# ecgi

# Do Institutional Investors Monitor their Large-Scale vs. Small-Scale Investments Differently? Evidence from the Say-On-Pay Vote

Miriam Schwartz-Ziv
Hebrew University of Jerusalem and ECGI

Russ Wermers
University of Maryland and ECGI

This paper can be downloaded without charge from:
http://ssrn.com/abstract_id=3096745

www.ecgi.global/content/working-papers

european corporate governance institute

ECGI Working Paper Series in Finance

# Do Institutional Investors Monitor their Large-Scale vs. Small-Scale Investments Differently? Evidence from the Say-On-Pay Vote

Miriam Schwartz-Ziv
Russ Wermers

## Abstract

We examine the relation between an institution's stock ownership and its tendency to support corporate management through the "Say-on-Pay" (SOP) executive compensation vote. Institutional advisors are more likely to oppose management on the SOP vote for their small-scale investments, i.e., investments that comprise a small fraction of an institution's aggregate stockholdings across its funds, or, alternatively, investments that comprise a small fraction of the total equity market capitalization of a corporation. We find evidence indicating that this voting pattern reflects an institutions' overall sentiment for the stock, and is particularly prevalent when institutions have limited attention to monitor their investments.

Miriam Schwartz-Ziv*
Assistant Professor of Finance
Hebrew University of Jerusalem, Jerusalem School of Business
Administration
Mount Scopus
Jerusalem, 91905, Israel
e-mail: Miriam.Schwartz@mail.huji.ac.il

Russ Wermers
Professor of Finance
University of Maryland, Robert H. Smith School of Business
4471 Van Munching Hall
College Park, MD 20742, United States
phone: +1 301 405 0572
e-mail: rwermers@rhsmith.umd.edu

*Corresponding Author

# Do institutional investors monitor their large-scale vs. small-scale investments differently? Evidence from the say-on-pay vote

Miriam Schwartz-Ziv and Russ Wermers*

April 27, 2022

## Abstract

We examine the relation between an institution's stock ownership and its tendency to support corporate management through the "Say-on-Pay" (SOP) executive compensation vote. Institutional advisors are more likely to oppose management on the SOP vote for their small-scale investments, i.e., investments that comprise a small fraction of an institution's aggregate stockholdings across its funds, or, alternatively, investments that comprise a small fraction of the total equity market capitalization of a corporation. We find evidence indicating that this voting pattern reflects an institutions' overall sentiment for the stock, and is particularly prevalent when institutions have limited attention to monitor their investments.

## 1. Introduction

How is the scale of a stock investment of an institutional shareholder related to whether the institutional shareholder supports management when voting? In this study, we examine the relation between the scale of a stockholding and the institution's vote on Say-on-Pay (SOP), i.e., a vote on the appropriateness of the executive compensation of a corporation. Our paper seeks to understand whether SOP votes cast by financial institutions vary across their investments, depending on the magnitude of an investment. In studying this issue, we note that institutional investors cast the majority of all votes, and, thus, their votes potentially have a large impact on the overall vote outcome for corporate management.[1]

Starting in January 2011, U.S.-listed companies have been required to hold an SOP vote, i.e., a shareholder advisory vote to approve (or disapprove) the compensation awarded to the company's named executive officers over the prior fiscal year. The SOP vote is the only routine governance vote that offers shareholders a direct opportunity to provide feedback focused on the perceived quality of a company's top management. As such, it is a relatively low-cost monitoring opportunity that does not involve direct communication with management. Prior evidence suggests that SOP is value-enhancing (Ferri and Maber, 2013; Cuñat, Gine, and Guadalupe, 2016; Iliev and Vitanova, 2019), and that even small differences in SOP support rates can have a meaningful impact on limiting compensation levels.[2] Moreover, practitioners have suggested that the SOP vote provides shareholders with perhaps the best routine opportunity through which they can communicate, to management, their general level of satisfaction with managerial performance.[3]

To examine how the magnitude of an investment is related to SOP voting, we follow a

---

[1] We estimate that 88.2% and 35.7% of all votes are cast by financial institutions and mutual funds, respectively. As we show later, a large majority of this ownership comes in the form of "small holdings," which are less than one percent of the total AUM of an institution.

[2] See, e.g., Ertimur, Ferri, and Muslu (2010), Cai and Walkling (2011), Brady (2012), Ertimur, Ferri, and Oesch (2013), Correa and Lel (2016), Fisch, Palia, and Solomon (2018), and Denis, Jochem, and Rajamani (2019).

[3] See, e.g., Semler Brossy (2013), Bew and Fields (2012), Burr (2012), Chasan (2012), and Spencer Stuart (2017). Fos and Kahn (2017) show that the SOP vote may serve as a potential threat to management.

growing literature that examines shareholder votes (e.g., Iliev and Lowry, 2015; Malenko and Shen, 2016; Denis, Jochem, and Rajamani, 2019; Bhandari, Iliev, and Kalodimos, 2021), and focus on votes cast at the institutional advisor and mutual fund level during the 2011–2019 period. We measure the extent to which an institution is supportive of management when voting on SOP, using the aggregate votes cast by all mutual funds advised by that institution.[4] Two measures are used to estimate the scale of an institution's investment: (1) the stock's portfolio weight, i.e., the fraction of that institution's advised assets that are invested in a particular stock, and (2) the fraction of a company's market capitalization that is held by that institution.

We find that, relative to their large-scale investments, institutional investors are more likely to oppose management on the SOP vote for their small-scale investments. We use the term "small-scale investments to refer to both small portfolio-weight investments and small stock-ownership investments. We find that a decrease of one standard deviation in an institution's portfolio weight is expected to increase an institution's propensity to oppose management on the SOP vote by 5.2%, relative to the mean opposition rate. Similarly, a one-standard-deviation decrease in the fraction of a company's shares held by an institution is expected to increase an institution's propensity to oppose management on the SOP vote by 16.1%, relative to the mean opposition rate. We observe a similar pattern when institutions vote on other proposals, but within the standard management-sponsored proposals (which includes SOP), this pattern is especially pronounced for SOP votes, indicating that the SOP vote, especially, offers a governance mechanism used by investors to critically monitor their small-scale investments.

Importantly, we show that institutions are especially likely to vote against SOP for their small-scale investments when compensation is excessive. This indicates that, when institutions vote against SOP for their small-scale investments, they do not do so randomly or across the board. Rather, they vote against SOP precisely when it is reasonable to vote against the compensation

---

[4] We focus on mutual fund votes, since they are the only type of investors that are required to publicly disclose the votes that they cast.

awarded, i.e., when the compensation is excessive.

We consider two channels to explain the pattern of small-scale investors voting against SOP. The first channel is the "sentiment channel," which posits that (institutional) shareholders may tend to vote against management on SOP for their small-scale investments relative to their large-scale investments, due to their (i.e., institutions') overall sentiment. Specifically, a positive sentiment for a stock could lead to both a large portfolio weight selected and a more management-friendly vote cast.

To investigate whether the sentiment channel prevails, we contrast institutions that hold most of their advised assets through actively managed funds with institutions that hold most of their advised assets through funds that are passively managed. This allows us to examine whether institutions that tend to choose how to allocate their investments exhibit different voting patterns relative to institutions that typically passively follow market indexes. Here, we find evidence in support of the sentiment channel. Specifically, we show that institutions that invest the majority of their advised assets in actively managed funds are especially prone to oppose SOP for their small-scale investments relative to their large-scale investments. This indicates that, when institutions (through their advised funds) actively choose how to allocate their investments, they are also more likely to explicitly oppose SOP with respect to their small-scale investments. Put differently, when institutions have a positive sentiment for the stock, they tend to choose a relatively large-scale investment in the stock and to be supportive of management on the SOP vote.

More generally, we find that institutions that tend to monitor and govern independently are more likely to vote against SOP for their small-scale investments. Specifically, institutions that appear to frequently form their own opinion on how to vote, i.e., those that vote relatively frequently against the recommendations of Institutional Shareholder Services (ISS), or alternatively, against management's recommendations, are also those that vote against SOP more frequently for their small-scale investments relatively to their large-scale investments. Taken

3

together, our findings support the sentiment channel by showing that institutions that actively choose to make small-scale investments, and actively and independently monitor, are the institutions that tend to use the SOP vote to oppose management for their small-scale investments.

The second channel that we consider to explain the pattern of institutions voting against SOP for their small-scale investments is a "limited attention channel" that posits that investors have "attention budgets" (Sims, 2003; Kacperczyk, Van Nieuwerburgh, and Veldkamp, 2016). Studies have documented that investors rationally devote less attention to investments which have a smaller impact on their portfolios, i.e., their small portfolio-weight investments (e.g., Fich, Harford, and Tran, 2015; Kempf, Manconi, and Spalt, 2017). This notion is demonstrated in a letter that Vanguard sent in 2015, in which Vanguard specified its vision on engagement and governance, including the objective to establish "better and richer communication between shareholders and boards." However, as stated at the top of the letter, Vanguard sent this letter only to *some* of the companies they held—those that comprised their largest portfolio-weight investments.[5] This suggests that Vanguard sought to establish direct (and costly) communication channels particularly with their large portfolio-weight investments.

Moreover, since institutions have limited attention, the intensity with which an institution monitors a company, and the methods it uses for monitoring will likely vary from company to company. Institutions will likely choose to devote particular monitoring efforts depending on whether the monitoring benefits outweigh the costs (Grossman and Hart, 1980; Shleifer and Vishny, 1986). The SOP vote, which is a relatively low-cost monitoring mechanism, may be particularly suitable for small-scale investments that do not justify more costly monitoring methods.

Corporations, too, have limited resources and limited attention, meaning that they can meaningfully engage with only a limited fraction of their shareholders. For example, PwC (2017)

---

[5] See https://pcg.law.harvard.edu/wp-content/uploads/2016/09/7-CEO_Letter_03_02_ext.pdf.

states that "many companies reach out every year to their largest institutional investors. They might define that as investors holding at least a 5% stake, or the top 10 or 20 investors." Similarly, Spencer Stuart (2017) points out that companies proactively reach out to their largest shareholders to discuss the SOP vote. Thus, such large-scale shareholders are likely to receive enhanced (lower-cost) opportunities to communicate with management and, thus, to at least attempt to "govern management in private" (consistent with McCahery, Sautner, and Starks, 2016). Conversely, investors with small-scale investments are likely to have fewer opportunities and incentives to communicate with management and to attempt to govern in private. Therefore, for small-scale investments, shareholders may resort to low-cost monitoring opportunities, such as shareholder votes.

We next carefully apply empirical tests that are designed to address the potentially endogenous relation between the magnitude of an institution's holding and its SOP support rate for that investment. Here, we find evidence supporting the limited attention channel by examining subsets that include "distracted institutions," and contrasting these with subsets of "non-distracted institutions." Indeed, in subsets of plausibly distracted institutions, we find evidence consistent with such institutions being especially likely to oppose the SOP vote for their small-scale investments, relative to their large-scale investments. Specifically, we find that this pattern prevails: (1) during short periods of time in which many other shareholder meetings are held, and consequently, institutional shareholders have less attention to budget to each company; (2) when ISS recommends to vote against SOP, thereby requiring institutions' attention for further inspection of these proposals; and (3) when the institution and the company are physically distant from each other, thereby increasing monitoring "attention costs." Altogether, these results indicate that institutional advisors tend to vote against SOP for their small-scale investments relative to their large-scale investments, especially when such institutions' attention-budget is constrained.

We further provide evidence that institutions are especially likely to vote against SOP for

their small-scale investments relative to the likelihood that they do so for their large-scale investments, when there are "grounds" for concern. Specifically, we find that this voting pattern prevails when, ex-post, shareholders (in aggregate) are relatively unsupportive of the SOP vote, or when insiders hold a large fraction of the company—i.e., shareholders who may have different incentives as compared to an institutional investor holding a small-scale investment.

Finally, we examine whether the magnitude of a stock investment at the institutional advisor level versus the fund level better predicts the SOP vote cast. When we measure the magnitude of an investment at the mutual fund level rather than the institutional level, using a fund's portfolio weight as well as the fraction of a company's market capitalization held by a fund, we find similar results to those documented at the institutional level: funds with smaller portfolio weights and a smaller fraction-of-company owned are more likely to oppose SOP. However, when we include, in the model, holding variables aggregated to the institutional advisor level (namely, the variables *Institution's portfolio weight* and *Fraction of company held by institution*), the above-noted results are not robust at the mutual fund level. Additionally, the holding variables at the institutional advisor level consistently exhibit a substantially larger economic magnitude relative to the holding variables at the mutual fund level. Thus, our study suggests that voting decisions are made while accounting for the magnitude of the investment especially at the institutional advisor level as opposed to the fund level. We note that determining votes at the institutional advisor level offers an efficiency of scale in voting, as reflected in the above-noted Vanguard letter.

In summary, our study makes the following contributions. First, it demonstrates that when a low-cost monitoring mechanism is made available, financial institutions use it to monitor and discipline management primarily for their small portfolio weight and small fraction-of-company investments. This finding implies that, in companies with a more dispersed shareholder structure, SOP vote outcomes are more likely to be unsupportive of management. This conclusion also suggests that investors who each hold only a small fraction of the company's shares, but aggregate

6

to a large fraction of total company ownership, can potentially play a meaningful role in corporate governance when a low-cost monitoring mechanism is made available, even though such small-scale investors are likely precluded from direct negotiations with management.

Our second contribution is to show that, especially when an institution's attention is limited and its ability to actively engage with management is constrained, the governance mechanism that it uses varies, depending on the magnitude of the investment. Our study suggests that the availability of low-cost monitoring mechanisms especially allows distracted shareholders with small-scale positions to voice critical feedback to management.

## 2. Background, data, and descriptive statistics

### 2.1. Background

On January 21, 2011, the SEC made the say-on-pay (SOP) vote mandatory for all U.S.-listed companies with a public free float exceeding $75 million; two years later, it extended the rule to all U.S.-listed companies.[6] In so doing, the SEC offered shareholders an unprecedented, relatively low-cost mechanism for providing feedback to management on a regular basis.[7]

Other than SOP, the only issues that are raised routinely at shareholder meetings are the election of the directors proposed by management and the ratification of the company's auditors. SOP is unique in that it offers shareholders an opportunity to provide feedback directed to management.[8] While SOP is formally a vote on the compensation awarded to the CEO and the other four named executives, it also reflects shareholder perceptions of management performance (Bew and Fields, 2012; Burr, 2012; Chasan, 2012; Spencer Stuart, 2017; Fisch, Palia, and

---

[6] See https://www.mcguirewoods.com/news-resources/publications/say-on-pay-rules.pdf, page 2.

[7] In 2011, each company held a frequency SOP vote, in which shareholders determined whether they wished to hold the SOP vote every one, two, or three years. Kronlund and Sandy (2018) find that, for 89.7% of companies, shareholders voted in favor of an annual SOP vote.

[8] For every proposal brought to a vote at a shareholder meeting, management issues a recommendation on whether to vote for or against the proposal. For virtually all SOP proposals (99.82%) in our study, unsurprisingly, management issued a recommendation to vote in favor of SOP. Hence, essentially there exists no variation in this variable, and therefore it is not addressed in this study.

Solomon, 2018). Perhaps for this reason, SOP has been credited with increasing the dialogue between shareholders and management (Larcker, McCall, Ormazabal, and Tayan, 2012).[9] Finally, we point out that mutual funds are required to vote in the best interest of their investors, as well as ensuring that those investors have easy access to fund voting records.[10]

## 2.2. *Data*

We obtain data from several data sources. Data on company performance is obtained from CRSP and Compustat. Data on executives and their compensation is obtained from Institutional Shareholder Services (ISS). Data on mutual fund holdings is obtained from the CRSP Mutual Fund Database. Data on institutional shareholdings at the advisor level (13F) is obtained from the Thomson Reuters s-34 Files Database.[11] In Appendix A, we describe the procedures we use to match the CRSP Mutual Fund Database to the ISS Voting Analytics Database. Data on shareholder composition, including blockholders, is obtained from GMI ratings.

Voting outcomes are obtained from the ISS Voting Analytics Database.[12] This database documents the aggregate vote outcomes for each proposal that came to a vote at a shareholder meeting. These outcomes are generally reported in an 8-K filing and, occasionally, in a 10-Q or 10-K filing. In addition, the ISS Voting Analytics Database includes data on the votes cast by mutual funds, which are sourced from the N-PX form that mutual funds submit annually to the

---

[9] While the SEC may have understood this effect of SOP on small-shareholder governance while preparing the SOP rule, we could find no clear reference to such a motivation in the SEC's final rule. In general, the final rule refers to the Dodd–Frank Act (DFA) as the motivation for implementing the rule. However, the DFA does not clearly specify the need to control excessive executive compensation and the need to improve shareholder governance as motivations for improving the voice of shareholders holding a small fraction of a company. Nevertheless, our results are consistent with the notion that the SOP rule has given small (institutional) shareholders a bigger role in governance. The final SEC rule is available at: https://www.sec.gov/rules/final/2011/33-9178.pdf.

[10] See the Investment Advisors Act Rule 2106(4)-6 at https://www.sec.gov/rules/final/ia-2106.htm.

[11] Many 13F filers, including pensions and endowments, do not serve as investment advisors as they are sponsors, not managers, of funds (although they often manage some of their own assets). However, the only institutions that we include in our study are those that serve as investment advisors for mutual funds—since we measure the aggregate voting of mutual funds at the institutional level. Thus, henceforth, we often refer to 13F filers as "investment advisors."

[12] We met with ISS personnel in person several times in order to better understand the SOP voting data. In addition, the ISS helped us formulate expectations about how institutional investors vote on SOP.

8

SEC. For each issue discussed at a shareholder meeting, the ISS database also includes management recommendations on how shareholders should vote.

## *2.3.* **Descriptive Statistics**

We start by highlighting the large impact institutions and mutual funds have on vote outcomes by estimating the percentage of voted shares cast by institutions and funds. We first estimate this percentage for institutions by using data reported in ProxyPulse (2019), published by Broadridge, the only company through which shareholders can submit their votes electronically (which is how the vast majority of shareholders vote). ProxyPulse (2019) reports that, for S&P 1500 companies, 70% of the shares are held by institutional investors, and that 90% of all institutional shareholdings are voted on, while only 28% of all retail shareholdings are voted on. Hence, an estimated 88.2% = ((70%*0.9)/((70%*0.9)+(1-70%)*0.28)) of all votes are cast by institutions. This figure emphasizes that vote outcomes at the company level are typically determined by the votes cast by institutional investors, and motivates us to focus on the votes cast by financial institutions.

In addition, we estimate that in the average company-year observation, mutual funds owned 28.5% of the outstanding shares of the companies that held a SOP vote during the period 2011–2019 (Table 1). Using the above-mentioned figures, we find that, on average, an estimated 35.7% of all voted shares were voted on by mutual funds. These figures highlight that mutual funds, as a subset of institutional investors, also have a large impact on the aggregate vote outcome.

Table 2 (Panel A) documents that the median *Fraction of company's shares held by institution* is only 0.19%; the median portfolio weight of a stock at the institutional advisor level is only 0.011%. Also, SOP support rates tend to be high: the *Weighted average of the institution's SOP support rate* is equal to 90.4%. Definitions of all variables are included in the Glossary of Variables. Panel B of Table 2 demonstrates that the institutional advisor level and fund level

9

holding variables (both portfolio weight and fraction of company shareholdings) are positively correlated at a high level of statistical significance. Note, however, that this positive correlation is far from perfect: in all cases, it is lower than 50%. Thus, in our study we examine both the institutional level and the fund level voting stance, depending on the magnitude of the investment at the institutional level, and/or the fund level.

Table 3 focuses on the votes cast at the institutional advisor level. Model 3 reports, for the 20 institutions that participated in the largest number of SOP votes, the frequency with which they voted against the ISS recommendation. Note that mutual funds advised by some institutions never voted against the ISS recommendation, while those advised by other institutions did so quite frequently. For example, as Column (3) shows, ProFund Advisors never voted against the ISS recommendation, while Charles Schwab Investment Management did so 13.1% of the time. Thus, to a large degree, institutions appear to have a "house policy" on whether to fully trust the ISS recommendation or to form their own opinion about the quality of management at a particular company.

In the final column of Table 3, we focus on the delegation of the SOP voting decision within the institution (e.g., BlackRock), i.e., whether this decision is made by the institution or by the fund advised by the institution (e.g., BlackRock Large Cap Core Fund). Bew and Fields (2012) report that some institutions determine, at the institutional level, how their funds should vote, while other institutions delegate this decision to their fund managers. Indeed, column (4) of Table 3 indicates that, within some institutions, funds vote unanimously (e.g., Vanguard with a zero standard deviation of votes within institution), while others do not (e.g., EQ Advisors Trust with an 11.06% standard deviation).

The median *Standard deviation of votes within institution* is equal to 0%, indicating that within the median institution, funds vote unanimously, and therefore our analysis focuses on the institutional level. However, the average institution delegates some amount of discretion on the

10

voting decision to individual funds, as indicated by the average standard deviation that is equal to 2.2%. Following up on this variation, we also examine how the magnitudes of funds' holdings relate to the SOP votes they cast (in Section 5).

Finally, we point out that the typical investment of an institution (mutual fund) is small. Specifically, 88% (94%) of all investments comprise less than 0.5% of a company's outstanding shares. Moreover, small positions aggregate to meaningful positions: the average aggregate fraction of outstanding shares held by financial institutions (mutual funds), across all financial institutions (mutual funds) that each hold less than 1% of outstanding shares, is equal to 18.04% (14.3%); similarly, the average aggregate fraction of outstanding shares held by 13F institutions (mutual funds), across all financial institutions (mutual funds) that each hold less than 0.5%, is equal to 11.7% (8.9%). Accordingly, we consider the votes of small institutional shareholders to be, in aggregate, meaningful—especially given that SOP votes are considered to be an especially negative signal for management if their support rate for management is lower than 70%. Thus, a relatively small minority of investors can make an impact on a company's management and board.[13]

## 3. Are institutional shareholders with large-scale investments more likely to support management?

In this section, we examine how the magnitude of each investment at the institutional advisor level relates to the SOP vote outcome. We first focus on the institutional advisor level because, as shown in Figure 3, the funds of the median institution tend to vote consistently with each other, suggesting that voting decisions are typically made at the financial advisor level. In addition, institutional advisors are required by the Investment Advisors Act Rule 206(4)-6 to "adopt and implement written policies and procedures that are reasonably designed to ensure that

---

[13] ISS personnel confirmed this in discussions with us at their headquarters in Rockville, Maryland.

the advisor votes proxies in the best interest of its clients." Thus, while funds can and do diverge from their institution's policies, as indicated in column (4) of Table 3, voting is frequently determined at the institutional advisor level.[14]

To carry out our analysis, we define two "holding variables" that differently capture the magnitude of an investment. The first variable, which follows Fich, Harford, and Tran (2015) and Kempf, Manconi, and Spalt (2017), is *Institution's portfolio weight (as a fraction)*, which measures a stock's portfolio weight as a fraction of the institution's total portfolio.[15] As shown in Table 2 (Panel A), the median value of this variable is 0.11%. The second variable is *Fraction of company's shares held by institution*; the median value is 0.19%.

We construct the following measure of the extent to which an institution's votes are in support of SOP:

$$\text{Weighted average of the institution's SOP support rate } = \sum_{i=1}^{n} W_i * V_i \quad (1)$$

This measure is constructed at the institution-meeting level. Because votes are cast at the fund level and not at the institutional advisor level, we use fund-level data to construct this measure. $W_i$ denotes the weight of mutual fund $i$ for a given stock relative to the aggregate holdings of all mutual funds advised by the institution (i.e., the fraction of a company's shares held by mutual fund $i$, divided by the total fraction of the company's shares held by all mutual funds advised by the same institutional advisor, both measured at the end of the calendar quarter preceding the vote). $V_i$ is a binary variable that equals one if fund $i$ voted for SOP, and zero if it voted against SOP. $n$ indicates the number of mutual funds managed by the institution.

Each observation included in Table 4 (Panel A) is at the institution-meeting level.[16] We

---

[14] For example, BlackRock's and Vanguard's policies are published at https://www.blackrock.com/corporate/en-us/literature/fact-sheet/blk-responsible-investment-guidelines-us.pdf and https://about.vanguard.com/vanguard-proxy-voting/voting-guidelines, respectively.

[15] While 13F filings measure all (long) positions at the institutional advisor level, the result of SOP voting is only available for each mutual fund, and not for pensions, endowments, and other types of advised funds. Thus, we aggregate only the mutual fund holdings at the institutional advisor level as a proxy for how institutional advisors vote on SOP across all of their managed portfolios.

[16] We identify an institution by using the institution identifier available in the ISS database. For example, Vanguard has only one institution identifier (72998) and only one corresponding institution name (Vanguard Group, Inc).

include in the Table 4 models variables controlling for the magnitude of the investment, namely, *Institution's portfolio weight* and *Fraction of company's shares held by institution*, which are our primary variables of interest. In addition, we control for the total compensation awarded to the CEO on which the SOP vote is being held (*Total compensation of CEO t-1*), company performance measures (*ROA of company t-1*, *Company abnormal return*), company controls (*ISS recommended voting for SOP*, *Market capitalization, Fraction of company's shares held by institution*, *Number of institutions voting on proposal, Fraction of shares held by blockholders* and *Fraction of shares held by executives*),[17] CEO controls (*CEO age*, *CEO tenure*), and holdings controls (*Total assets managed by institution*). Additionally, the models include year, industry (two-digit SIC codes), and institution fixed effects as indicated at the bottom of Table 4 (Panel A). Standard errors are clustered at the institutional advisor level and are robust to heteroscedasticity. We include an institution fixed effect to control for the unobserved tendency of a given institution to vote in a particular manner across stocks and over time (as reported in column (4) of Table 3). By including an institution fixed effect, we focus our analysis on the variation of votes within an institution, which depends on the magnitude of the investment as measured in terms of portfolio weight or, alternatively, in terms of fraction-of-company-held.

We first point out some control variables included in Table 4 (Panel A) that are significantly related to the SOP vote. As expected, the larger the compensation awarded to the CEO (*Total compensation of CEO t-1* (in $Millions)), the more likely institutions are to vote against SOP, i.e., against the compensation awarded to the named executives during the previous year.[18] In addition, companies with strong prior-year performance (i.e., large *ROA of company t-1* and/or *Company abnormal return*) are likely to receive high SOP support rates from institutions.[19]

---

[17] We include *Number of institutions voting* in the specification to control for institutions' monitoring costs. As this variable increases, monitoring becomes costlier since coordination becomes more difficult.

[18] In unreported specifications, we replace the variables controlling for CEO compensation with variables controlling for the compensation awarded to the five named executives, and find very similar results.

[19] In unreported specifications in which we use the 12-month abnormal returns for the same period for which the compensation was awarded, the results pertaining to 12-month abnormal return remain very similar.

This finding implies that SOP voting is related to company performance, and not simply to the level of executive compensation (consistent with Brunarski, Campbell, and Harman, 2015; Cuñat, Gine, and Guadalupe, 2016; Correa and Lel, 2016; Fisch, Palia, and Solomon, 2018; Iliev and Vitanova, 2019). In addition, if *ISS recommended voting for SOP* the likelihood that shareholders will do so increases dramatically (consistent with Larcker, McCall, and Ormazabal, 2012; Ertimur, Ferri, and Oesch, 2013; Thomas, Palmiter, and Cotter, 2012; and, particularly, Malenko and Shen, 2016).

We next focus on our primary variables of interest, namely, the holding variables: *Institution's portfolio weight* and *Fraction of company's shares held by institution*. Our findings in Table 4 (Panel A) document that the larger the magnitude of the holding, the more likely the institution's funds are to vote in support of SOP, thereby indicating that they support both the compensation awarded and management. Specifically, model 1 of Table 4 (Panel A) estimates that a decrease of one standard deviation in *Institution's portfolio weight* (0.0107; see Table 2, Panel A) is expected to decrease the institution's SOP support rate by 0.5% (0.0107*0.4667). Since the mean institutional opposition rate to SOP is only 9.6% (1-0.904), where 0.904 is the mean *Weighted average of the institution's SOP support rate* (as reported in Table 2), the latter estimate is equal to a 5.2% (0.5%/9.6%) increase in the propensity to oppose management on SOP.

Model 1 of Table 4 (Panel A) also estimates that a one-S.D. decrease in *Fraction of company's shares held by institution* is expected to increase the propensity to oppose management on SOP by 16.1% ((0.0242*0.6391)/(1-0.904)) relative to its mean. This result indicates that the smaller a holding at the institutional advisor level (in terms of portfolio weight and fraction of company held), the more likely an institution is to vote against SOP, and the magnitude of this effect is economically significant. We note that this result is consistent with Bhandari, Iliev, and Kalodimos (2021), who document that institutions that hold an above-median fraction of outstanding shares (relative to the fraction of the outstanding shares held by other institutions) are

significantly more likely to vote against proxy access; i.e., their votes reflect a more management-friendly stance.

A possible concern is that our results are driven by the company's quality, which may vary substantially across different annual shareholder meetings, both within the same company and across different companies, and may be endogenously correlated with the magnitude of an institution's investment. To address this concern, we conduct a simple test: in model 2 of Table 4 (Panel A), we include a meeting fixed effect. This allows us to observe whether different institutions' votes in a given meeting vary depending on the magnitude of their investment. The results are very similar to those reported in model 1, alleviating the above concern.

Model 3 replicates model 1, but does not include an institution fixed effect. As noted, we include an institution fixed effect to allow us to examine the variation *within* an institution's holdings depending on the magnitude of the holding. As reported, in this regression, *Institution's portfolio weight* is no longer significant, while *Fraction of company's shares held by institution* remains significant, albeit with a smaller coefficient. Hence, the relation between the magnitude of an institution's investment and the tendency to vote with management on SOP is substantially stronger when we examine within-institution variation (by including an institution fixed effect), as opposed to when we examine the pooled cross-sectional variation (by omitting an institution fixed effect). We note that Iliev and Lowry (2015) do not include an institution or a fund fixed effect in their empirical specifications, as they are primarily interested in examining the cross-sectional variation—in their case, the types of funds that follow ISS recommendations. Our primary focus is on understanding voting variation *within* an institution (or, later, within a given mutual fund); i.e., we investigate when a given institution (or fund) is likely to vote with management, relative to its other investments, given the magnitude of each investment. Accordingly, we include an institution fixed effect in most of our models. Our findings demonstrate that an institution's SOP votes are determined, at least partially, by the magnitude of the investment, relative to the other

15

investments managed by the same institution.

In model 4, we focus on the question of whether financial institutions are able to distinguish between "deserved" compensation and "excessive" compensation, and whether they are likely to oppose SOP especially when compensation is excessive. To address this question, we follow the approach of Core, Guay, and Larcker (2008) who distinguish between "justified" (i.e., predicted) compensation and "unjustified" (i.e., residual) compensation.

Following the methodology of Core, Guay, and Larcker (2008), the predicted compensation is estimated using a regression that includes the following controls: *Fraction of shares held by blockholders, Fraction of shares held by execu*tives, ROA of company t-1, *Company abnormal return*, *Market capitalization*, *Fraction of shares held by institution*, *CEO age*, *CEO tenure*, and year and industry fixed effects.[20] The residual compensation is defined as the difference between the predicted compensation and the actual compensation awarded. A large residual compensation indicates that the CEO is receiving substantially higher compensation than what is expected.

Model 4 of Table 4 (Panel A) documents that the larger the CEO's residual compensation (i.e., the "unjustified" compensation) and the smaller the CEO's predicted compensation (i.e., the "justified" compensation), the more likely institutions are to vote against SOP. This finding indicates that funds are able to distinguish between the "justified" and the "unjustified" compensation, and that they tend to vote *against* SOP when the excessive-residual compensation is large, and vote *in support* of SOP when the justified-predicted compensation is large. In unreported tests, we find a low correlation between these two variables (4.7%), which indicates that the explanatory power of each variable is largely independent of the explanatory power of the other variable.

In models 5 and 6, we address the question of whether small-scale investors who may not

---

[20] We drop *CEO tenure* due to its high level of collinearity with *CEO age*.

16

have sufficient incentives to invest in monitoring nevertheless monitor where it makes the most sense to do so, namely, in companies that pay their CEO excessive compensation, i.e., where *CEO residual compensation* is greater than 0. To address this question, we define, for each of the variables measuring the magnitude of the institution's investment (i.e., *Institution's portfolio weight* and *Fraction of company's shares held by institution*), a dummy variable that identifies the bottom-quartile observations: *Institution's portfolio weight bottom quartile* and *Fraction of company's shares held by institution bottom quartile*.

As columns (5) and (6) report, institutions that hold a small-scale investment, as defined by each of the latter two variables, and that also vote on SOP in a company that awards excessive compensation, as measured by the interaction variables *Institution's portfolio weight bottom quartile * Excessive compensation* and *Fraction of company's shares held by institution bottom quartile * Excessive compensation*, are significantly more likely to vote against SOP. This finding provides further evidence that institutions with small-scale investments do not vote against SOP randomly or across the board. Rather, they do so when CEO compensation is excessive.

Finally, in models 7 and 8, we focus on the question of whether our result that institutions with small-scale investments are more likely to vote against SOP is driven by "tails" of the variables measuring the magnitude of institutions' investments, i.e., the tails of *Fraction of company's shares held by institution* and *Institution's portfolio weight*. Thus, we include in these models dummy variables that (separately) control for the top quartile, or alternatively, the bottom quartile of each of these two holding variables. As is shown in columns (7) and (8), relative to the two middle quartiles (the omitted base group), investments that fall under *Institution's portfolio weight bottom quartile* and *Fraction of company's shares held by institution bottom quartile* are more likely to oppose SOP (results are significant at the 10% level for these two variables). The coefficients of these variables indicate that when the magnitude of an investment is within the bottom quartile (in terms of portfolio weight or the fraction of company's shares held by an

17

institution), institutions are particularly likely to vote against SOP.

The positive sign of the coefficients of *Institution's portfolio weight top quartile* and *Fraction of company's shares held by institution top quartile* shows that for relatively large-scale (i.e., top-quartile) investments, institutions are more likely to vote for SOP. However, the result is only significant (at the 1% level) for the variable *Fraction of company's shares held by institution top quartile* (column (8)). Thus, while the top quartiles of the holding variables are positively related to voting in support of SOP (as reported in columns (7) and (8)), the results are more consistently significant for the bottom-quartile dummies, supporting the notion that institutions are likely to vote against SOP especially for their small-scale investments. To conclude, models 7 and 8 demonstrate that the tails of both variables follow the pattern of institutions being more likely to oppose SOP for their small-scale investments relative to their large-scale investments; however, the results are somewhat more statistically robust for the bottom tail (i.e., institutions with small-scale investments).

While our analysis thus far has focused on the SOP vote, in Panel B of Table 4 we also address the question of whether the pattern where institutions with small-scale investments voting against SOP prevails across other votes that take place at annual meetings of corporations. Accordingly, we now expand the analysis to all proposals. The specifications include, but do not report, all company performance and company controls included in Panel A of Table 4, and fixed effects for the institution, year, and Fama–French 48 industries. Additionally, because the Table 4 Panel B regressions include many different types of proposals, we include a fixed effect for each type of proposal (using ISS's "issagendaitemid" classifications). Standard errors are clustered at the institutional level. The analysis covers meetings that occurred during the period 2011–2019. Model 1 includes all proposals, model 2 includes only proposals sponsored by management, and model 3 includes only proposals sponsored by shareholders.

These models document a pattern similar to the one we have observed thus far: institutions

are more likely to vote against management when they hold a small-scale investment in the company. However, the coefficients of the holding variables in column (1) (all votes) and column (2) (management-sponsored votes) of Panel B report substantially smaller economic magnitudes, compared to those reported for the SOP vote (Table 4, Panel A). Thus, within the standard management-sponsored proposals (which include SOP), the pattern of institutions that hold small-scale investments voting against management is particularly prominent for SOP votes. Column (3) (shareholder-sponsored proposals) documents a strong pattern where institutions vote against management especially for their small-scale investments. However, since this specification includes many types of proposals, they do not include controls relevant for each type of proposal. By contrast, by focusing on a single proposal, namely, SOP, we are able to include relevant controls, which, we believe, make our findings particularly robust.

In sum, this section documents that a financial institution is particularly likely to oppose management on SOP when the institution's portfolio weight and the fraction of the company's shares held by the institution is small, relative to the institution's other holdings.


## 4. The mechanisms of SOP voting and the scale of the investment

In this section, we investigate *why* institutional shareholders tend to vote more frequently against management on SOP for their small-scale investments, relative to their large-scale investments. We explore this question through two (possibly complementary) channels: (1) the sentiment channel—institutions invest more in companies for which their overall view is more positive, and for these companies they are also more likely to vote in support of SOP, and (2) the limited attention channel—investors have limited attention, and when investors are distracted, the low-cost SOP vote is especially useful for monitoring small-scale investments that may potentially not justify more costly engagements.

*4.1. Sentiment Channel*

19

Institutional shareholders (and shareholders in general) may tend to vote against management on SOP for their small-scale investments relative to their large-scale investments due to their overall sentiment for the stock: a positive sentiment for a stock could lead to both a large portfolio weights selected, and also to a more management-friendly vote. We refer to this possibility as the "sentiment channel."

To investigate this channel, we follow the literature that has highlighted that active funds choose how to allocate their assets, and consequently may also govern differently than passive funds (Appel, Gormley, and Keim, 2016; Heath, Macciocchi, Michaely, and Ringgenberg, 2021; and Brav, Jiang, Li, and Pinnington, 2021). Accordingly, in models 1 and 2 of Table 5, we repeat the analysis of model 4 of Table 4, but split our sample depending on whether an institution tends to manage its advised assets actively (model 1) or passively (model 2).[21] Our rationale is that "active institutions" choose how to allocate their assets, while "passive institutions" typically do not, since a relatively large portion of a passive institutions' assets is invested in passive index funds that simply track an index.

To define active versus passive institutions, we estimate, for each institution, the percentage of assets invested by the institution in passive versus active funds. To do so, we first classify whether each mutual fund is active or passive. We classify a fund as passive if CRSP flags the fund as an index fund, or the fund's name suggests that it is an index fund (e.g., the fund name contains words such as "index" or "idx" or "S&P 500" or "Russell 1000"). Other funds are classified as active funds. We then define active (passive) institutions as those that have at least (less than) 50% of their assets invested in active (passive) funds.

If we observe that especially institutions that tend to actively manage their assets, have a more prominent pattern of voting against SOP for their small-scale investments, this would provide evidence that investors' chosen stock allocations and their votes are positively correlated

---

[21] Here, our control variables are unreported, but are the same as in model 4 of Table 4.

and reflect the same sentiment. For under the sentiment channel, an institution that *elects* to make a large-scale investment in a company also tends to vote with management.[22]

Using this approach, we find evidence in support of the sentiment channel. In model 1, confined to institutions that actively manage their assets as defined above, we observe that the two holding variables reported in Table 5 (*Institution's portfolio weight* and *Fraction of company's shares held by institution*) have a positive and significant coefficient (at the 5%–10% level). In model 2, confined to institutions that passively manage their assets, both holding variables have insignificant coefficients, and only the former is positive. These findings indicate that when an institution can (cannot) express its sentiment in terms of selecting which stocks to invest in, institutions' SOP votes are more (less) closely related to the magnitude of the investment selected, and reflect a consistent sentiment. Put differently, we show that institutions do indeed tend to vote against SOP for their small-scale investments especially when institutions choose to make only small-scale investments. This observation provides support for the sentiment channel. An unreported analysis conducted at the fund level, which controls for the fund's portfolio weight and the fraction of company's shares held by the fund, confirms this conclusion.

The bottom of Table 5 reports an F-test of the joint equality of *Institution's portfolio weight* and *Fraction of company's shares held by institution* across specifications (1) and (2). Additionally, F-tests that compare the equality of only one of these variables across each pair of specifications is also reported. The joint F-test equals 9.29, significant at the 1% level, strongly indicating that *Institution's portfolio weight* and *Fraction of company's shares held by institution* are jointly different in specification (1) relative to specification (2). The additional F-tests reported in Table 5 indicate that this significant difference is largely driven by the variable *Fraction of company's shares held by institution*, which is significantly different between models 1 and 2 (F-test equals 8.42), and that it is hardly driven by *Institution's portfolio weight*, which is not

---

[22] A vote for management on SOP can be considered as "passive cooperation" with management.

significantly different between models 1 and 2 (F-test equals only 0.43). Collectively, the F-tests highlight that the differences in the magnitudes of (at least one of) the coefficients of the holding variables are significantly different in model 1 compared to those of model 2.

We next examine whether institutions that tend to actively govern the companies they hold, i.e., that tend to make their voting decisions independently, more closely follow the pattern of voting against SOP for their small-scale investments. We focus on the element of making independent voting decisions to understand which type of institutions actively vote against SOP for their small-scale investments. Our goal is to understand whether the institutions that, in general, invest time and energy in making independent voting decisions (suggesting that they view votes as an important means of governance) are those that vote against SOP for their small-scale investments. Accordingly, in model 3 (4) we confine our sample to institutions that, across all votes cast in the three years preceding the observation year, had a below (above) median frequency of following management recommendations. The latter variable serves as a proxy for active governance during the observation year. In the subset of institutions that tend not to follow past management recommendations (model 3), the results show an economically larger and more significant pattern of institutions voting against SOP for their small-scale investments, relative to institutions that tend to follow management recommendations (model 4). While the joint F-test is not significant at conventional levels, the above noted differences pointed out suggest that the holding variables play a more prominent role in influencing institutions that frequently make voting decisions independently of the company's management.

Model 5 (6) reports a similar analysis, but confines the sample to institutions with a below (above) median frequency of voting consistently with ISS recommendations during the three years preceding the observation year—another proxy for active governance. Here, too, we find that the subset of institutions that vote independently of ISS (i.e., that vote relatively frequently against ISS recommendations; model 5) tend to vote against SOP for their small-scale investments. We

22

do not find such a pattern for institutions that tend to follow ISS recommendations (model 6). This difference between the specifications is further highlighted by the significant joint F-test which is significant at the 5% level. Thus, models 3–6 support the argument that institutions that actively and independently form their voting decisions, indicating that they invest time and resources in their voting decisions, are especially likely to use the SOP vote to vote against management for their small-scale investments relative to their large-scale investments.

In sum, Table 5 provides support for the sentiment channel, since it demonstrates that institutions that select in which stocks to invest, *choose* to make a large-scale investment for the same stocks they tend to vote in support of SOP. Table 5 also demonstrates that especially institutions that are active in terms of making independent voting decisions, tend to more strongly oppose management on the SOP vote for their small-scale investments. These results suggest that institutions that actively trade as well as actively monitor are more likely to express a positive (negative) sentiment for their large- (small-) scale investments on the SOP vote.

*4.2. Limited Attention Channel*

In this section we investigate the "limited attention channel," which posits that institutions have limited attsention budgets (Sims, 2003; Kacperczyk, Van Nieuwerburgh, and Veldkamp, 2016; Liu, Low, Masulis, and Zhang, 2020; Akepanidtaworn, Di Mascio, Imas, and Schmidt, 2021). Lu, Ray, and Teo (2016) demonstrate that funds' assets (and, therefore, institutions' assets) are managed by humans who have limited attention, and when they are distracted (even by personal matters such as divorce or health), their professional attention capacity suffers. Since institutions' attention is limited, they frequently rely on accessible information, e.g., information provided by the media (Fang, Peress, and Zheng, 2014; Ben-Rephael, Da, and Israelsen, 2017).

Given that institutions have limited attention, institutions will likely monitor some companies more intensely than others, and not all companies will necessarily be monitored in the same way or in the same intensity. Moreover, an institution's choice to devote attention to a

company and to monitor it will likely depend on whether the monitoring benefits outweigh the costs. Monitoring costs are borne only by the investor who monitors, but the gains are shared across all shareholders, and other non-monitoring shareholders will enjoy a free-ride (Grossman and Hart, 1980; Shleifer and Vishny, 1986). Consequently, as Chen, Harford, and Li (2007) further emphasize, institutions will assess the costs and benefits of monitoring, and choose when to monitor depending on whether the benefits of monitoring outweigh the costs.

Accordingly, prior studies have documented that institutions communicate with, and monitor, some but not all companies. For example, Carleton, Nelson, and Weisbach (1998) document that TIAA-CREF selected to privately engage in governance-related issues only with a limited number of companies. McCahery, Sautner, and Starks (2016), Becht, Franks, Grant, and Wagner (2017), and Becht, Franks, and Wagner (2021) also document engagements between institutional investors and a select number of companies.

Kempf, Manconi, and Spalt (2017) demonstrate that, due to limited attention, funds allocate more attention to investments that comprise large portfolio-weight investments in the fund's portfolio. The rationale is that the larger the portfolio-weight investment, the greater the benefits of monitoring (i.e., the benefits outweigh the costs). Because fund managers make investment decisions, the Kempf, Manconi, and Spalt (2017) measure is particularly tailored for capturing distraction at the fund level (rather than the institutional advisor level). However, their paper highlights a more general property—that those making investment decisions are more likely to pay attention, and be willing to incur monitoring costs for their large portfolio-weight investments.

Indeed, the Vanguard (2015) letter mentioned above, in which Vanguard detailed how it sought to engage with, and govern the companies they held, was sent only to the companies that comprised large portfolio-weight investments across Vanguard's advised funds. This indicates that direct engagement with corporate management, which is a relatively costly governance practice,

24

was reserved by Vanguard for their largest (institutional advisor-level) portfolio-weight holdings. It also suggests that when institutions monitor their small-portfolio weight investments, they resort to relatively low-cost governance mechanisms.

Corporations also have limited attention and, therefore, are able to thoroughly engage with only a limited number of shareholders, likely those that are most important from the company's perspective, namely, those holding a large fraction of the company's shares. For this reason, shareholders will likely receive more access to the company when they hold a large fraction of the company's shares as compared to when they hold only a small fraction of the company's shares. Indeed, PWC (2017) and Spencer Stuart (2017) indicate that companies reach out to their largest shareholders, and provide them with increased access to having a dialogue with management. Harris and Raviv (1988), Barclay and Holderness (1989), Zwiebel (1995), Pagano and Röell (1998), and Dyck and Zingales (2004) all draw a similar conclusion: shareholders holding a large fraction of the company's shares have increased access to management. Moreover, with respect to votes, prior studies suggest that shareholders who have access to management (e.g., have business ties with management) and also a relatively high ability to impact the vote outcome, are likely to cast a management-friendly vote (Cvijanović, Dasgupta, and Zachariadis, 2016; Dressler, 2020).[23]

If the limited attention channel can (also) explain our results, we should observe that the pattern of institutions being more likely to vote against SOP for their small-scale investments is particularly prevalent in times and situations in which institutions' attention is constrained. In such times, investors' ability to take costly monitoring actions, such as communicating directly with management, is particularly limited and, therefore, likely focused primarily on their large-scale

---

[23] Cvijanović, Dasgupta, and Zachariadis (2016) find that when business ties do not exist, both large fund families (i.e., those with above median assets under management) and small fund families vote similarly, but that when business ties do exist, large fund families' votes are more management-friendly than those of small fund families. This suggests that having access to management and therefore being able to have pre-voting negotiations, and also having a potentially meaningful impact on the vote outcome, ultimately leads to more supportive vote outcomes. This conclusion is further supported by Dressler (2020) who examines shareholders' votes cast at Israeli corporations. She shows that institutional shareholders with high voting power (i.e., institutions that have a high ability to influence the vote outcome) are more likely to vote in support of management-sponsored proposals. She finds evidence that these supportive votes are cast when pre-voting negotiations occur.

investments (Fich, Harford, and Tran, 2015; Kempf, Manconi, and Spalt, 2017), for which they are likely to seek and be offered enhanced monitoring opportunities. Thus, when institutions are distracted, the low-cost SOP vote may be especially useful as a "low involvement" approach to disciplining management for small-scale investments.

To explore whether the voting patterns support the limited attention channel, we focus on measures that proxy for whether institutions were distracted.[24] We first follow Iliev, Kalodimos, and Lowry (2021) who demonstrate that institutional investors are more distracted during the proxy season (i.e., the weeks in which most of the shareholder meetings occur), and reexamine our results while taking into account whether the meeting occurred during the proxy season. Figure 1 plots, for the observations included in our sample, a histogram of the frequency of the week number (within the calendar year) during which the meetings occurred. As Figure 1 clearly shows, most meetings are concentrated in weeks 16–24 of a given calendar year, and thus we define these weeks as the proxy season. We assume that institutions are more distracted at meetings held during the proxy season since many other meetings are held during that period, and institutions must make voting decisions on a large number of companies in a short period of time.

Model 1 of Table 6 is restricted to meetings that took place during the proxy season (weeks 16–24), while model 2 is restricted to those that did not occur during the proxy season (weeks 1–15 and 25–52). These models demonstrate that the pattern of institutions voting against SOP for their small-scale investments is particularly strong in the subset of meetings that occur during the proxy season (model 1). As the table shows, in model 1 the coefficients of both holding variables are positive and significant, while in model 2 only the holding variable *Fraction of company's shares held by institution* is (positive and) significant. These findings provide support for the limited attention channel, since they demonstrate that when institutions are distracted because they must vote on a very large number of proposals during a very short time period, they tend to vote

---

[24] For this reason, we do not include an analysis that is based on the Kempf, Manconi, and Spalt (2017) fund-level measure of distraction.

against SOP for their small-scale investments, although F-tests do not strongly reject equality.

A possible concern is that institutions strategically choose the magnitude of their investments depending on company characteristics, which are correlated with whether shareholder meetings are held during the proxy season. For example, companies with weak financial performance may tend to schedule their meetings during the proxy season, and institutions may also prefer to make only small-scale investments in companies that perform weakly. To address this concern, in Appendix B, we report two tests. First, in Table B.1, we report summary statistics for each of the two holding variables for companies that held their meetings during the proxy season, versus those that did not. As this table reports, the magnitudes of these variables are almost identical for each subset. For example, the average *Institution's portfolio weight* for companies that held a shareholder meeting during the proxy season is equal to 0.23%, while this average is equal to 0.27% for companies that did hold their shareholder meeting during the proxy season (columns (1) and (2), respectively). The difference between these two figures is statistically insignificant (column (3)). Additionally, in Table B.2 we repeat model 1 of Table 4 (Panel A) but replace the dependent variable with the binary variable *Proxy season*, which equals one if the meeting was held during the proxy season (i.e., in weeks 16–24), and zero if it was not. As Table B.2 reports, the two holding variables are insignificant, indicating that the magnitudes of the holding variables for meetings held during the proxy season are not statistically different from the holding variables of meetings not held during the proxy season. Thus, these results support the argument that institutions do not strategically select the magnitude of their investment depending on whether the meeting is held during the proxy season or not.

To further examine the limited attention channel, we report an additional analysis that focuses on a different distraction measure, namely, whether ISS recommended voting against SOP and, therefore, also against the management recommendation. We view this measure as one that captures the extent to which institutions are distracted, since our data indicates that an ISS

27

recommendation to vote against SOP flags problematic proposals that warrant further inspection. Specifically, our data documents that when ISS recommends voting in support of SOP, then 99.8% of the SOP proposals pass, but when ISS recommends voting against SOP, only 85.4% of the proposals pass. Thus, when votes are "flagged" with a negative ISS recommendation, there is a substantially higher likelihood that the vote will not pass, consistent with the findings of Malenko and Shen (2016).

Motivated by the latter observation, in model 3 (4), we split the observations, depending on whether ISS recommended a vote against (for) SOP. A negative ISS recommendation can serve as a proxy for whether extra monitoring efforts are required. Our results in Table 7, columns (3) and (4), show that, indeed, when extra monitoring efforts are required because ISS recommended voting against SOP, institutions are particularly likely to oppose SOP for their small-scale investments, relative to their large-scale investments. We find that when ISS recommends voting against management (model 3), the coefficients of the holding variables are at least 10 times larger, and exhibit higher levels of statistical significance, compared to when ISS recommends voting for management (model 4). The joint F-test, which is significant at the 1% level, further highlights that the difference between the coefficients of the holding variables reported in model 3 versus model 4 are jointly significant.

Taken together, the findings indicate that, especially when ISS recommends to vote against SOP, institutions are more likely to explicitly oppose SOP for their small-scale investments relative to their large-scale investments. These results corroborate the conclusion that, especially when institutions are distracted because there is a need to inspect the proposal more closely, institutions are more likely to vote against SOP for their small-scale investments.

Our last measure of an institution's monitoring-attention cost is the geographical distance between an institution and a company. Prior studies argue that shareholders who are physically close to companies are better able to monitor these close companies because they have increased

28

access to information pertaining to the company (e.g., Coval and Moskowitz, 1999; Cumming and Dai, 2010). Thus, if a financial institution is physically close to a company it holds, it is less attention-consuming and costly for the institution to monitor the company, since conducting a physical meeting that allows monitoring the company does not require extensive travel. Therefore, we expect to find that when institutions and companies are distant (close), the magnitude of the investment should (should not) be strongly related to the vote they cast since institutions are more (less) distracted when monitoring physically distant (close) companies. Put differently, the low-cost SOP vote is a particularly useful monitoring mechanism for distracted institutions with small-scale investments.

We examine this possibility empirically by first estimating the distance between each institution and company. To do so, we manually find the zip codes of the financial institutions, and we obtain the companies headquarter zip code from Compustat. We then estimate the distance between these two zip codes using the NBER ZIP Code Distance Database. We split the sample depending on whether this distance is above or below the median distance (models 5 and 6, respectively). As expected, for distant institutions (model 5), the coefficients of both holding variables are positive and significant, while, for close institutions (model 6), only the *Fraction of company's shares held by institution* is positive and significant, although F-tests do not strongly reject the equality of the two models. Overall, the results demonstrate that distant and, therefore, more distracted institutions, are more likely to consistently follow the pattern of voting against SOP for their small-scale investments. To alleviate identification concerns, for this analysis too we show, in Appendix B, that the holding variables do not significantly vary, depending on the location of the company.

In summary, in this section we have shown that particularly distracted institutions are likely to vote against SOP for their small-scale investments. Thus, as a low-cost monitoring mechanism, the SOP voting seems to be particularly beneficial for monitoring small-scale investments

especially when institutions have limited attention they can devote to monitoring.

*4.3. SOP votes when there are "grounds for concern"*

In Table 4 (models 5 and 6), we have shown that institutions do not vote against SOP randomly or across the board for their small-scale investments, but rather do so especially when compensation is excessive, i.e., when it is reasonable to vote against SOP. Following up this analysis, in this section we further examine whether institutions that vote against SOP for their small-scale investments do so especially when there are "grounds for concern."

We start by focusing on SOP votes that, ex post, received a relatively large fraction of votes cast against SOP. Such votes indicate that, ultimately, shareholders collectively demonstrated concern. Accordingly, in Table 7, we split the observations depending on whether the shareholder SOP support rate is "particularly low" or "not particularly low" (models 1 and 2, respectively). We define a particularly low support rate as an SOP vote that receives less than 70% support from shareholders. We use this threshold, since, in our in-person discussions with ISS, their researchers explained that an SOP vote that passes by a margin of less than 70% is viewed unfavorably by a typical company's board of directors and investors.[25] Consequently, ISS's policy is that SOP votes that receive less than 70% support warrant further review. In such cases, ISS decides on a case-by-case basis how to recommend voting on the election of compensation committee members and, in exceptional cases, even the full board. Put differently, if SOP support rates are equal to or below 70%, ISS will be less likely to recommend voting in support of directors as a default option.[26]

Indeed, in Table 7 we document substantially larger coefficient magnitudes for the holding variables in the specification restricted to the meetings in which, ex ante, shareholders are

---

[25] Specifically, we met with ISS in Rockville, Maryland. We, especially, acknowledge the helpful guidance of Martha Carter, who was the head of research at ISS at that time.

[26] https://www.issgovernance.com/file/policy/active/americas/US-Voting-Guidelines.pdf, see page 12.

Electronic copy available at: https://ssrn.com/abstract=3096745

unsupportive of management, i.e., support rates are below 70% (model 1), relative to those in which shareholders are supportive of management (model 2). Additionally, both holding variables in the former specification are significant, while, in the latter specification, only the *Fraction of company's shares held by institution* is significant. Consider the coefficient of *Institution's portfolio weight* in model 1, which is equal to 2.72 and is significant at the 1% level, while this coefficient in model 2 is equal to only 0.1948 and is insignificant. The joint F-test (equal to 11.48), which is significant at the 1% level, further highlights that these coefficients are significantly different. These results provide support for the argument that especially when, in aggregate, shareholders express concerns over the SOP vote, institutional investors are especially likely to vote against SOP for their small-scale investments relative to their large-scale investments.

We also follow Brickley, Lease, and Smith (1988) who argue that relative to non-blockholders, inside blockholders are more likely to vote in support of management-initiated proposals. This argument relies on the assumption that insiders are especially likely to receive increased private benefits when they support management. Following this rationale, we assume that the interests of institutional investors holding a small-scale investment may not align with those of insiders holding a large-scale investment, i.e., may be especially likely to enjoy private benefits.

Thus, we split our data into subsets, depending on the magnitude of the holdings of insiders, which serves as a proxy for the benefits insiders might reap. Specification 3 (4) includes the observations of companies in which insiders' holdings are above (below) the median sample value. We find that, especially in the subset of companies in which insiders' stockholdings are above-median (model 3), the pattern of institutions voting against SOP for their small-scale investments prevails consistently. Specifically, in model 3, both holding variables are significant and have larger magnitudes than those documented for the subset of below-median insider holdings (column (4)). The joint F-test, which is significant at the 1% level, further highlights that

31

these differences are significant. This suggests that the SOP vote is a vote used by institutions to oppose management for their small-scale investments when the institutions' interests are not necessarily represented.

In summary, the evidence in Section 4 supports the conclusion that the pattern of institutional investors being more likely to vote against SOP for their small-scale investments relative to their large-scale investments is due to both the sentiment channel and also the limited attention channel. We also provide evidence that this pattern is likely to prevail especially in companies in which it is reasonable to expect that institutions with small-scale investments will vote against SOP.

## 5.      Votes cast at the mutual fund level

Financial institutions may determine their votes either at the institutional advisor level or at the fund level. Given that voting decisions are costly and time-consuming, it may be more efficient for an institution to make voting decisions once at the aggregate institutional level, as opposed to multiple times at the individual fund level. Moreover, most shareholder meetings are held within the short time frame of the busy proxy season, in which investors must vote on a large number of issues at many different companies, and each fund may not have the resources required to make many voting decisions within a short period of time. Additionally, an institutional advisor with a large aggregate position in a company (through many smaller positions at funds it oversees) will possess more power to influence management, e.g., through direct communications, relative to a single fund that holds a smaller position in the company. Consistent with these arguments, Table 3 demonstrates that while not all funds within a given institution vote in the same direction, the funds within the median institution vote in the same direction, which may suggest that the median institution determines the votes cast at the institutional level.

In Table 4 we reported that institutions are especially likely to oppose management on the

32

SOP vote for their small portfolio-weight and small fraction-of-company investments. In this section, we further examine whether a similar pattern exists at the fund level. That is, we examine whether funds are particularly likely to vote against SOP for small portfolio-weight investments, and small-fraction-of-company investments, when these are measured at the fund level.[27] As noted above, Table 2, Panel B, demonstrates that the correlation of the holding variables at the institutional advisor level and the fund level is less than 0.5 for all variables, indicating that some correlation between the holding variables at the institutional and fund levels exists, but imperfectly.

To conduct our fund-level analysis, we use the CRSP Mutual Fund Database,[28] and estimate each of the two holding variables at the fund level: the fund's portfolio weight (with a median value equal to 0.16%; see Table 2, Panel A) and the fraction of a company's shares held by the fund (with a median value of 0.02%). The analysis reported in Table 8 is performed at the fund–meeting level. Our specifications include fund fixed effects, to allow us to observe how the SOP votes cast by a specific fund differ depending on the magnitude of each investment, relative to the fund's other investments. Errors are clustered at the fund level, and are robust to heteroscedasticity.

The dependent variable in Table 8 equals one if the fund voted for SOP (indicating support of the compensation awarded), and zero otherwise. An extensive debate exists on whether OLS versus logit specifications should be used when the dependent variable is binary (e.g., Stone and Rasp, 1991; Angrist and Pishke, 2008). We follow the recommendations of Angrist and Pishke (2008) and report OLS specifications, but as a robustness check we also report our main results using logit regressions.

The results in Table 8 show that, similar to the institutional-level results (Table 4, Panel

---

[27] Additional studies that examine votes at the fund and/or institutional level are Davis, and Kim (2007), Matvos and Ostrovsky (2010), Morgan, Poulsen, Wolf, and Yang (2011), Iliev and Lowry (2015), Aggarwal, Erel, and Starks (2015), Ertimur, Ferri, and Oesch (2017), Appel, Gormley, and Keim (2016), and Dimmock, Gerken, Ivković, and Weisbenner (2018).

[28] We chose the CRSP mutual fund database over the Thomson S-12 files database as our primary source for computing the holding variables, because Schwarz and Potter (2015) estimate that, starting from the fourth quarter of 2007, the CRSP mutual fund database is the most thorough individual database available.

A), mutual funds are more likely to vote in support of SOP when compensation is small and company performance is strong. We next explore the holding variables–the portfolio weight and the fraction of company held, both measured at the fund level. Column (1) of Table 8 reports that, the larger a stock's weight in a mutual fund's portfolio, the more likely the fund is to vote in support of SOP. According to model 1 of Table 8, a one-standard-deviation increase in *Fund's portfolio weight* (which equals 0.0087 according to Table 2) is associated with a decrease of only 0.41% ((0.0087*0.0332)/(1-0.9290)) in that fund's SOP opposition rate relative to the fund's mean opposition rate (the fund's average SOP support rate is 0.9290, as reported in Table 2). Model 1 also demonstrates a statistically significant coefficient (at the 5% level) for *Fraction of company's shares held by fund*, but the economic magnitude is negligible (0.0001). In model 2, we report a logit version of model 1; the results are similar to those reported in model 1. These findings indicate that mutual funds generally exhibit voting behavior consistent with the patterns documented above at the institution level: the smaller the portfolio weight and the fraction-of-company held, the more likely institutions and funds are to publicly oppose management on the SOP vote.

Following the observation that the holding variables both at the fund level and at the institutional level relate to the SOP votes cast, we examine whether one of these levels dominates the other. Accordingly, we include in models 3 and 4 of Table 8 all four holding variables (i.e., portfolio weight and fraction of company held, each measured both at the fund level and at the institutional level). Model 3 does not include a meeting fixed effect, while model 4 does. Models 3 and 4 report that small portfolio weights, both at the institutional level and at the fund level, predict low SOP support rates. For example, model 3 reports that if the portfolio weight at the institutional level decreases by one standard deviation (0.0107), the institution's SOP opposition rate is expected to increase by 8.99% ((0.0107*0.8072)/(1-0.9040)). A one-standard-deviation decrease in a fund's portfolio weight (0.0087) is expected to increase the fund's SOP opposition rate by 0.22% ((0.0087*0.0181)/(1-0.9290)), which is statistically significant, but in economic

Electronic copy available at: https://ssrn.com/abstract=3096745

terms small relative to the above-noted magnitude reported for the institutional-level holding variables.

Moreover, while models 3 and 4 indicate that the fraction of the company's shares held at the institutional level is significantly related to the SOP votes cast (at the 1% level), the fraction of company's shares held at the fund level is insignificant and that coefficient is equal to 0, further demonstrating that the holding variables at the institutional level are particularly robust.

Taken together, these findings demonstrate that the magnitude of the investment, both at the institutional level and at the fund level, relate to the SOP vote cast. However, we show that the institutional-level holding variables are more robust and trump the fund-level holding variables in predicting SOP vote outcomes. This finding suggests that votes are typically determined at the institutional level (consistent with the results of Table 3), and motivates us to focus our analyses in the paper on votes cast at the institutional level.

## 6. Conclusion

Our study shows that the SOP vote, which offers a low-cost monitoring opportunity, is used by institutional shareholders to voice explicit criticism for stocks they have selected to make only a small-scale investment. This pattern suggests that an investors' overall sentiment for the stock drives both investment allocation decisions and voting decisions. Additionally, we show that when institutions are distracted they are likely to vote against SOP for their small-scale investments. Our findings suggest that as a low-cost monitoring mechanism, the SOP vote offers to what is perhaps the most common type of shareholders—institutions with small portfolio weights and/ or a small fraction-of- company investment—an opportunity to provide critical feedback to management. Thus, the SOP vote allows many shareholders, who each hold only a small fraction of a company's shares, to express a collective and, therefore, stronger voice, which can pressure management to address these shareholders' concerns.

35

36

## Glossary of Variables

| Variable name | Definition | Source |
|---|---|---|
| Institutional-level variables | | |
| Equal weight of institution's SOP support | Fraction of funds within institution that voted for SOP | ISS Voting Analytics |
| Fraction of company's shares held by institution | shares/( shrout2*1000) | Thomson Reuters s-34, and CRSP, respectively |
| Institution's portfolio weight (as a fraction) | prc*shares/ total assets managed by institution. | Thomson Reuters s-34 |
| Number of institutions voting on proposal | Number of institutions voting on proposal included in the ISS Voting Analytics database | ISS Voting Analytics Database |
| Total assets managed by institution (in $Trillions) | The sum of the value (prc*shares) of all holdings of an institution in a given quarter/1 trillion | Thomson Reuters s-34 and CRSP, respectively |
| Weighted average of the institution's SOP support rate | $\sum_{i=1}^{n} W_i * V_i$ measure is constructed at the institution–meeting level. $W_i$ denotes the weight of mutual fund $i$ for a given stock. $Vi$ is a binary variable that equals one if fund $i$ voted for SOP, and zero if it voted against SOP. $n$ indicates the number of mutual funds managed by the institution. | Thomson Reuters s-34 and ISS Voting Analytics Database |
| Company-level variables | | |
| CEO age (years) | Age of CEO | ISS dataset on executives |
| CEO tenure (years) | Tenure of CEO | ISS dataset on executives |
| Company abnormal return | Company abnormal return above the value weighted market portfolio over the 12 months preceding the vote | CRSP |
| Fraction of shares held by blockholders | Fraction of outstanding shares held by blockholders who each hold at least 5% of the outstanding shares | GMI, based on proxy data |
| Fraction of shares held by executives | Aggregate fraction of shares held by executives | GMI, based on proxy data |
| Fraction of shares held by institutions | Total number of shares held by institutions/ number of shares outstanding | Thomson Reuters s-34 and CRSP, respectively |
| Fraction voted for SOP | Fraction of votes cast for SOP/ all SOP votes cast | ISS Voting Analytics Database |
| ISS recommended voting for SOP | Equals one if ISS recommended voting for SOP, and zero otherwise | ISS Voting Analytics Database |
| Market capitalization (in $Millions) | shrout*prc/1,000 | CRSP |
| Number of institutional shareholders | Number of institutions voting (i.e., appearing in ISS Voting Analytics Database). | ISS Voting Analytics Database |
| Residual compensation | The residual from regressing the total compensation awarded to the CEO on the lagged: ROA, abnormal returns, market capitalization, age of CEO, tenure of CEO, and fixed year and industry effects. | ISS compensation data |
| ROA of company $t$-1 | ebitda/(one-year lagged "at", i.e., total assets) | Compustat |
| Total compensation of CEO t-1 (in $Millions) | Total compensation of CEO | ISS compensation data, based on proxy data |

-Continued on next page-

| Variable name | Definition | Source |
|---|---|---|
| **Mutual fund-level variables** | | |
| Annual net flow of fund | We estimate the monthly inflows (after taking into account the monthly return), and then estimate the total net flows during the 12 months preceding the vote. | CRSP Mutual Fund Database |
| Expense ratio (weighted average of share classes) | Weighted average (by class) of fund's expense ratio – "fexp_ratio." | CRSP Mutual Fund Database |
| Fraction of company's shares held by fund | nbr_shares/( shrout2 *1000) | CRSP Mutual Fund Database and CRSP, respectively |
| Fund twelve-month characteristic selectivity return | Calculated by the authors using the Daniel, Grinblatt, Titman, & Wermers (1997) approach. | Thomson Reuters s12 |
| Fund voted for SOP | A binary variable that equals one if the fund voted for SOP, and zero otherwise. | ISS Voting Analytics Database |
| Fund's portfolio weight (as a fraction) | percent_tna/100, where percent_tna is the security's percentage of the total net assets in the portfolio | CRSP Mutual Fund Database |
| Number of funds voting on proposal | Number of funds voting on proposal included in the ISS Voting Analytics database | ISS Voting Analytics Database |
| Total net assets managed by fund (in $Thousands) | mtna/1000, where mtna is defined as "assets minus total liabilities as of month-end." | CRSP Mutual Fund Database |
| Turnover ratio (weighted average) | Weighted average (by class) of fund's turnover ratio – "fturn_ratio." | CRSP Mutual Fund Database |

## Bibliography

Aggarwal, R., Erel, I., Starks, L. T., 2015. Influence of public opinion on investor voting and proxy advisors. Available at SSRN: https://ssrn.com/abstract=2447012.

Akepanidtaworn, K., Di Mascio, R., Imas, A., Schmidt, L., 2021. Selling fast and buying slow: Heuristics and trading performance of institutional investors. National Bureau of Economic Research Working Paper 29076.

Angrist, J. D., and Pischke, J. S. (2008). Mostly Harmless Econometrics: An Empiricist's Companion. Princeton University Press, Princeton, NJ.

Appel, I., Gormley, T. A., Keim, D. B., 2016. Passive investors, not passive owners. Journal of Financial Economics 121, 111-141.

Barclay, M. J., Holderness, C. G., 1989. Private benefits from control of public corporations. Journal of Financial Economics 25(2), 371-395.

Becht, M., Franks, J. R., Wagner, H. F., 2021. The benefits of access: Evidence from private meetings with portfolio firms. European Corporate Governance Institute Working Paper 751.

Becht, M., Franks, J., Grant, J., Wagner, H. F., 2017. Returns to hedge fund activism: An international study. Review of Financial Studies 30(9), 2933-2971.

Ben-Rephael, A., Da, Z., Israelsen, R. D., 2017. It depends on where you search: Institutional investor attention and underreaction to news. Review of Financial Studies 30(9), 3009-3047.

Bew, R., Fields, R., 2012. Voting decisions at US mutual funds: How investors really use proxy advisors. Available at SSRN 2084231: https://ssrn.com/abstract=2084231.

Bhandari, T., Iliev, P., Kalodimos, J., 2021. Governance changes through shareholder initiatives: The case of proxy access. Journal of Financial and Quantitative Analysis 56(5), 1590-1621.

Brady, D. (2012). Say on pay: Boards listen when shareholders speak. Bloomberg, http://www.bloomberg.com/news/articles/2012-06-07/say-on-pay-boards-listen-when-shareholders-speak

Brav, A., Jiang, W., Li, T., Pinnington, J., 2021. Picking friends before picking (proxy) fights: How mutual fund voting shapes proxy contests. Columbia Business School Research Paper 18-16.

Brickley, J. A., Lease, R. C., Smith Jr., C. W., 1988. Ownership structure and voting on antitakeover amendments. Journal of Financial Economics 20, 267-291.

Brunarski, K. R., Campbell, T. C., Harman, Y. S., 2015. Evidence on the outcome of say-on-pay votes: How managers, directors, and shareholders respond. Journal of Corporate Finance 30, 132-149.

Burr, B. B., 2012. Money managers increasing activism on governance — but quietly, pension and investments. http://www.pionline.com/article/20120319/PRINT/303199980/money-managers-increasing-activism-on-governance-8212-but-quietly

Cai, J., Walkling, R. A., 2011. Shareholders' say on pay: Does it create value? Journal of Financial and Quantitative Analysis 46(2), 299-339.

Carleton, W. T., Nelson, J. M., Weisbach, M. S., 1998. The influence of institutions on corporate governance through private negotiations: Evidence from TIAA-CREF. Journal of Finance 53(4),

1335-1362.

Chasan, E., 2012. "Say on pay" changes ways. The Wall Street Journal, http://blogs.wsj.com/cfo/2012/02/21/say-on-pay-changes-ways/.

Chen, X., Harford, J., Li, K., 2007. Monitoring: Which institutions matter? Journal of Financial Economics 86(2), 279-305.

Core, J. E., Guay, W., Larcker, D. F., 2008. The power of the pen and executive compensation. Journal of Financial Economics 88(1), 1-25.

Correa, R., Lel, U., 2016. Say on pay laws, executive compensation, CEO pay slice, and firm value around the world. Journal of Financial Economics 122, 500-520.

Coval, J. D., Moskowitz, T. J., (1999). Home bias at home: Local equity preference in domestic portfolios. Journal of Finance 54(6), 2045-2073.

Cumming, D., Dai, N., (2010). Local bias in venture capital investments. Journal of Empirical Finance 17(3), 362-380.

Cuñat, V., Gine, M., Guadalupe, M., 2016. Say pays! Shareholder voice and firm performance. Review of Finance 20, 1799-1834.

Cvijanović, D., Dasgupta, A., Zachariadis, K. E., 2016. Ties that bind: How business connections affect mutual fund activism. Journal of Finance 71(6), 2933-2966.

Daniel, K., Grinblatt, M., Titman, S., Wermers, R., 1997. Measuring mutual fund performance with characteristic-based benchmarks. Journal of Finance 52, 1035-1058.

Davis, G. F., Kim, E. H., 2007. Business ties and proxy voting by mutual funds. Journal of Financial Economics 85(2), 552-570.

Denis, D., Jochem, T., Rajamani, A., 2019. Compensation benchmarking and the peer effects of say-on-pay. Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2909963.

Dimmock, S. G., Gerken, W. C., Ivković, Z., Weisbenner, S. J., 2018. Capital gains lock-in and governance choices. Journal of Financial Economics 127(1), 113-135.

Dressler, E., 2020. Voice and power: Do institutional shareholders make use of their voting power? Journal of Corporate Finance 65, 101716.

Dyck, A., Zingales, L., 2004. Private benefits of control: An international comparison. Journal of Finance 59(2), 537-600.

Ertimur, Y., Ferri, F., Muslu, V., 2010. Shareholder activism and CEO pay. Review of Financial Studies 17(2), 527-563.

Ertimur, Y., Ferri, F., Oesch, D., 2013. Shareholder votes and proxy advisors: Evidence from say on pay. Journal of Accounting Research 51(5), 951-996.

Ertimur, Y., Ferri, F., Oesch, D., 2017. Understanding uncontested director elections. Management Science 64(7), 3400-3420.

Fang, L. H., Peress, J., Zheng, L., 2014. Does media coverage of stocks affect mutual funds' trading and performance? Review of Financial Studies 27(12), 3441-3466.

Ferri, F., Maber, D. A., 2013. Say on pay votes and CEO compensation: Evidence from the UK. Review of Finance 17(2), 527-563.

Fich, E. M., Harford, J., Tran, A. L., 2015. Motivated monitors: The importance of institutional investors' portfolio weights. Journal of Financial Economics 118(1), 21-48.

Fisch, J., Palia, D., Solomon, S. D., 2018. Is say on pay Aall about pay? The impact of firm performance. Harvard Business Law Review 8, 101.

Fos, V., Kahn, C. M., 2017. Governance through threats of intervention and exit. Available at SSRN: http://ssrn.com/abstract=2527710.

Grossman, S. J., Hart. O., 1980. Takeover bids, the free-rider problem, and the theory of the corporation. The Bell Journal of Economics 94, 42-64.

Harris, M., Raviv, A., 1988. Corporate governance: Voting rights and majority rules. Journal of Financial Economics 20, 203-235.

Heath, D., Macciocchi, D., Michaely, R., Ringgenberg, M., 2021. Do index funds monitor? Swiss Finance Institute Research Paper 19-08.

Iliev, P., Lowry, M., 2015. Are mutual funds active voters? Review of Financial Studies 28(2), 446-485.

Iliev, P., Vitanova, S., 2019. The effect of the say-on-pay in the US. Management Science 65(10), 4505-4521.

Iliev, P., Kalodimos, J., Lowry, M., 2021. Investors' attention to corporate governance. Review of Financial Studies 34(12), 5581-5628.

Kacperczyk, M., Van Nieuwerburgh, S., Veldkamp, L., 2016. A rational theory of mutual funds' attention allocation. Econometrica 84(2), 571-626.

Kempf, E., Manconi, A., Spalt, O., 2017. Distracted shareholders and corporate actions. Review of Financial Studies 30(5), 1660-1695.

Kronlund, M., Sandy, S., 2018. Does shareholder scrutiny affect executive compensation? Available at SSRN: http://ssrn.com/abstract=2358696.

Larcker, D. F., McCall, A. L., Ormazabal, G., Tayan, B., 2012. Ten myths of "say on pay." Working paper, Stanford University.

Liu, C., Low, A., Masulis, R., Zhang, L., 2020. Monitoring the monitor: Distracted institutional investors and board governance, Review of Financial Studies 33(10), 4489-4531.

Lu, Y., Ray, S., Teo, M., 2016. Limited attention, marital events and hedge funds. Journal of Financial Economics 122(3), 607-624.

Malenko, N., Shen, Y., 2016. The Role of Proxy Advisory Firms: Evidence from a Regression-Discontinuity Design. Review of Financial Studies 29(12), 3394-3427.

Matvos, G., Ostrovsky, M., 2008. Cross-ownership, Returns, and Voting in Mergers. Journal of Financial Economics 89(3), 391-403.

Matvos, G., Ostrovsky, M., 2010. Heterogeneity and Peer Effects in Mutual Fund Proxy Voting. Journal of Financial Economics 98(1), 90-112.

McCahery, J. A., Sautner, Z., Starks, L. T., 2016. Behind the Scenes: The Corporate Governance Preferences of Institutional Investors. Journal of Finance 71, 2905-2932.

Morgan, A., Poulsen, A., Wolf, J., Yang, T., 2011. Mutual Funds as Monitors: Evidence from Mutual Fund Voting. Journal of Corporate Finance 17, 914-928.

Pagano, M., Röell, A., 1998. The Choice of Stock Ownership Structure: Agency Costs, Monitoring, and the Decision to go Public. Quarterly Journal of Economics 113, 187-225.

ProxyPulse, 2019. 2019 Proxy Season Review. Broadridge. Available at https://www.broadridge.com/proxypulse/reports/2019/second-edition-2019.html

PwC, 2017. Director–Shareholder Engagement: Getting it Right. Available at https://www.conference-board.org/retrievefile.cfm?filename=Panel-III---PwC---Director-Shareholder-Engagement---Getting-It-Right.pdf&type=subsite.

Schwarz, C., Potter, M., 2015. Revisiting Mutual Fund Portfolio Disclosure. Available at SSRN: http://dx.doi.org/10.2139/ssrn.2093688 2093688.

Semler Brossy, 2013. Righting the Say on Pay Ship After a "No" Vote. Available at http://www.semlerbrossy.com/wp-content/uploads/ATD-Shareholder-Engagement.pd.

Shleifer, A., Vishny, R. W., 1986. Large shareholders and corporate control. Journal of Political Economy 94(3), 461-488.

Sims, C. A., 2003. Implications of rational inattention. Journal of Monetary Economics 50(3), 665-690.

Spencer Stuart, 2017. 2017 Spencer Stuart Board Index. Available at https://www.spencerstuart.com/~/media/ssbi2017/ssbi_2017_final.pdf.

Stone, M., Rasp, J., 1991. Tradeoffs in the choice between logit and OLS for accounting choice studies. Accounting Review 66(1), 170-187.

Thomas, R. S., Palmiter, A. R., Cotter, J. F., 2012. Dodd–Frank's say on pay: Will it lead to a

greater role for shareholders in corporate governance? Cornell Law Review 97, 11-49.

Vanguard, 2015. Letter sent by F. William McNabb III, Vanguard's Chairman and CEO, to the independent leaders of the boards of directors of the Vanguard funds' largest portfolio holdings. Available at https://pcg.law.harvard.edu/wp-content/uploads/2016/09/7-CEO_Letter_03_02_ext.pdf.

Zwiebel, J., 1995. Corporate conservatism and relative compensation. Journal of Political Economy 103(1), 1-25.

**Figure 1: Weekly distribution of annual shareholder meetings included in the sample**
This figure reports the weekly distribution of the votes includes in this sample, i.e., the SOP votes cast by mutual funds between 2011 and 2019.
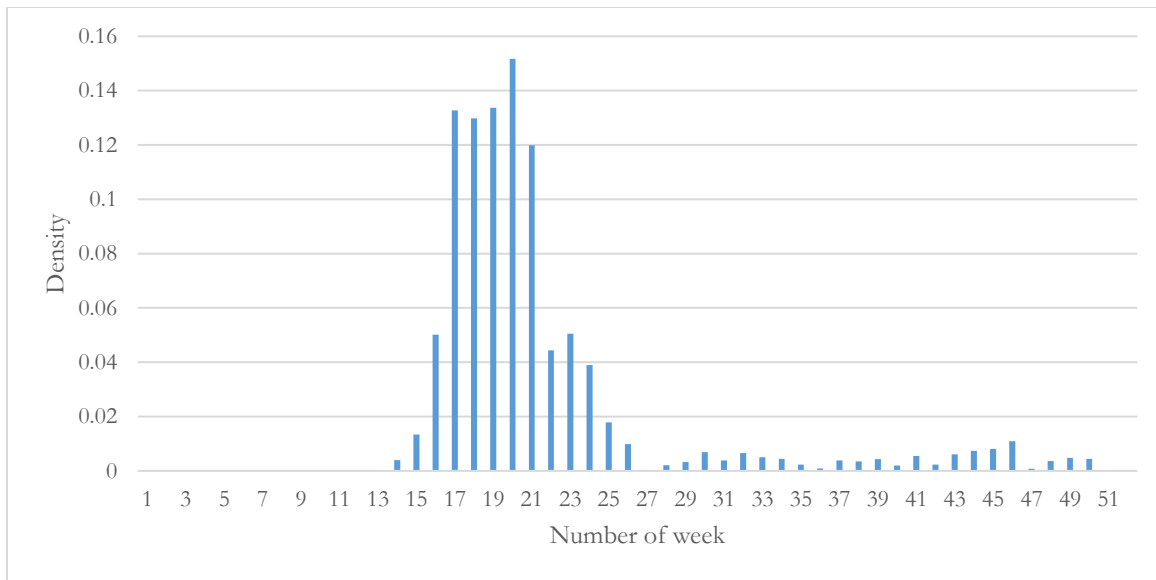
**Table 1: Shares held and votes cast by institutions and mutual funds**

This table estimates the shares held and votes cast by institutions and mutual funds. The aggregate percentage of shares held by institutional investors (mutual funds) is estimated by dividing the aggregate number of shares held by all institutions (mutual funds) in a given stock and a given year, in the quarter preceding the vote, by the total number of shares outstanding, and then calculating the average across all stock-years. ProxyPulse (2019) reports that, for S&P 1500 companies, 70% of the shares are held by institutional investors, and that 90% of all institutional shareholdings are voted on, while only 28% of all retail shareholdings are voted on. Based on these figures, we estimate the percentage of SOP votes cast by institutions and mutual funds. For example, we estimate that 88.2% = ((70%*0.9)/((70%*0.9)+(1-70%)*0.28)) of the SOP votes cast are cast by institutional investors.

|                                                                    | Average |
|--------------------------------------------------------------------|---------|
| Aggregate percentage of shares held by institutional investors     | 70%     |
| Estimated percentage of SOP votes cast by institutional investors  | 88.2%   |
| Aggregate percentage of shares held by mutual funds                | 28.5%   |
| Estimated percentage of SOP votes cast by mutual funds             | 35.7%   |

**Table 2**
**Panel A: Summary statistics**
This table reports summary statistics for the SOP observations during the period 2011–2019. Variables are defined in the Glossary of Variables.

| Variable name | N | Mean | Median | S.D. |
|---|---|---|---|---|
| **Institutional-level variables** | | | | |
| Fraction of company's shares held by institution | 58,413 | 0.0131 | 0.0019 | 0.0242 |
| Institution's portfolio weight (as a fraction) | 58,413 | 0.0047 | 0.0011 | 0.0107 |
| Number of institutions voting on proposal | 58,413 | 77.3010 | 75.0000 | 22.1417 |
| Total assets managed by institution (in $Trillions) | 58,413 | 0.1361 | 0.0214 | 0.2673 |
| Weighted average of the institution's SOP support rate | 58,413 | 0.9040 | 1.0000 | 0.2927 |
| | | | | |
| **Company-level variables** | | | | |
| Abnormal return | 58,413 | 0.0262 | -0.0006 | 0.3736 |
| CEO age (years) | 58,413 | 55.8889 | 56.0000 | 7.2622 |
| CEO tenure (years) | 58,413 | 8.3407 | 5.8288 | 10.9238 |
| Fraction of shares held by blockholders | 58,413 | 0.2679 | 0.2490 | 0.1669 |
| Fraction of shares held by executives | 58,413 | 0.1051 | 0.0450 | 0.1568 |
| Fraction of shares held by institutions | 58,413 | 0.6963 | 0.7542 | 0.2047 |
| ISS recommended voting for SOP | 58,413 | 0.8703 | 1.0000 | 0.3360 |
| Market capitalization (in $Millions) | 58,413 | 6627.5400 | 1279.3300 | 22504.8200 |
| Number of institutions voting on proposal | 58,413 | 219.3828 | 145.0000 | 221.2978 |
| ROA of company $t$-1 | 58,413 | 0.1109 | 0.1187 | 0.4942 |
| Total compensation of CEO $t$-1 (in $Millions) | 58,413 | 5.1781 | 3.1844 | 7.6240 |
| | | | | |
| **Mutual fund-level variables** | | | | |
| Expense ratio (weighted average of share classes) | 268,994 | 0.0100 | 0.0081 | 0.0078 |
| Fraction of company's shares held by fund | 268,994 | 0.0021 | 0.0002 | 0.0127 |
| Fund voted for SOP | 268,994 | 0.9290 | 1.0000 | 0.2569 |
| Fund's portfolio weight (as a fraction) | 268,994 | 0.005 | 0.0016 | 0.0087 |
| Number of funds voting on proposal | 268,994 | 516.5667 | 469.0000 | 257.1708 |
| Turnover ratio (weighted average) | 268,994 | 0.6438 | 0.3500 | 1.5647 |

49

**Table 2**
**Panel B: Correlation matrix of the holding variables**
This table reports the correlations between the holding variables. Variables are defined in the Glossary of Variables. P-values are reported in parentheses. *, **, and *** indicate Type I error levels of p<.10, p<.05, and p<.01, respectively.

| | Institution's portfolio weight (as a fraction) | Fraction of company's shares held by institution | Fund's portfolio weight (as a fraction) | Fraction of company's shares held by fund |
|---|---|---|---|---|
| Institution's portfolio weight (as a fraction) | 1*** | | | |
| | 0.000 | | | |
| Fraction of company's shares held by institution | -0.0546*** | 1*** | | |
| | 0.000 | 0.000 | | |
| Fund's portfolio weight (as a fraction) | 0.444*** | -0.0850*** | 1*** | |
| | 0.000 | 0.000 | 0.000 | |
| Fraction of company's shares held by fund | -0.048*** | 0.3172*** | 0.0323*** | 1*** |
| | 0.000 | 0.000 | 0.000 | 0.000 |

**Table 3: SOP votes of 13F institutions**
This table documents, for the 20 institutions (i.e., investment advisors) with the largest numbers of votes cast, the average frequency of SOP votes cast against the ISS recommendation (Column (3)), and the standard deviation of the SOP votes cast by the mutual funds advised by the institution (Column (4)).

| | Name of institution | Number of votes cast | % votes opposing ISS recommendation | S.D. of votes within institution |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| 1 | BlackRock Advisors, Inc. | 379,239 | 9.6% | 0.84% |
| 2 | Vanguard Group, Inc. | 338,816 | 8.1% | 0.00% |
| 3 | Fidelity | 318,059 | 5.3% | 4.94% |
| 4 | Dimensional Fund Advisors, Inc. | 173,712 | 6.0% | 1.74% |
| 5 | TIAA-CREF Asset Management LLC | 168,746 | 11.5% | 0.00% |
| 6 | State Street Global Advisors | 138,224 | 6.9% | 0.99% |
| 7 | ProFund Advisors LLC | 122,306 | 0.0% | 0.00% |
| 8 | Charles Schwab Investment Management, In | 116,928 | 13.1% | 0.00% |
| 9 | John Hancock Funds, LLC | 112,495 | 3.8% | 6.21% |
| 10 | SEI Investments Management Corporation | 111,302 | 8.4% | 0.02% |
| 11 | ProShare Advisors LLC | 109,218 | 0.0% | 0.00% |
| 12 | Security Investors, LLC | 97,182 | 3.0% | 0.41% |
| 13 | T. Rowe Price Associates, Inc. (MD) | 96,175 | 8.8% | 0.30% |
| 14 | JPMorgan Asset Management, Inc. (US) | 85,729 | 3.8% | 0.93% |
| 15 | PowerShares Capital Management LLC | 81,131 | 7.6% | 0.10% |
| 16 | Voya Investment Management, LLC | 80,893 | 5.1% | 0.13% |
| 17 | AXA Equitable Funds Management Group | 75,218 | 7.7% | 8.46% |
| 18 | Pacific Life Fund Advisors | 72,453 | 9.1% | 2.31% |
| 19 | EQ Advisors Trust | 71,857 | 9.7% | 11.06% |
| 20 | MassMutual Financial Group | 68,618 | 11.2% | 9.50% |
| | Average for *all* 621 institutions in study | 8,930 | 12.5% | 2.20% |
| | Median for *all* 621 institutions in study | 524 | 9.6% | 0.00% |

50

51

**Table 4: Votes cast at the institutional advisor level**
**Panel A: SOP votes – basic results**

The panel reports OLS regressions at the institution–meeting level for the period 2011–2019. The dependent variable is the weighted average of the institution's SOP support rate weighted by the magnitude of each fund's investment across all funds advised by the institution. All regressions include year and Fama–French 48 industry fixed effects. Robust standard errors are clustered at the institutional level. Variables are defined in the Glossary of Variables. P-values are reported in parentheses. *, **, and *** indicate p<.10, p<.05, and p<.01, respectively.

| | Weighted average of the institution's SOP support rate | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Institution's portfolio weight (as a fraction) | 0.4667** (.044) | 0.4031* (.093) | -0.0092 (.981) | 0.4667** (.044) | | | | |
| Fraction of company's shares held by institution | 0.6391*** (.000) | 0.6183*** (.000) | 0.6973*** (.000) | 0.6391*** (.000) | | | | |
| Fraction of shares held by blockholders | -0.0296*** (.000) | | -0.0250*** (.003) | -0.0668*** (.000) | -0.0258*** (.002) | -0.0255*** (.003) | -0.0231*** (.007) | -0.0226*** (.007) |
| Fraction of shares held by executives | -0.0587*** (.000) | | -0.0670*** (.002) | -0.2331*** (.000) | -0.0699*** (.000) | -0.0703*** (.000) | -0.0587*** (.000) | -0.0574*** (.000) |
| Total compensation of CEO $t$-1 (in 100 $Millions) | -0.0568*** (.000) | | -0.0548*** (.000) | | -0.0438*** (.000) | -0.0452*** (.000) | -0.0564*** (.000) | -0.0569*** (.000) |
| ROA of company $t$-1 | 0.1535*** (.000) | | 0.1482*** (.000) | 0.1615*** (.000) | 0.1413*** (.000) | 0.1418*** (.000) | 0.1540*** (.000) | 0.1535*** (.000) |
| Company abnormal return | 0.0051 (.276) | | 0.008 (.105) | 0.0212*** (.006) | 0.0055 (.227) | 0.0053 (.245) | 0.0049 (.271) | 0.0047 (.297) |
| ISS recommended voting for SOP | 0.5383*** (.000) | | 0.5393*** (.000) | 0.5383*** (.000) | 0.5373*** (.000) | 0.5371*** (.000) | 0.5383*** (.000) | 0.5381*** (.000) |
| CEO predicted compensation | | | | 0.6789** (.014) | | | | |
| CEO residual compensation | | | | -0.0568*** (.000) | | | | |
| Excessive compensation | | | | | -0.0112*** (.008) | -0.0081* (.055) | | |
| Institution's portfolio weight bottom quartile | | | | | -0.0035 (.637) | | -0.0154* -0.093 | |
| Institution's portfolio weight bottom quartile * Excessive compensation | | | | | -0.0223** (.024) | | | |
| Fraction of company's shares held by institution bottom quartile | | | | | | -0.0018 (.671) | | -0.0102* (.062) |
| Fraction of company's shares held by institution bottom quartile * Excessive compensation | | | | | | -0.0161*** (.002) | | |
| Institution's portfolio weight top quartile | | | | | | | 0.0042 (.378) | |
| Fraction of company's shares held by institution top quartile | | | | | | | | 0.0213*** (.002) |

-continued on next page-

52

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| | Weighted average of the institution's SOP support rate | | | | | | | |
| Market capitalization (in $100 Millions) | 0.0152*** (.000) | | 0.0148*** (.000) | -0.0579** (.036) | 0.0169*** (.000) | 0.0174*** (.000) | 0.0174*** (.000) | 0.0151*** (.000) |
| Total assets managed by institution (in $Millions) | -0.0415* (.100) | -0.0452** (.047) | 0.0347** (.034) | -0.0415* (.100) | -0.0166 (.427) | -0.0155 (.455) | -0.017 (.419) | -0.0168 (.422) |
| Fraction of shares held by institution | 0.0039 (.220) | | 0.0017 (.609) | 0.0063* (.064) | 0.0068** (.036) | 0.0068** (.035) | 0.0055* (.088) | 0.0058* (.074) |
| Number of institutions voting on proposal | 0.000 (.838) | | 0.0001 (.629) | -0.0038*** (.008) | -0.0002 (.205) | -0.0002 (.122) | -0.0001 (.525) | -0.0001 (.429) |
| CEO age (years) | 0.000 (.940) | | -0.0002 (.342) | -0.0016*** (.004) | -0.0001 (.532) | -0.0001 (.488) | -0.0001 (.776) | -0.0001 (.755) |
| CEO tenure (years) | -0.0004*** (.008) | | -0.0003 (.211) | 0 (.) | -0.0004** (.010) | -0.0004*** (.010) | -0.0004*** (.009) | -0.0004*** (.010) |
| Institution fixed effects | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes |
| Year and industry fixed effects | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Meeting fixed effects | No | Yes | No | No | No | No | No | No |
| R-squared | 0.447 | 0.465 | 0.346 | 0.447 | 0.447 | 0.447 | 0.447 | 0.446 |
| N | 58,410 | 62,012 | 58,413 | 58,410 | 58,410 | 58,410 | 58,410 | 58,410 |

**Panel B: All votes**

The table reports OLS regressions at the institution–meeting level for the period 2011–2019. This table includes all proposals. The dependent variable is the weighted average of the institution's SOP support rate. Regressions include, but do not report, all company performance measures and company controls included in Panel A of Table 4. All regressions include fixed effects for the institution, type of proposal, year, and Fama–French 48 industries. Robust standard errors are clustered at the institutional level. P-values are reported in parentheses. *, **, and *** indicate p<.10, p<.05, and p<.01, respectively.

| | Weighted average of the institution's SOP support rate | | |
|---|---|---|---|
| | (1) | (2) | (3) |
| Institution's portfolio weight (as a fraction) | 0.2321** | 0.2099* | 0.6662** |
| | (.041) | (.052) | (.018) |
| Fraction of company's shares held by institution | 0.1455** | 0.1720*** | 1.2437*** |
| | (.011) | (.000) | (.000) |
| Fraction of shares held by blockholders | -0.0193*** | -0.0177*** | -0.0230 |
| | (.000) | (.000) | (.394) |
| Fraction of shares held by executives | -0.0488*** | -0.0375*** | -0.1521*** |
| | (.000) | (.000) | (.000) |
| Observations included | All | Management sponsored | Shareholders sponsored |
| Institution fixed effects | Yes | Yes | Yes |
| Additional controls | Yes | Yes | Yes |
| Proposal type fixed effects | Yes | Yes | Yes |
| Year and industry fixed effects | Yes | Yes | Yes |
| Errors clustered at institutional level | Yes | Yes | Yes |
| R-squared | 0.400- | 0.331 | 0.484 |
| N | 732,162 | 681,006 | 51,155 |

**Table 5: Types of institutions and the SOP vote**

This table reports OLS regressions at the institution-meeting level for the 2011-2019 period. The dependent variable is the weighted average of the institution's SOP support rate. This table includes, but does not report, all control variables included in model 1 of Table 4. Model 1 (2) is confined to the institutions that manage the majority (minority) of their assets in actively managed funds (index funds). Model 3 (4) is confined to institutions that in the three years preceding the vote had a below (above) median frequency of voting consistently with management recommendations. Model 5 (6) is confined to institutions that in the three years preceding the vote had a below (above) median frequency of voting consistently with ISS recommendations. The regressions include year and Fama-French 48 industry fixed effects. Robust standard errors are clustered at the fund level. The table reports, for each pair of specifications (i.e., each odd-numbered specification and the following even-numbered specification) a joint F-test that compares both the institution's portfolio weight and the fraction of the company's shares held by the institution across both specifications. Additionally, F-tests that compare the equality of only one of these variables at a time across each pair of specifications are also reported. P-values are reported in parentheses. *, **, and *** indicate p<.10, p<.05, and p<.01, respectively.

| | Weighted average of the institution's SOP support rate | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Institution's portfolio weight (as a fraction) | 0.3767* (.096) | 0.8831 (.264) | 0.5246* (.096) | 0.202 (.482) | 0.7714** (.010) | 0.1073 (.309) |
| Fraction of company's shares held by institution | 0.7816*** (.000) | -0.0634 (.793) | 1.0481** (.038) | 0.5150*** (.000) | 0.9085*** (.009) | 0.0431 (.716) |
| Fraction of shares held by blockholders | -0.0355*** (.000) | -0.0220* (.077) | -0.0397*** (.003) | -0.0152* (.093) | -0.0497*** (.003) | -0.0011 (.694) |
| Fraction of shares held by executives | -0.0610*** (.000) | -0.061 (.117) | -0.0769*** (.000) | -0.0527*** (.008) | -0.0863*** (.008) | -0.0048 (.146) |
| Subset | Active institution | Passive institution | Institution frequently votes against management | Institution frequently votes with management | Institution not frequently votes with ISS | Institution frequently votes with ISS |
| Institution, fund and company controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year and industry fixed effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Fund fixed effects | Yes | Yes | Yes | Yes | Yes | Yes |
| R-squared | 0.486 | 0.303 | 0.571 | 0.339 | 0.34 | 0.967 |
| N | 43,796 | 14,093 | 27,812 | 30,596 | 15,232 | 14,075 |
| Joint F-test (portfolio weight+ fraction of company's shares held by institution.) equal across 2 reg. | | 9.29 | | 3.17 | | 4.53 |
| Prob > F | | 0.010 | | 0.205 | | 0.033 |
| F-test portfolio weight equal across two regressions | | 0.43 | | 2.34 | | 5.72 |
| Prob. > F | | 0.514 | | 0.126 | | 0.017 |
| F-test fraction of company's shares held by institution equal across two regressions | | 8.42 | | 0.96 | | 10.14 |
| Prob. > F | | 0.004 | | 0.328 | | 0.006 |

55

**Table 6: Distracted financial institutions and the SOP vote**

This table reports OLS regressions at the institution–meeting level for the period 2011–2019. The dependent variable is the weighted average of the institution's SOP support rate. This table includes, but does not report, all control variables included in model 1 of Table 4 (Panel A). Model 1 (2) is restricted to meetings held during the busy proxy season (not during the proxy season). The proxy season is defined as weeks 16–24 of each calendar year. Model 3 (4) is restricted to institutions that had an above (below) median frequency of proposals that received an ISS recommendation to vote against management recommendation. Model 5 (6) is restricted to institutions physically distant (close) to the company (i.e., the headquarters of the financial institution advising the fund is above (below) the median distance). The regressions include year and Fama–French 48 industry fixed effects. Robust standard errors are clustered at the fund level. The table reports for each pair of specifications (i.e., each odd-numbered specification and the following even-numbered specification) a joint F-test that compares both *Institution's portfolio weight* and *Fraction of company's shares held by institution* across both specifications. Additionally, F-tests that compare the equality of only one of these variables at a time across each pair of specifications are also reported. P-values are reported in parentheses. *, **, and *** indicate $p<.1$, $p<.05$, and $p<.01$, respectively.

| | Weighted average of the institution's SOP support rate | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Institution's portfolio weight (as a fraction) | 0.6169** (.036) | 0.3528 (.201) | 2.6207*** (.000) | 0.1604 (.300) | 0.7311** (.043) | 0.1701 (.464) |
| Fraction of company's shares held by institution | 0.6489*** (.002) | 0.6398*** (.000) | 3.4734*** (.000) | 0.3389* (.074) | 0.7113*** (.002) | 0.6550*** (.000) |
| Fraction of company's shares held by blockholders | -0.0452*** (.000) | -0.0091 (.439) | -0.1200** (.022) | -0.0189*** (.007) | -0.0378** (.024) | -0.0368*** (.001) |
| Fraction of company's shares held by executives | -0.0545** (.013) | -0.0607*** (.004) | -0.0484 (.414) | -0.0499*** (.001) | -0.0697** (.013) | -0.0696*** (.008) |
| Subset | Proxy season | Not proxy season | ISS recommended to vote against SOP | ISS recommended to vote for SOP | Distant institution | Close institution |
| Institution, fund, and company controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year and industry fixed effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Fund fixed effects | Yes | Yes | Yes | Yes | Yes | Yes |
| R-squared | 0.449 | 0.45 | 0.436 | 0.292 | 0.445 | 0.47 |
| N | 30,029 | 28,374 | 6,093 | 52,306 | 22,052 | 23,049 |
| Joint F-test (portfolio weight+ fraction of company's shares held by institution) equal across 2 reg. | | 0.6 | | 57.95 | | 0.86 |
| | | 0.740 | | 0.000 | | 0.652 |
| F-test portfolio weight equal across two regressions | | 0.57 | | 14.91 | | 0.86 |
| Prob. > F | | 0.452 | | 0.000 | | 0.355 |
| F-test fraction of. company's shares held by institution equal across two regressions | | 0.000 | | 31.38 | | 0.01 |
| Prob. > F | | 0.952 | | 0.000 | | 0.935 |

56

**Table 7: Type of companies and the SOP vote**

This table reports OLS regressions at the institution–meeting level for the period 2011–2019. The dependent variable is the weighted average of the institution's SOP support rate. This table includes, but does not report, all control variables included in model 1 of Table 4 (Panel A). Column (1) ((2)) is confined to SOP votes in which the SOP vote received below (at least) 70% support rates. Column (3) ((4)) is confined to companies whose insider ownership is above (below) the median. The regressions include year and Fama-French 48 industry fixed effects. Robust standard errors are clustered at the fund level. The table reports for each pair of specifications (i.e., each odd-numbered specification and the following even-numbered specification) a joint F-test that compares both *Institution's portfolio weight* and *Fraction of company's shares held by institution* across both specifications. Additionally, F-tests that compare the equality of only one of these variables at a time across each pair of specifications are also reported. P-values are reported in parentheses. *, **, and *** indicate p<.10, p<.05, and p<.01, respectively.

| | Weighted average of the institution's SOP support rate | | | |
| --- | --- | --- | --- | --- |
| | (1) | (2) | (3) | (4) |
| Institution's portfolio weight (as a fraction) | 2.7278*** | 0.1948 | 1.1239** | 0.1967 |
| | (.001) | (.261) | (.014) | (.328) |
| Fraction of company's shares held by institution | 2.8285*** | 0.4550*** | 0.6097*** | 0.5897*** |
| | (.000) | (.008) | (.002) | (.001) |
| Fraction of shares held by blockholders | -0.2431*** | -0.0217*** | -0.0410*** | -0.0057 |
| | (.001) | (.006) | (.000) | (.649) |
| Fraction of shares held by executives | -0.2881** | -0.0674*** | -0.0343* | 0.1393 |
| | (.020) | (.000) | (.053) | (.584) |
| Subset | Shareholders not supportive of SOP | Shareholders supportive of SOP | Insiders hold large % of company | Insiders hold small % of company |
| Institution, fund, and company controls | Yes | Yes | Yes | Yes |
| Year and industry fixed effects | Yes | Yes | Yes | Yes |
| Fund fixed effects | Yes | Yes | Yes | Yes |
| R-squared | 0.392 | 0.347 | 0.456 | 0.441 |
| N | 4,436 | 53,913 | 30,041 | 27,577 |
| Joint F-test (portfolio weight+ fraction of company's shares held by institution) equal across two regressions | | 30.14 | | 4.81 |
| | | 0.000 | | 0.091 |
| F-test portfolio weight equal across two regressions | | 11.48 | | 4.79 |
| Prob. > F | | 0.000 | | 0.029 |
| F-test fraction of company's shares held by institution company equal across two regressions | | 11.18 | | 0.01 |
| Prob. > F | | 0.000 | | 0.903 |

**Table 8: SOP votes cast by mutual funds**

This table reports regressions at the fund–meeting level for the period 2011–2019. The dependent variable is a dummy that equals one if the fund voted in support of SOP. The regressions include year and Fama–French 48 industry fixed effects. Robust standard errors are clustered at the fund level. P-values are reported in parentheses. *, **, and *** indicate p<.10, p<.05, and p<.01, respectively.

| | Fund voted for SOP | | | |
| --- | --- | --- | --- | --- |
| | (1) | (2) | (3) | (4) |
| Fund's portfolio weight (in fraction) | 0.0332*** (.000) | 0.0516*** (.005) | 0.0181** (.036) | 0.0173** (.045) |
| Fraction of company's shares held by fund | 0.0001** (.030) | 0.0012*** (.006) | 0.000 (.294) | 0.000 (.213) |
| Institution's portfolio weight (in fraction) | | | 0.8072*** (.000) | 0.5920*** (.000) |
| Fraction of company's shares held by institution | | | 0.1537*** (.000) | 0.1792*** (.000) |
| Fraction of shares held by blockholders | -0.0261*** (.000) | -0.8065*** (.000) | -0.0295*** (.000) | |
| Fraction of shares held by executives | -0.0587*** (.000) | -1.0340*** (.000) | -0.0570*** (.000) | |
| Total compensation of CEO $t$-1 (in 100 $Millions) | -0.0604*** (.000) | -0.9474*** (.000) | -0.0628*** (.000) | |
| ROA of company $t$-1 | 0.1167*** (.000) | 3.3680*** (.000) | 0.1138*** (.000) | |
| Company abnormal return | 0.0126*** (.000) | 0.3461*** (.000) | 0.0122*** (.000) | |
| ISS recommended voting for SOP | 0.4522*** (.000) | 4.4704*** (.000) | 0.4522*** (.000) | |
| Market capitalization (in $100 Millions) | 0.0108*** (.000) | 0.1431*** (.000) | 0.0079*** (.000) | |
| Total assets managed by institution (in $Millions) | | | 0 (.155) | 0 (.143) |
| Fraction of shares held by institution | 0.0061*** (.000) | 0.1838*** (.000) | 0.0054*** (.000) | |
| Number of institutions voting on proposal | | | 0 (.920) | |
| CEO age (years) | -0.0004*** (.000) | -0.0063*** (.002) | -0.0004*** (.000) | |
| CEO tenure (years) | -0.0004*** (.000) | -0.0107*** (.000) | -0.0004*** (.000) | |
| Number of funds voting on proposal | 0.0000*** (.000) | 0.0005*** (.000) | 0.0000*** (.005) | |
| Type of regression | OLS | Logit | OLS | OLS |
| Fund fixed effect | Yes | Yes | Yes | Yes |
| Year and industry fixed effects | Yes | Yes | Yes | Yes |
| Meeting fixed effects | No | No | No | Yes |
| R-squared | 0.428 | 0 | 0.436 | 0.496 |
| N | 380,562 | 365,451 | 281,684 | 281,632 |

**Appendix A: Procedures for matching the ISS Voting Analytics Database to other databases**

In this appendix we explain how we match the ISS Voting Analytics Database to two other databases: the CRSP Mutual Fund Database and Thomson Reuters s-34 Institutional Holding Database on 13-F Filers.

        **CRSP Mutual Funds Database.** Unfortunately, the ISS Voting Analytics Database on mutual funds' votes does not include conventional identifiers for mutual funds. However, ISS does provide links to the N-PX form that includes, in virtually all cases, a fund family CIK code and a mutual fund "seriesid" identifier.[29] Reporting a fund ticker in the N-PX filing is voluntary, and most mutual funds do not do so. To increase the number of funds for which we are able to obtain a ticker, we follow the procedure used by Matvos and Ostrovsky (2008, footnotes 6 and 7) and Iliev and Lowry (2015) by matching the fund's seriesid to at least one of the tickers reported in the company's filing section of the Edgar database.[30]

        To further increase the number of mutual funds for which we are able to match a ticker, we manually search in several additional databases for a ticker that is associated with the mutual fund's name and the institution's name, as reported in the N-PX filing. These additional databases include the CRSP Mutual Fund Database, Thomson Reuters Database on Mutual Fund Holdings S12, Factset, and general searches on the internet.

        Using all these approaches, we are able to match 40.2% of the SOP vote observations included in the Mutual Funds ISS Voting Analytics Database to a fund ticker. However, for a given company in a given year, the average aggregate holdings of mutual funds that we are able to match to a ticker amount to 19.9% of the outstanding stocks. We estimate in Table 1 that 28.5% of the outstanding stocks are held, on average, by mutual funds. Hence, we are able to match voting corresponding to the holdings of 73.3% (20.9%/28.5%) of the stocks held by mutual funds. Finally, we search in the CRSP Mutual Funds Database for each ticker we have found for each fund included in the ISS Voting Analytics Database, in a given quarter. If the quarter and the ticker match, we record the corresponding crsp_portno, which is the fund identifier in the CRSP Mutual Funds Database.

        **Thomson Reuters s-34 Institutional Holdings Database.** For each fund, we map the

---

[29] The Seriesid identifier is assigned by the SEC, and uniquely identifies a mutual fund. To the best of our knowledge, the Seriesid identifier is not included in any of the mutual fund databases commonly available to academics.

[30] In Edgar, https://www.sec.gov/edgar/searchedgar/companysearch.html, one may type a seriesid in the "Fast Search" box, which leads to the hyperlink "List all Funds and Classes/Contracts for…" which details the available tickers of all funds branching from the seriesid.

Thomson Reuters fund identifier ("fundno") to a Thomson Reuters institution identifier ("mgrno"), using the S12type5 file from WRDS. The S12type5 file mapping is not always updated in cases in which one institution acquires another institution. Accordingly, we manually examine, for each institution, whether the latter is the case in the 2011–2019 period we study. In the cases where a fund is held by an institution that is acquired by another institution, we identify the correct institution by searching for the name of the fund in Form N-SAR. This form identifies the primary advisor (i.e., institution) of each fund.

## Appendix B: Holding Variables for Subsets

**Table B.1: Summary statistics of the holding variables for subsets**

This table reports summary statistics of *Institution's portfolio weight* (as a fraction) and *Fraction of company's shares held by institution* for the period 2011–2019 for different subsets. Column (1) ((2)) is restricted to meetings held during the busy proxy season (not during the proxy season). The proxy season is defined as weeks 16–24 of each calendar year. Column (4) ((5)) is restricted to institutions physically distant (close) to the company, i.e., the headquarters of the financial institution advising the fund is above (below) the median distance. Columns (3) and (6) report t-tests estimated for columns (1)–(2), and (4)–(5), respectively.

| Average Values | Proxy season | Not proxy season | Difference | Distant institution | Close institution | Difference |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Institution's portfolio weight (as a fraction) | 0.0023 | 0.0027 | -0.0004 | 0.0027 | 0.0023 | 0.0004 |
| Fraction of company's shares held by institution | 0.0139 | 0.0135 | 0.0004 | 0.0119 | 0.0117 | 0.0002 |

**Table B.2:**

This table repeats model 1 of Table 4 (Panel A), but replaces the dependent variable with the variables indicated below for each column.

| | Proxy season | Distant institution |
|---|---|---|
| | (1) | (2) |
| Institution's portfolio weight (as a fraction) | 0.1797 (.590) | -0.1968 (.668) |
| Fraction of company's shares held by institution | -0.0329 (.898) | -0.1488 (.658) |
| Additional controls | Yes | Yes |
| Institution fixed effects | Yes | Yes |
| Year and industry fixed effects | Yes | Yes |
| R-squared | 0.157 | 0.191 |
| N | 89,541 | 70,032 |

61

about ECGI

The European Corporate Governance Institute has been established to improve *corporate governance through fostering independent scientific research and related activities.*

The ECGI will produce and disseminate high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It will draw on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

The views expressed in this working paper are those of the authors, not those of the ECGI or its members.

www.ecgi.global

**Electronic Access to the Working Paper Series**

The full set of ECGI working papers can be accessed through the Institute's Web-site (www.ecgi.global/content/working-papers) or SSRN:

| | |
|---|---|
| **Finance Paper Series** | http://www.ssrn.com/link/ECGI-Fin.html |
| **Law Paper Series** | http://www.ssrn.com/link/ECGI-Law.html |