the coefficient associated with FA not to be statistically different from the coefficient associated with AA . Estimation of Eq. (3) is performed using OLS regressions with similar specifications as previously described.

4. Results

4.1 ISS Assessments and SOP Vote Outcomes

Prior research provides evidence of significant relations between ISS summary recommendations (the “Against” recommendation) and SOP vote outcomes. We both confirm this

²³ Cases in which ISS recommends “For” and the SOP vote does not pass are extremely rare and dropped from our sample.

result and extend the literature by examining which components of ISS recommendations are more informative to shareholder voting, relative to the summary measure addressed by prior work.

Table 4 reports the results of our estimation of Eq. (1). We consider two measures of shareholder voting outcomes: an indicator of whether the vote passed the minimum threshold set by the firm (columns (1) – (3)) and an indicator of whether the vote passed with greater than 80% support (columns (4) – (6)). We first establish consistency with prior research and document that ISS “Against” recommendations are negatively associated with shareholder approval (columns (1) and (4)). In columns (2) and (5), we examine the compensation Quality Score and find that it is negatively related to shareholder approval as expected. Finally, in columns (3) and (6), we examine the relation between SOP outcomes and the five Levels of Concerns. Interestingly, only a subset of the concerns informs shareholder voting. Across both columns, pay for performance concerns (*P4PConcern*), severance and change-in-control concerns (*SevCICConcern*) and committee communication concerns (*CCCommConcern*) are negatively related to voting outcomes. In column (3), shareholders appear to also consider non-performance pay as high concerns are significantly associated ($p < 0.10$) with a lower likelihood of passing the vote.²⁴

In untabulated analyses, we estimate the regression separate for December and non-December fiscal year ends. Our inferences are largely unchanged. The relation between ISS assessments and voting outcomes are generally similar between non-December fiscal year ends, when ISS may have more time to process information, and December fiscal year ends, when their workload is compressed.

²⁴ A potential explanation for this result is that not all levels of concern inform the overall ISS recommendation. That is, only some levels of concern are associated with overall recommendations and therefore are informative of shareholder votes. In untabulated tests, we estimate a model with *ISSAgainst* as the dependent variable and find that all five levels of concerns are positive and significantly related to the overall recommendation, individually and when included simultaneously. This suggests that shareholders are selective about what informs their vote.

Collectively, these results suggest that shareholder votes are consistent with overall ISS recommendations, as in prior research. However, negative (low passing) votes are more heavily influenced by concerns over pay for performance compensation, severance agreements, and compensation committee communications suggesting that firms should focus on these metrics when trying to convince shareholders of the quality of their compensation packages. These results suggest that more granular information provides greater insights into voting outcomes beyond the coarser “For” or “Against” recommendations studied in prior research.

----- Insert Table 4 here -----

4.2 ISS Assessments and Accounting Performance

We next analyze the informativeness of ISS assessments with respect to future performance. We examine whether and to what extent ISS identification of risks associated with executive compensation practices is predictive of future accounting performance.

Table 5, Panel A, reports the results of our univariate tests examining mean differences in industry-adjusted ROA (*AbnROA*) between firms that receive unfavorable evaluations by ISS and those receiving favorable ones. We examine all three types of ISS evaluations: overall recommendation, compensation Quality Scores and individual Levels of Concern. For the latter two groups, we compare firm/years associated with high risk (i.e. high Levels of Concern or high-Quality Scores) to those associated with low risk (i.e. low Levels of Concern or low Quality Scores).²⁵ With respect to ISS recommendations, we compare firm-years associated with an “Against” recommendation with firm-years associated with a “For” recommendation. As reported in Table 5, Panel A, significant negative values suggest that firms with unfavorable ISS evaluations

²⁵ Recall that we defined our measure of quality scores (*QSComp*) based on a three-point scale, assuming value 1 if low compensation risk, 2 if medium compensation risk, and 3 if high compensation risk. In the univariate tests, we compare firm/years associated with high risk (*QSComp* = 3) with those associated with low risk (*QSComp* = 1).

have worse future accounting performance. This univariate evidence suggests this is the case for all ISS evaluations, except non-performance pay and compensation committee communications concerns. The results are generally consistent when we restrict the sample to only passing SOP votes, as well as to only SOP votes that passed with more than 80% of favorable votes. The weak differences when non-performance pay and peer groups are the ISS concerns may result from the fact that fewer firm-years receive high risk assessments.

Table 5 Panel B reports results of our multivariate analyses. In Columns (1-3), we report results from the pooled sample. Interestingly, we find no evidence that ISS evaluations are significantly associated with lower industry-adjusted accounting performance (*AbnROA*).

In our next set of tests, we consider the effect that workload compression has on ISS assessments. In developing their assessments, ISS analyzes and processes a substantial amount of data from proxy statements (e.g., Doyle (2018), Ertimur et al. (2013)). ISS has approximately 1,200 employees, and covers more than 20,000 companies and 40,000 meetings worldwide, but the size of the staff dedicated to analyzing the large amount of data is not disclosed.²⁶ Doyle (2018) mentions that “(T)o handle its proxy season workload, ISS hires temporary employees and outsources work to employees in Manila. Given the large number of companies that the proxy advisors opine on each year, the inexperience of their staffs, and the complexity of executive pay practices, it’s inevitable that proxy reports will have some errors.”

Over 70% of our sample firms have a December fiscal year end (FYE), meaning that ISS is the busiest during the months of March and April (proxy season). To the extent that ISS is less able to devote sufficient time and resources, we expect the quality of their assessments and recommendations to be lower. In Columns (4-6), we examine the relation between ISS assessments

²⁶ See <https://www.issgovernance.com/about/about-iss/>

and future accounting performance for firms with December fiscal year ends. Consistent with workload compression affecting assessments, similar to the pooled sample, we find no significant relations between ISS assessments and future performance.

In Columns (7-9), we include only firms with non-December fiscal year ends. For these firm-year, we expect that ISS assessments will be less affected by resource constraints. Consistent with that, we find that future performance is negatively associated with ISS “Against” SOP recommendations (Column 7), Quality Scores representing high overall compensation risk (Column 8), and high risk assessments with respect to pay-for-performance and communication practices (Column 9).²⁷

These results suggest that ISS evaluations of compensation practices are informative about future firm performance, mostly for firms in the off-season (non-December FYE). When ISS is busier, the quality of their assessments seems to degrade, as ISS evaluations are not significantly associated with lower future performance.²⁸ It is important to note that our analyses include several control variables that have been shown to be associated with poor compensation practices. Therefore, the interpretation of ISS assessments is incremental to what determines low quality compensation practices.

----- Insert Table 5 here -----

4.4 Informativeness of ISS Assessments when Shareholders and ISS disagree

Our last set of tests incorporates cases of disagreement between ISS recommendations and shareholder voting. In Table 6, we report the results of our multivariate analyses assessing the

²⁷ We are currently investigating the curious result that non-performance pay concerns are positively associated with future performance.

²⁸ As mentioned previously, we find that the relation between ISS assessments (i.e., Levels of Concern, Quality Score and ISS recommendations) and SOP vote outcome is not affected by the firms’ FYE. We interpret these results as an indication that ISS follows the same protocol all the times (internal consistency), shareholders follow ISS recommendations independently of FYE, but the quality of ISS analysis and interpretation of proxy statement information deteriorates if the firm has a December FYE impacting its ability to inform shareholders.

informativeness of ISS compensation assessments with respect to future accounting performance allowing for ISS “Against” recommendations to be differentially related to future accounting performance depending on whether shareholders pass the SOP vote (Eq. (3)). In the pooled sample of fiscal year ends (Column 1), we find that future accounting performance is lower only when ISS recommends against a compensation package and shareholders vote similarly. The coefficient on *FA* (when shareholders vote for a compensation package that ISS recommended against) is not significantly different from zero. However, Wald tests document that the negative and significant coefficient on *AA* (indicating cases in which both parties dislike the compensation package) and the insignificant coefficient on *FA* are not significantly different from each other.

In Column (2), we find no relation between ISS recommendations (either with or without shareholder agreement) and future performance. These findings are consistent with those in Table 5 Panel B, suggesting that workload compression may affect the quality of ISS recommendations.

In Column (3), we find negative and significant relations between ISS recommendations and future performance. That is, when ISS recommends against a compensation package, future accounting performance is lower, regardless of how shareholders vote on the pay package. Wald tests indicate that there is no difference in the informativeness of the recommendation when shareholders vote contrary to the ISS recommendation.

Taken together, these results suggest that ISS “Against” recommendations are able to uncover poor compensation practices as they are associated with worse future accounting performance, even in the presence of a favorable shareholder vote. However, these recommendations are most informative during the “off” season when assessments are less affected by workload compression.

----- Insert Table 6 here -----

4.5 Additional Analyses

We execute several additional analyses (untabulated) to assess the robustness of our results. First, one concern of our analyses is that the ISS assessments may be a function of current firm performance which is correlated with future performance. We attempt to address this particular concern in several ways. First, in our main analyses, we control for lagged performance. To the extent that ISS recommendations are driven by how the firm *has* performed and not how it *will* perform, this variable should capture ISS assessments and the recommendations should not be dependent on future performance. Second, we repeat the estimation of Eq. (2) on the subsample of firms with lagged performance ranking in the lowest tercile of each year. If ISS “against” recommendations are determined by poor accounting performance, our main findings should not hold in this subsample. Inconsistent with that explanation, findings from this test are in line with our main analyses. Third, our tests examining December FYE separate from non-December FYE also address this concern. If ISS “against” recommendations are mechanically driven by past poor performance that persists, rather than by the ability of ISS to inform shareholders about suboptimal packages, then we should find that the relation between an “Against” recommendation and future performance to be similar between firms with December FYE and non-December FYE. As mentioned above, we do not find such a result.

To address other concerns about endogeneity or omitted variables, we perform two sets of “matching” tests. We re-estimate Eq. (2) using propensity score matching, where we matched firms receiving “Against” and “For” recommendations based on all control variables included in our main specification. In a separate test, we employ a matched pair design in which, for each firm receiving an “Against” recommendation in a particular year, we identify and keep the most similar firm receiving a “For” recommendation based on economic and governance characteristics

and requiring exact matching on size, lagged performance, industry, and year. We then estimate Eq. (2) on this subsample.²⁹ For both tests, we continue to find lower performance for firms receiving “Against” recommendations.

We perform a placebo test, whereby we randomly assign firm/year observations to values of the indicator variable *ISSAgainst*. We estimate Eq. (2) using this random assignment 1,000 times and find that the average value of the estimated coefficient on *ISSAgainst* is not statistically different from zero.

To account for the possibility that accounting performance is influenced by other characteristics of corporate governance, we repeat all our estimations controlling for ISS Quality Scores related to the assessment of firm audit practices and overall board assessments. Our results remain consistent with our main findings.

Finally, we estimate all our statistical models excluding firms in the financial services industry and utilities. Our results continue to remain consistent with our main findings and become even stronger if we remove from our sample all firms operating in regulated industries (i.e. financial services, utilities, telecommunications, and energy). These results suggest that ISS recommendations might be less useful in settings where regulatory provisions influence several aspects of corporate governance, including compensation contracting.

5. Conclusion

Proxy advisors have come under increased scrutiny recently. The lack of transparency on their methodology and the potential for conflicts of interest with the firms for which they provide recommendations to institutional investors, amplified by their influence on voting outcomes

²⁹ The difference between these two matching analyses is that in the former, we consider all observations included in the sample and weigh the quality of their match to the focal firm/year observation. In the latter, we retain only the best match for each focal firm/year observation.

documented by prior research, has called into question whether their recommendations are informative about the quality of executive compensation practices. Although academic research has suggested that their recommendations may not improve firms' compensation policies and that they merely synthesize information for investors, their services are still in high demand. The lack of congruence between market forces that continue to support proxy advisor services and the academic evidence suggesting their services may not add value leads us to revisit the question of whether ISS assessments identify firms with suboptimal CEO pay packages.

We take advantage of a large data set obtained from ISS Executive Compensation Data from 2011 to 2016 for Russell 3000 companies for which we have detailed information on the rationale behind ISS recommendations. Our larger and more detailed dataset allows us to leverage the cross-sectional and within-firm variation to assess whether ISS recommendations identify suboptimal compensation practices leading to lower accounting performance.

As with prior research, we find that overall ISS recommendations are associated with shareholder votes. However, in examining ISS assessments that lead to their overall recommendations, we find that shareholders selectively incorporate information corresponding to the "Levels of Concern", which assess the risk associated with specific characteristics of executive compensation and with related governance practices of the compensation committee, in their voting. This new evidence provides greater insight into the ISS evaluation process and shareholder voting. Specifically, we find that negative (low passing) votes are more heavily influenced by concerns over pay-for-performance compensation and compensation committee communications.

Addressing our main research question, we find that ISS recommendations appear to predict future accounting performance, predominantly when firms have a non-December fiscal year end. This suggests that when ISS is less busy and able to devote more resources to analyzing

firms' compensation packages, their recommendations are of higher quality and they are better able to identify lower quality compensation packages. Collectively, these results provide the first evidence, to our knowledge, that ISS activities may be value-added to shareholders. This evidence sheds new light on why proxy advisors remain widely used by institutional investors.

Our study is not without some limitations. First, we infer the quality of ISS assessments of compensation practices by exploring their association with accounting performance, but we do not measure the actual characteristics of the compensation contract. Although we attempt to address this through additional analyses, it is possible that an omitted variable explains both low quality compensation practices and poor accounting performance. Second, while we provide evidence that ISS assessments are predictive of future accounting performance, our results do not establish whether ISS performs a key intermediary role in the capital markets that cannot be conveniently substituted by investors' capabilities to process the same information. In other words, we do not document the efficiency of the market to incorporate the proxy statement information in absence of ISS recommendations.

Despite these limitations, we believe our work makes an important contribution to the literature by providing evidence that ISS evaluations identify sub-optimal compensation practices that are associated with poor future performance and by identifying conditions where ISS effectiveness is greater (i.e. in the off-season).

Appendix A

Variable Definitions

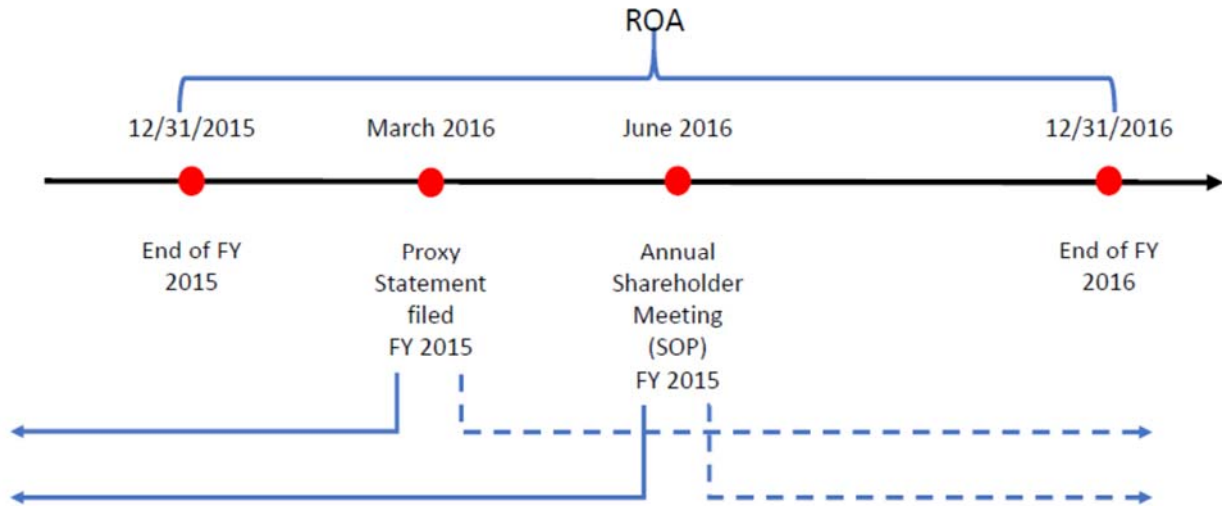
Variable	Definition
<i>Dependent Variables</i>	
<i>AbnROA</i>	Industry-adjusted return on assets.
<i>Pass</i>	Indicator variable assuming a value of 1 if Say-on-Pay vote is favorable, and zero otherwise. A Say-on-Pay vote passes when the votes in favor are greater than the required percentage of base, as set by the firm.
<i>HighPass80%</i>	Indicator variable assuming a value of 1 if Say-on-Pay vote passes with favorable votes greater than 80% of the base, and zero otherwise. This variable is not defined for those cases where the Say-on-Pay vote fails.
<i>ISS evaluations of governance factors related to Say-on-Pay</i>	
<i>QSComp</i>	Ordinal variable representing the ISS Compensation Quality Score. The score ranges from 1 to 10. The higher the score, the more negative is ISS evaluation of this particular aspect of the firm's governance. We measure the ISS QS score with an ordinal variable assuming a value of 1 if the QS score is good (QS scores between 1 and 3), a value of 2 if the QS is medium (QS scores between 4 and 7), and a value of 3 if the QS score is poor (QS score between 8 and 10).
<i>QSOoverall</i>	Ordinal variable representing the ISS Overall Quality Score. The score ranges from 1 to 10. The higher the score, the more negative is ISS evaluation of this particular aspect of the firm's governance. We measure the ISS QS score with an ordinal variable assuming a value of 1 if the QS score is good (QS scores between 1 and 3), a value of 2 if the QS is medium (QS scores between 4 and 7), and a value of 3 if the QS score is poor (QS score between 8 and 10).
<i>QSAudit</i>	Ordinal variable representing the ISS Audit Quality Score. The score ranges from 1 to 10. The higher the score, the more negative is ISS evaluation of this particular aspect of the firm's governance. We measure the ISS QS score with an ordinal variable assuming a value of 1 if the QS score is good (QS scores between 1 and 3), a value of 2 if the QS is medium (QS scores between 4 and 7), and a value of 3 if the QS score is poor (QS score between 8 and 10).
<i>QSBoard</i>	Ordinal variable representing the ISS Board Quality Score. The score ranges from 1 to 10. The higher the score, the more negative is ISS evaluation of this particular aspect of the firm's governance. We measure the ISS QS score with an ordinal variable assuming a value of 1 if the QS score is good (QS scores between 1 and 3), a value of 2 if the QS is medium (QS scores between 4 and 7), and a value of 3 if the QS score is poor (QS score between 8 and 10).
<i>QSShareholders</i>	Ordinal variable representing the ISS Shareholders Quality Score. The score ranges from 1 to 10. The higher the score, the more negative is ISS evaluation of this particular aspect of the firm's governance. We measure the ISS QS score with an ordinal variable assuming a value of 1 if the QS score is good (QS scores between 1 and 3), a value of 2 if the QS is medium (QS scores between 4 and 7), and a value of 3 if the QS score is poor (QS score between 8 and 10).

(Appendix A continues on the next page)

Appendix A – Variable Definitions – Cont'd

Variable	Definition
<i>P4PConcern</i>	Ordinal variable representing the ISS level of concern relative to pay-for-performance aspects of executive compensation, and assuming a value of 1 if the concern is low, a value of 2 if the concern is medium, and a value of 3 if the concern is high.
<i>NPPConcern</i>	Ordinal variable representing the ISS level of concern relative to non-performance pay aspects of executive compensation, and assuming a value of 1 if the concern is low, a value of 2 if the concern is medium, and a value of 3 if the concern is high.
<i>SevCICConcern</i>	Ordinal variable representing the ISS level of concern relative to severance and change in control provisions, and assuming a value of 1 if the concern is low, a value of 2 if the concern is medium, and a value of 3 if the concern is high.
<i>PeerGroupConcern</i>	Ordinal variable representing the ISS level of concern relative to the choice of peer groups for executive compensation purposes, and assuming a value of 1 if the concern is low, a value of 2 if the concern is medium, and a value of 3 if the concern is high.
<i>CCCommConcern</i>	Ordinal variable representing the ISS level of concern relative to compensation committee communication policies and practices, and assuming a value of 1 if the concern is low, a value of 2 if the concern is medium, and a value of 3 if the concern is high.
<i>ISSAgainst</i>	Indicator variable assuming a value of 1 if ISS recommends against management's Say-on-Pay proposal, and zero if ISS recommends in favor of the Say-on-Pay proposal. Observations for which ISS recommendation was to withhold or abstain were dropped from the sample.
Control Variables	
<i>LogMktval</i>	Natural logarithm of the market value of the firm.
<i>MTB</i>	Market-to-book ratio of equity.
<i>LogSales</i>	Natural logarithm of the sales revenue of the firm.
<i>SDAbnROA</i>	Standard deviation of the industry-adjusted return on assets calculated over the prior 3 years.
<i>DualCEO</i>	Indicator variable assuming a value of 1 if the CEO is also the Chairman of the Board, and zero otherwise.
<i>BusyNEDirectors</i>	Percentage of non-executive directors that sit on three or more boards.
<i>CEOTenure</i>	CEO tenure measured in years.
<i>NewCEO</i>	Indicator variable assuming value 1 if the CEO is in his first year, and 0 otherwise.
<i>GenderRatio</i>	Percentage of female directors.
<i>BoardSize</i>	Number of directors.
<i>InsidersPct</i>	Percentage of shareholders that are insiders of the company.
<i>CompChangeAfterMeeting</i>	Indicator variable assuming value 1 if the firm issued an 8-k after the annual meeting communicating a change to the CEO compensation contract.
<i>BlockholdersPct</i>	Percentage of outstanding shares held by blockholders. Blockholders are defined as investors who hold at least 5% of outstanding shares.

Appendix B
Timeline of proxy filing and ISS recommendations
for a representative firm with a December fiscal year end



In our example a firm has a fiscal year ending on December 31 of 2015. The proxy statement and related ISS assessments will likely be issued around March 2016. The proxy statement will include descriptions of the compensation paid to executives in fiscal year 2015, and any material changes (or lack thereof) to compensation practices determining the pay of executives in fiscal year 2016. Proxy statement, ISS assessments, recommendations, and SOP vote are all dated 2016 and we posit that they are predictive of accounting performance of fiscal year 2016. In our regressions we indicate the ISS assessments issued in March of 2016 as $ISSAssessment_{i,2016}$ to indicate that the information included in the proxy statement (describing the compensation paid in fiscal year 2015) becomes available to investors and to ISS in 2016.

Appendix C
ISS Recommendations and Say-On-Pay Vote Outcomes

Panel A: Pooled Sample

ISS recommendations and Say-on-Pay vote outcome		<i>SOP Vote Outcome</i>		
		<i>Fail</i>	<i>Pass</i>	<i>Total</i>
<i>ISS recommendation</i>	<i>For</i>	13	12,595	12,608
	<i>Against</i>	251	1,405	1,656
	<i>Total</i>	264	14,000	14,264

Panel B: Sample Restricted to Passing Votes

ISS recommendations and Say-on-Pay vote outcome		<i>SOP Vote Outcome</i>		
		<i>Low-pass</i>	<i>High pass 80%</i>	<i>Total</i>
<i>ISS recommendation</i>	<i>For</i>	692	11,903	12,595
	<i>Against</i>	967	438	1,405
	<i>Total</i>	1,659	12,341	10,052

Note: Panel A reports the composition of the combinations between ISS recommendations “for” and “against” and the outcomes of the Say-on-Pay votes for the all the firm-years included in our sample. A Say-on-Pay vote passes (“Pass”) when the votes in favor are greater than the required percentage of base, as set by the firm. Panel B reports the combinations of ISS recommendations and Say-on-Pay vote outcomes restricting the sample to passing Say-on-Pay votes only. In Panel B we distinguish between observations in which the Say-on-Pay vote passed with favorable votes greater than 80% of the base (“High Pass 80%”) from votes that meet the required hurdle set by the firm, but remain below 80%.

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Table 1: Sample Composition by Industry

Sector	Global Industry Classification (GIC)	N Firms	N Observations	Percentage of Sample
10	Energy	227	1,017	6.17
15	Materials	159	796	4.83
20	Industrial	472	2,314	14.04
25	Consumer Discretionary	458	2,073	12.58
30	Consumer Staples	136	619	3.76
35	Healthcare	591	2,279	13.83
40	Financials	688	3,181	19.3
45	Information Technology	552	2,341	14.21
50	Telecommunication Services	137	600	3.64
55	Utilities	83	428	2.6
60	Real Estate	173	832	5.05
Total		3,676	16,480	100.00

Notes: Table 1 reports the composition of our sample using the MSCI Global Industry Classification Standard (GICS). We limit the granularity of our classification to the first two digits of the industry code.

Table 2: Descriptive Statistics

Panel A: Descriptive statistics on ISS assessments, firm characteristics and voting outcomes

Variable	N	Mean	StdDev	p25	p50	p75
<i>AbnROA</i>	16240	0.043	0.654	-0.016	0.025	0.107
<i>QSOOverall</i>	10943	5.469	2.878	3.000	5.000	8.000
<i>QSAudit</i>	10943	2.005	2.518	1.000	1.000	2.000
<i>QSBoard</i>	10943	5.490	2.876	3.000	5.000	8.000
<i>QSShareholders</i>	10943	5.353	2.888	3.000	5.000	8.000
<i>QSComp</i>	10943	5.429	2.880	3.000	5.000	8.000
<i>P4PConcern</i>	8106	1.392	0.658	1.000	1.000	2.000
<i>NPPConcern</i>	8123	1.080	0.303	1.000	1.000	1.000
<i>PeerGroupConcern</i>	8131	1.138	0.362	1.000	1.000	1.000
<i>SevCICConcern</i>	8118	1.498	0.555	1.000	1.000	2.000
<i>CCCommConcern</i>	8029	1.380	0.520	1.000	1.000	2.000
<i>ISSAgainst</i>	14264	0.116	0.320	0.000	0.000	0.000
<i>Pass</i>	14295	0.981	0.135	1.000	1.000	1.000
<i>HighPass80%</i>	14028	0.881	0.324	1.000	1.000	1.000
<i>LogMktval</i>	15196	6.917	1.977	5.551	6.927	8.222
<i>MTB</i>	15196	1.429	2.947	0.416	0.903	1.677
<i>LogSales</i>	16015	6.452	2.199	5.116	6.564	7.889
<i>SDAbnROA</i>	15721	0.064	0.241	0.008	0.025	0.058
<i>DualCEO</i>	14905	0.398	0.489	0.000	0.000	1.000
<i>InsiderPct</i>	14905	0.162	0.086	0.100	0.143	0.200
<i>BusyNEDirectors</i>	14905	0.054	0.089	0.000	0.000	0.100
<i>CEOTenure</i>	14248	5.873	6.090	1.700	3.900	8.000
<i>NewCEO</i>	14248	0.166	0.372	0.000	0.000	0.000
<i>GenderRatio</i>	14905	0.877	0.109	0.800	0.889	1.000
<i>BoardSize</i>	14905	8.859	2.486	7.000	9.000	10.000
<i>InsidersPct</i>	12374	0.125	0.183	0.020	0.049	0.140
<i>BlockholdersPct</i>	12375	0.269	0.170	0.146	0.249	0.366
<i>CompChangeAfterMeeting</i>	16480	0.021	0.145	0.000	0.000	0.000

Panel B: Changes in ISS assessments from the prior year

<i>P4PConcern</i>	Low (t)	Med (t)	High (t)
Low (t-1)	3,339	567	200
Med (t-1)	621	388	170
High (t-1)	153	206	184
<i>NPPConcern</i>	Low (t)	Med (t)	High (t)
Low (t-1)	5,253	162	12
Med (t-1)	190	174	10
High (t-1)	20	17	11
<i>PeerGroupConcern</i>	Low (t)	Med (t)	High (t)
Low (t-1)	4,676	355	15
Med (t-1)	406	350	18
High (t-1)	16	19	2
<i>SevCICConcern</i>	Low (t)	Med (t)	High (t)
Low (t-1)	2,486	488	43
Med (t-1)	418	2,159	96
High (t-1)	50	89	11
<i>CCCommConcern</i>	Low (t)	Med (t)	High (t)
Low (t-1)	3,347	318	27
Med (t-1)	634	1,278	47
High (t-1)	28	24	30
<i>QSComp</i>	Low (t)	Med (t)	High (t)
Low (t-1)	1,662	706	239
Med (t-1)	757	1,739	765
High (t-1)	271	786	1,287
<i>ISSAgainst</i>	Against (t)	For (t)	
Against (t-1)	385	683	
For (t-1)	725	8,223	

Notes: Panel A reports descriptive statistics for the variables of interest in our study. The descriptive statistics were calculated for each variable on the entire range of observations. In our statistical analyses we winsorize all continuous variables at the 1st and 99th percentiles. Panel B reports the stationarity of the ISS assessments with the counts of observations that fall into each cell, comparing year t to year t-1.

Table 3: Correlation Matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) <i>AbnROA</i>	1.000								
(2) <i>QS_Overall</i>	-0.078***	1.000							
(3) <i>QS_Audit</i>	-0.035***	0.246***	1.000						
(4) <i>QS_Board</i>	-0.062***	0.493***	0.089***	1.000					
(5) <i>QS_Shareholders</i>	-0.000	0.596***	0.013	0.089***	1.000				
(6) <i>QSComp</i>	-0.093***	0.688***	0.101***	0.276***	0.086***	1.000			
(7) <i>P4PConcern</i>	-0.055***	0.198***	0.049***	0.041***	0.010	0.278***	1.000		
(8) <i>NPPConcern</i>	-0.009	0.058***	0.008	0.024**	-0.005	0.078***	0.157***	1.000	
(9) <i>PeerGroupConcern</i>	0.031***	0.061***	-0.020*	-0.022*	0.032***	0.079***	0.246***	0.052***	1.000
(10) <i>SevCICConcern</i>	-0.004	0.086***	-0.028**	0.001	0.032***	0.129***	0.060***	0.067***	0.026**
(11) <i>CCCommConcern</i>	-0.024**	0.334***	0.031***	0.314***	0.030***	0.383***	0.155***	0.056***	0.030***
(12) <i>ISSAgainst</i>	-0.018**	0.195***	0.052***	0.075***	0.026**	0.241***	0.708***	0.213***	0.207***
(13) <i>Pass</i>	-0.005	-0.066***	-0.006	-0.015	0.001	-0.105***	-0.324***	-0.102***	-0.101***
(14) <i>LogMktval</i>	0.144***	-0.234***	-0.111***	-0.178***	-0.062***	-0.230***	-0.016	0.113***	0.036***
(15) <i>MTB</i>	-0.704***	0.028***	-0.014	0.031***	0.007	0.043***	-0.028**	-0.041***	0.088***
(16) <i>LogSales</i>	0.256***	-0.231***	-0.062***	-0.189***	-0.083***	-0.244***	-0.029***	0.133***	-0.046***
(17) <i>SDAbnROA</i>	-0.473***	0.099***	0.062***	0.055***	-0.003	0.117***	0.057***	-0.026**	0.088***
(18) <i>DualCEO</i>	0.011	0.064***	-0.011	0.067***	0.064***	0.023**	0.055***	0.079***	0.065***
(19) <i>InsiderPct</i>	-0.046***	0.159***	0.034***	0.297***	0.013	0.133***	0.025**	-0.004	-0.016
(20) <i>BusyNEDirectors</i>	0.035***	-0.016	-0.019*	-0.075***	0.006	-0.000	0.061***	0.060***	0.066***
(21) <i>CEOTenure</i>	0.031***	0.036***	-0.053***	0.089***	0.024**	0.016	0.016	0.036***	0.039***
(22) <i>NewCEO</i>	-0.035***	-0.006	0.026**	-0.016	-0.015	0.007	0.014	0.025**	-0.007
(23) <i>GenderRatio</i>	-0.087***	0.153***	0.017*	0.201***	0.029***	0.160***	0.032***	0.001	0.022*
(24) <i>BoardSize</i>	0.052***	-0.104***	-0.075***	-0.082***	0.021**	-0.145***	-0.035***	0.050***	-0.028**
(25) <i>InsidersPct</i>	-0.028***	0.277***	0.056***	0.373***	0.096***	0.173***	0.009	0.023*	-0.018
(26) <i>BlockholdersPct</i>	-0.005	-0.047***	0.006	-0.099***	-0.021**	-0.024**	0.036***	-0.015	0.035***
(27) <i>CompChangeAfterMeeting</i>	0.001	-0.017*	-0.008	-0.028***	-0.009	-0.006	0.022**	-0.001	0.024**

(Table 3 continues on the next page)

	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(10) <i>SevCICConcern</i>	1.000								
(11) <i>CCCommConcern</i>	0.004	1.000							
(12) <i>ISSAgainst</i>	0.218***	0.220***	1.000						
(13) <i>Pass</i>	-0.063***	-0.110***	-0.358***	1.000					
(14) <i>LogMktval</i>	0.011	-0.218***	0.003	-0.011	1.000				
(15) <i>MTB</i>	-0.034***	0.088***	-0.014	0.006	0.050***	1.000			
(16) <i>LogSales</i>	0.006	-0.263***	-0.005	-0.009	0.801***	-0.187***	1.000		
(17) <i>SDAbnROA</i>	-0.026**	0.101***	0.041***	-0.003	-0.146***	0.272***	-0.226***	1.000	
(18) <i>DualCEO</i>	0.055***	0.046***	0.028***	-0.032***	0.143***	-0.005	0.131***	-0.026***	1.000
(19) <i>InsiderPct</i>	-0.001	0.234***	0.047***	-0.026***	-0.264***	0.112***	-0.246***	0.061***	0.080***
(20) <i>BusyNEDirectors</i>	-0.025**	-0.042***	0.033***	0.004	0.286***	0.037***	0.247***	0.022***	0.003
(21) <i>CEOTenure</i>	0.063***	0.076***	0.020**	-0.027***	-0.052***	-0.002	-0.056***	-0.044***	0.212***
(22) <i>NewCEO</i>	0.000	-0.014	0.016*	-0.008	-0.005	-0.006	0.021**	0.058***	-0.087***
(23) <i>GenderRatio</i>	0.019	0.194***	0.043***	-0.024***	-0.305***	0.022***	-0.300***	0.059***	-0.046***
(24) <i>BoardSize</i>	0.007	-0.176***	-0.027***	0.022**	0.480***	-0.190***	0.446***	-0.140***	0.013
(25) <i>InsidersPct</i>	-0.070***	0.229***	0.056***	0.026***	-0.248***	0.058***	-0.182***	0.039***	0.054***
(26) <i>BlockholdersPct</i>	0.045***	-0.067***	0.010	-0.012	-0.110***	0.014	-0.083***	0.023**	-0.100***
(27) <i>CompChangeAfterMeeting</i>	0.018*	-0.024**	0.017**	-0.025***	-0.002	-0.009	-0.001	-0.006	-0.027***
	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	
(19) <i>InsiderPct</i>	1.000								
(20) <i>BusyNEDirectors</i>	-0.159***	1.000							
(21) <i>CEOTenure</i>	0.165***	-0.096***	1.000						
(22) <i>NewCEO</i>	-0.014*	0.015*	-0.389***	1.000					
(23) <i>GenderRatio</i>	0.221***	-0.099***	0.050***	-0.026***	1.000				
(24) <i>BoardSize</i>	-0.361***	0.122***	-0.039***	0.018**	-0.285***	1.000			
(25) <i>InsidersPct</i>	0.366***	-0.091***	0.185***	-0.052***	0.134***	-0.178***	1.000		
(26) <i>BlockholdersPct</i>	-0.092***	0.023**	-0.090***	0.019**	0.039***	-0.123***	-0.361***	1.000	
(27) <i>CompChangeAfterMeeting</i>	-0.026***	0.017**	-0.009	0.039***	0.005	0.000	-0.038***	0.043***	

Notes: This table reports the pairwise Pearson correlation coefficients with respect to all our variables of interest. Statistical significance is indicated as follows: * p<0.10; ^ p<0.05; # p<0.01.

Table 4: ISS Assessments and Say-on-Pay Outcomes

LPM	DV = Pass			DV = High Pass80%		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>ISSAgainst_{i,t}</i>	-0.174*** (-11.57)			-0.706*** (-38.31)		
<i>QSComp_{i,t}</i>		-0.021*** (-5.98)			-0.037*** (-5.32)	
<i>P4PConcern_{i,t}</i>			-0.067*** (-8.89)			-0.235*** (-21.55)
<i>NPPConcern_{i,t}</i>			-0.029* (-1.87)			-0.020 (-0.97)
<i>PeerGroupConcern_{i,t}</i>			-0.009 (-0.86)			-0.022 (-1.47)
<i>SevCICConcern_{i,t}</i>			-0.012** (-2.31)			-0.065*** (-6.00)
<i>CCCommConcern_{i,t}</i>			-0.024*** (-3.07)			-0.045*** (-3.98)
<i>Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Year FE</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Industry FE</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>FYE Month FE</i>	No	No	No	No	No	No
<i>N</i>	6885	5199	4846	6744	5084	4740
<i>Adj. R²</i>	0.170	0.030	0.137	0.447	0.044	0.267

Notes: This table reports the coefficients estimated for Eq. (1). Columns (1) and (4) estimate the association between ISS against recommendations and the likelihood of a favorable Say-on-Pay vote outcome. Columns (2) and (5) estimate the association between ISS compensation Quality Score and the likelihood of a favorable Say-on-Pay vote outcome. Columns (3) and (6) examine the relation between the individual levels of concern and a favorable SOP vote outcome. Each model is estimated twice, first using the indicator variable *Pass* (assuming a value of 1 if the SOP vote meets or beats the minimum threshold defined by the firm, and zero otherwise) reported in Columns (1-3), and then using *HighPass80%* (an indicator variable if the SOP vote receives at least 80% of the available votes, and zero if the SOP passes but with a lower percentage of favorable votes; the variable is not defined if the Say-on-Pay vote fails) reported in Columns (4-6). All other variables are defined in Appendix A. All analyses are performed using a linear probability model (LPM) with standard errors clustered at the firm level and include industry and year fixed effects. All continuous variables are winsorized at the 1st and 99th percentiles. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table 5: ISS Assessments and Firm Accounting Performance (ROA)

Panel A: Univariate Analyses – Comparison of Industry-Adjusted ROA between Firms with Unfavorable ISS Assessments and Firms with Favorable ISS Assessments

	N	Mean difference	<i>t</i> -Stat	<i>p</i> -value (two-tail)	N	Mean difference	<i>t</i> -Stat	<i>p</i> -value (two-tail)
	<i>P4PConcern_{i,t}</i>				<i>NPPConcern_{i,t}</i>			
Pooled sample	6,395	-0.030***	-4.44	0.000	7,485	-0.039*	-1.81	0.070
Restricted to <i>Pass</i>	6,231	-0.037***	-4.94	0.000	7,334	-0.040*	-1.71	0.087
Restricted to <i>HighPass80%</i>	5,543	-0.047***	-3.62	0.000	6,515	-0.043	-1.36	0.172
	<i>SevCICConcern_{i,t}</i>				<i>CCCommConcern_{i,t}</i>			
Pooled sample	4,458	-0.029**	-2.40	0.017	5,172	-0.009	-0.61	0.539
Restricted to <i>Pass</i>	4,371	-0.036***	-2.80	0.005	5,055	-0.033**	-2.01	0.044
Restricted to <i>HighPass80%</i>	3,858	-0.054***	-2.81	0.005	4,509	-0.079**	-2.16	0.031
	<i>PeerGroupConcern_{i,t}</i>							
Pooled sample	6,979	-0.030	-1.20	0.229				
Restricted to <i>Pass</i>	6,844	-0.049*	-1.69	0.091				
Restricted to <i>HighPass80%</i>	6,133	-0.081	-1.35	0.177				
	<i>QSComp_{i,t}</i>				<i>IssAgainst_{i,t}</i>			
Pooled sample	5,279	-0.043***	-7.86	0.000	14,066	-0.037***	-6.37	0.000
Restricted to <i>Pass</i>	5,147	-0.046***	-8.17	0.000	13,808	-0.046***	-7.35	0.000
Restricted to <i>HighPass80%</i>	4,459	-0.043***	-7.31	0.000	12,189	-0.097***	-9.28	0.000

Panel B: Multivariate Analyses: ISS Assessments Predictive Ability of Firm Accounting Performance (ROA)

DV = $AbnROA_{i,t}$	Any Fiscal Year End			December Fiscal Year End			Non-December Fiscal Year End		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>ISSAgainst</i> _{<i>i,t</i>}	-0.007 (-1.43)			-0.004 (-0.71)			-0.017** (-2.46)		
<i>QSComp</i> _{<i>i,t</i>}		0.001 (0.45)			0.003 (1.18)			-0.005** (-1.97)	
<i>P4PConcern</i> _{<i>i,t</i>}			-0.003 (-1.07)			-0.001 (-0.49)			-0.007** (-2.15)
<i>NPPConcern</i> _{<i>i,t</i>}			-0.001 (-0.27)			-0.007 (-1.33)			0.019*** (2.65)
<i>PeerGroupConcern</i> _{<i>i,t</i>}			0.000 (0.07)			-0.002 (-0.36)			0.002 (0.42)
<i>SevCICConcern</i> _{<i>i,t</i>}			0.002 (0.70)			0.003 (1.09)			-0.003 (-0.71)
<i>CCCommConcern</i> _{<i>i,t</i>}			-0.003 (-1.04)			-0.001 (-0.19)			-0.011*** (-2.92)
<i>Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Year FE</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Industry FE</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>FYE Month FE</i>	No	No	No	No	No	No	Yes	Yes	Yes
<i>N</i>	6693	6125	4707	5050	4653	3588	1643	1472	1119
<i>Adj. R²</i>	0.740	0.705	0.747	0.724	0.688	0.735	0.827	0.806	0.814

Notes: This table reports the results of our statistical tests analyzing the relation between ISS assessments and firm accounting performance in the subsequent year. **Panel A** reports the results of univariate analyses comparing the average industry-adjusted ROA exhibited by firms that received an unfavorable assessment by ISS with that of firms that received a favorable assessment by ISS. A negative difference indicates that firms with unfavorable ISS assessment exhibited lower industry-adjusted ROA compared to firms that received favorable assessments. For all assessment variables measured with ordinal variables assuming more than two values (i.e. *P4PConcern*, *NPPConcern*, *SevCICConcern*, *CCCommConcern*, *PeerGroupConcern*, and *QSComp*) we compared firms classified as high risk (i.e. ordinal variable assuming a value of 3) with firms classified as low risk (i.e. ordinal variable assuming a value of 1); since the variable *ISSAgainst* is defined as an indicator variable assuming only values of 0 or 1, we compared ROA of firms for which ISS recommended “for” with that of firms for which ISS recommended “against”. **Panel B** reports the coefficients estimated in our multivariate analyses (Eq. (2)). We estimate Eq. (2) three times: first on the pooled sample (col (1)-(3)), then splitting the sample between firms that end their fiscal year in December (col (4) – (6)) and firms whose fiscal year ends in months other than December (col (7) – (9)). Columns (1), (4), and (7) relate to the specification of *ISSAssessment* corresponding to the ISS SOP recommendations. Columns (2), (5),

and (8) relate to the specification referring to ISS compensation quality score. Columns (3), (6), and (9) refer to the specification of Eq. (2) where describes the variable *ISSAssessment* is substituted by each ISS levels of concern. All estimations are performed using OLS with standard errors clustered at the firm level and include industry and year fixed effects. In the specification related to firms with fiscal year end not in December, we also include fiscal year month fixed effects. All variables are defined as indicated in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table 6: Predictive Ability of ISS and Shareholders Agreement vs. Disagreement with respect to Industry-Adjusted ROA

DV = $AbnROA_{i,t}$	Any Fiscal Year End	December FYE	Non-Dec FYE
	(1)	(2)	(3)
AA_t	-0.012* (-1.68)	-0.008 (-0.86)	-0.022* (-1.74)
FA_t	-0.006 (-1.07)	-0.004 (-0.54)	-0.016** (-1.96)
<i>Controls</i>	Yes	Yes	Yes
<i>Year FE</i>	Yes	Yes	Yes
<i>Industry FE</i>	Yes	Yes	Yes
<i>FYE Month FE</i>	No	No	No
Wald test: $H_0: "AA \neq FA"$	p>0.10	p>0.10	p>0.10
N	6690	5047	1643
$Adj. R^2$	0.740	0.725	0.831

Notes: This table reports the estimations of Eq. (3), which describes the relation between agreement and disagreement between ISS and shareholders and accounting performance. Column (1) reflects the pooled sample, Column (2) includes a subsample obtained by restricting our observations to firms with fiscal years ending in December, and Column (3) includes the subsample of firms with non-December fiscal year ends. +Agreement and disagreement are defined as follows. When the SOP vote passes and ISS recommends “for”, we say that ISS and shareholders agree on the favorable outcome (indicator variable FF assumes a value of 1 in this case and 0 otherwise); when the SOP vote passes and ISS recommends “against”, we say that ISS and shareholders disagree on the SOP outcome (indicator variable FA assumes a value of 1 in this case and 0 otherwise); when the SOP vote fails and ISS recommends “against”, we say that ISS and shareholders agree on the unfavorable outcome (indicator variable AA assumes a value of 1 in this case and 0 otherwise); cases in which ISS recommends “for” and the SOP vote fails are extremely rare, and dropped from our sample. We estimate the coefficients using OLS regressions with standard errors clustered at the firm level and including industry and year fixed effects. FF is the base case. All other variables are defined as indicated in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.