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# INSTITUTIONAL INVESTORS AND PROXY VOTING ON COMPENSATION PLANS: THE IMPACT OF THE 2003 MUTUAL FUND VOTING DISCLOSURE REGULATION

Martijn Cremers
Roberta Romano

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Institutional Investors and Proxy Voting on Compensation Plans: The Impact of the 2003 Mutual Fund Voting Disclosure Regulation

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## ABSTRACT

This paper examines the impact on shareholder voting of the mutual fund voting disclosure regulation adopted by the SEC in 2003, using a paired sample of management proposals on executive equity incentive compensation plans submitted before and after the rule change. While voting support for management has decreased over time, we find no evidence that mutual funds' support for management declined after the rule change, as expected by advocates of disclosure. In fact, we find evidence of increased support for management by mutual funds after the change. There is some evidence that firms sponsoring such proposals both before and after the rule change differ from those sponsoring a proposal only before the change. For example, firms are more likely to sponsor a proposal both before and after the rule change if they have higher mutual fund ownership. Such endogeneity could partly explain our findings of increased support after the rule.

Martijn Cremers
Yale School of Management
135 Prospect Street
New Haven, CT 06520-8200
martijn.cremers@yale.edu

Roberta Romano
Yale Law School
P.O. Box 208215
Yale Station
New Haven, CT 06520-8215
and NBER
roberta.romano@yale.edu

## 1. Introduction

The proxy voting process is a key mechanism by which shareholders monitor corporate managers. It is the means by which managers are replaced through proxy contests over director elections, and by which their major plans are reviewed as state law and stock exchange rules require shareholder approval of significant transactions. Moreover, in recent years, activist institutional investors have used the proxy process to advocate changes in corporate policies, such as repeal of takeover defenses and changes in board composition or managerial compensation. In January 2003, the U.S. Securities and Exchange Commission (SEC) required mutual funds to disclose how they voted on proxy proposals presented at shareholder meetings starting in July 2003. This rule followed a series of significant federal government interventions into firms' corporate governance in the Sarbanes-Oxley Act (SOX), Congress' response to the scandals of 2001-2002 that began with the implosion of Enron.

There is a substantial literature debating Congress' legislative product, both for SOX's substantive content and for jurisdictional overreaching into subject matters long considered to be the domain of state corporate law – the governance of public corporations (e.g., Bainbridge, 2003; Cunningham, 2003; Romano, 2005). The fund vote disclosure rule has, however, been the subject of only limited study. Yet this rule was also intended to affect public corporations' governance, albeit more indirectly than SOX, by inducing mutual funds to be more active monitors and to be less supportive of management due to the public transparency of their votes.[2] In addition, the vote disclosure rule generated considerable industry opposition, in contrast to the muted opposition to SOX in the whirlwind of events accompanying the statute's enactment.

This paper examines the impact of the mutual fund voting disclosure rule on corporate

[2]As the SEC (2003) put it upon adopting the rule: "[R]equiring greater transparency of proxy voting by funds may encourage funds to become more engaged in corporate governance of issuers held in their portfolios, which may benefit all investors and not just fund shareholders." The controversy over the rule's adoption is discussed in part 2.

governance by examining its effect on proxy voting outcomes. To this end, we construct a sample of firms in which management sponsored proposals to adopt or amend executive equity incentive compensation plans (EEIC), both before and after the 2003 rule change.[3] For this most frequently occurring proposal type, we examine the difference in voting outcomes before relative to after the rule change, particularly in relation to mutual fund ownership. We control for firm characteristics including performance, non-mutual fund institutional ownership and governance features.

The vote disclosure rule change can be viewed as a 'natural experiment' that permits us to investigate mutual funds' voting behavior. Even though it affected all funds at a point in time in which additional changes were taking place in the investment environment (e.g., SOX and changes in broker voting), other institutional investors were not affected by the vote disclosure rule.

We find that voting support for management-sponsored EEIC proposal plans has been declining for close to a decade, with mutual funds appearing to support management less frequently than other investors. However, we find no evidence that the disclosure rule change decreased mutual funds' voting in support of management. Indeed, some of our results suggest that mutual funds' support for management increased after the rule's adoption, especially for firms where independent directors have the largest equity stakes and whose interests may be best aligned with shareholders.

These findings do not conform to the expectation of disclosure rule advocates, who anticipated that funds' voting support for management would decrease once their votes were disclosed. The data suggest that management proposals on equity incentive compensation enjoyed about as high a level of mutual fund support after the regulation change as before. This result does

[3] For our analysis of other management-sponsored proposals as well as shareholder-sponsored proposals, see Cremers and Romano (2007). We focus here on incentive compensation plan proposals because they are the most likely candidates for finding an impact of the rule change, for two reasons: First, they are the most frequent type of proposal, allowing a richer and more powerful empirical analysis. Second, they are the most controversial type of management-sponsored proposals, as they receive the lowest level of aggregate voting support. The heightened attention paid to such proposals, accordingly, would magnify any effect that the new transparency would have on

not appear to be a function of a change in proposed plans, because it is robust controlling for compensation plan features that shareholders disfavor (i.e., the extent of a plan's dilution). Further, the results are not affected by other features of the voting environment, such as confidential voting and the elimination of the New York Stock Exchange (NYSE)'s rule permitting brokers to vote shares on certain compensation plans. Finally, taking into account mutual fund characteristics and the largest mutual fund families' ownership does not affect our results.

Although we attempt to estimate mutual fund votes before the rule change, as we cannot observe actual votes before the change, our principal approach uses aggregate voting outcomes and aggregate mutual fund holdings, the approach taken by the leading study of institutional voting before the adoption of the rule (Brickley et al., 1988). In addition, we do not have data on the extent to which the mutual funds holding shares in our sample firms could have conflicts of interest (i.e., explicit business relations). Although the SEC expressed concern over all mutual funds' passive voting support for management and not solely conflicted funds' voting as the rationale for promulgating the disclosure rule (SEC 2003), to the extent that only conflicted funds might be expected to change their behavior, our findings regarding its impact are, by necessity, circumstantial in nature.

The decision to put up an EEIC proposal is a choice by management. We therefore investigate to what extent selection issues could potentially explain our findings. We create a matched sample of firms experiencing similar proposals solely before the disclosure rule change but not within two years after the change. Examining only voting outcomes before the disclosure change, the matched firms are not different in how their firm characteristics are related to the voting outcome. However, there is some evidence that the firms sponsoring EEIC proposals both before and after the rule change are different from the matched firms (i.e., firms that sponsored

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mutual funds' propensity to vote in support of management

such a proposal before but not within two years after the rule change). For example, greater ownership (level ánd increase) by mutual funds and marginally higher profitability are associated with a higher likelihood of firms' sponsoring an EEIC proposal after the rule change. These observed differences suggest that endogeneity (managers select proposals that they expect mutual funds to support) may partly explain our results. However, the main finding of no change in (and even some evidence for increased) support of mutual funds after the disclosure rule change is robust across subsamples where selection effects are ex-ante expected to differ.

The paper is structured as follows. Section 2 reviews the debate over the vote disclosure rule and the existing empirical research on institutional investors' potential conflicts of interest in voting, which relates to one of the two rationales for the rule's adoption. Section 3 introduces our research design and sample characteristics. The results of the analysis are discussed in detail in section 4. We begin by analyzing regressions in which we infer votes simply from institutional holdings. We consider the impact on our results of the endogeneity of the proposal process in section 5, comparing the results of the sample firms to a matched sample of firms that only offered proposals prior to the mutual fund vote disclosure rule. Section 6 uses funds' actual votes after the rule change to predict fund votes before the rule change, and then reruns the regressions in the initial analysis with our estimates of the total fund vote. Section 7 concludes.

## 2. The debate over the mutual fund proxy vote disclosure rule and previous literature

The most vigorous proponents of mutual fund proxy vote disclosure were labor union funds, who had petitioned the SEC in 2000 and 2001 to adopt such a requirement (IRRC, 2002:1). They accorded priority to the vote disclosure requirement because it was considered to be a key mechanism for monitoring whether mutual funds' voting meshed with union voting policies.[4] But

[4] With the rule's implementation, they have indeed done so. In March 2006, for example, the AFL-CIO surveyed mutual fund voting and reported to the press that it found that the "top eight mutual funds [were] in the bottom tier with regard to voting in line with AFL-CIO proxy voting policies" (BNA, 2006:294).

in advocating the rule change, the labor union funds expressed an alternative objective, of reducing mutual fund managers' perceived conflicts of interest (IRRC 2002; Teitelbaum 2003). Mutual fund managers were said to vote in support of corporate management, at the expense of investors in the funds and the other shareholders, in order to facilitate business relations with the corporations whose shares they owned. The rationale for requiring disclosure was that, once votes were revealed, investors could better monitor fund managers in order to constrain such conflicts.

The SEC's proposal to adopt the vote disclosure rule generated a strong response.[5] Members of the mutual fund industry expressed concern that vote disclosure would lead to pressure and retaliation by corporate managers[6] and to politicization of the proxy process by organizations, such as labor unions, and social responsibility activists. The latter contention was that such organizations and activists had, investment objectives that differed from other shareholders with regard to the maximization of share value, and would engage in media campaigns against the funds' voting records. Mutual funds also objected that the cost of the disclosures would exceed the benefit to investors, noting that the vast majority of mutual fund holders never expressed interest in how funds voted. The SEC dismissed the industry's concerns and promulgated the disclosure rule, concluding that the benefit of transparency outweighed the asserted costs.

Two studies have examined the issue of conflicted mutual fund voting in relation to the rule by analyzing mutual fund votes disclosed since the adoption of the rule (Rothberg and Lilien, 2006; Davis and Kim, 2007). Neither study finds evidence of conflicts of interest in fund voting.

Rothberg and Lilien (2006) investigate voting by the five largest mutual fund families on all proxy proposals, whether sponsored by management or shareholders. To examine the issue of

[5] The SEC received over 8,000 comment letters in response to the proposed rule (the vast majority being form letters supporting the rule sent in response to an organized writing campaign by the groups advocating its adoption): labor unions, public pension funds and individual investors supported the proposed rule, while the fund industry overwhelmingly opposed it (SEC 2003).

[6] This was, in fact, the argument made in support of shareholder proposals to require confidential proxy voting sponsored by activist institutional investors in the late 1980s- mid 1990s (Romano, 2003).

conflicted voting, they compare the votes of the four large mutual funds whose business they consider to be "mostly mutual fund" companies (i.e., non-conflicted), with the votes of the one large fund that is affiliated with an insurance broker, and three additional financial services firms with mutual funds which they characterize as "mostly not mutual fund" companies (i.e., potentially conflicted because the funds' parents' business is principally the provision of financial services rather than the mutual fund business). The hypothesis is that if conflicts of interest lead funds to vote for management, then mutual funds with a sizeable amount of "nonfund" business should be more likely to vote in support of management than funds for whom other business opportunities are not a factor. Rothberg and Lilien find that there is no significant difference in the average support levels across the two sets of funds. They conclude, albeit tentatively because of the small sample size, that there is no evidence of conflicted voting by mutual funds.

Davis and Kim (2007) analyze mutual fund conflicted voting by examining the voting of mutual funds that manage corporate-sponsored pension plans. They compare mutual funds' voting on shareholder proposals at firms whose pension plans the funds manage with their votes at firms whose pensions they do not manage. Davis and Kim find that there is no significant difference in funds' voting support for management of clients and of non-client firms.

Because these studies examine solely mutual fund voting subsequent to the rule change, it is difficult to draw inferences concerning whether the rule had an impact from their findings. For example, if, as advocates of the rule contended, disclosure would reduce conflicted voting, then we would not expect to find different voting patterns across funds sorted by the presence of potential conflicts in post-disclosure rule data. This is an explanation Davis and Kim advance for not having identified a difference in fund voting across clients and non-clients. It is, of course, also possible that there was no difference in conflicted and non-conflicted mutual fund voting prior to the disclosure rule.

To address whether the disclosure rule had an impact on fund voting, regardless of

whether mutual funds are conflicted, it is necessary to contrast voting outcomes both before and after mutual funds' votes had to be disclosed, which is the main strategy pursued in this paper. Because actual votes are not available prior to the 2003 adoption of the disclosure requirement, we combine an inferential approach based on relating voting outcomes to holdings by different investor groups, as used by studies of conflicted voting by institutional investors (see e.g. Brickley et al. (1988) and Van Nuys (1993)) with actual voting data, to examine changes in voting before and after the adoption of the disclosure requirement.[7]

As earlier noted, we do not directly explore whether mutual funds have conflicts of interest in voting their shares, and thus our study's focus differs from the two prior studies and provides only circumstantial evidence regarding the rule's impact on fund conflicts. This more indirect approach to the conflict issue is justifiable because there is an important, independent reason for examining the impact of the rule on mutual funds more generally than those with conflicts. In adopting the rule, the SEC did not solely single out conflicted funds as the rule's target but also criticized all mutual funds for being "largely passive investors reluctant to challenge management," and for instead following the practice of selling their stock rather than voting against management (SEC 2003). Our examination sheds light on whether this second regulatory goal, the SEC's desire to increase mutual funds' active opposition to management proposals by requiring vote disclosure, has been advanced.

## 3. Sample construction and description

Our main analysis uses a sample of 'proposal pairs,' i.e. similar proxy proposals for the same firm, with one proposal submitted before, and the other after, the mutual fund vote disclose

[7] We relate institutions' reported holdings to voting, as in e.g., Brickley et al. (1988), but this approach will overstate their voting impact if they are engaged in substantial stock lending programs and do not recall their shares by the record date in order to vote them. The SEC does not require disclosure of the number of shares voted.

rule's effective date of July 1st, 2003.[8] We construct our sample of pairs of proxy proposals from all votes on proxy proposals that are included in the Investor Responsibility Research Center's (IRRC) database of proxy voting from 1994-2005 and that are classified by the IRRC as corporate governance (rather than social responsibility) proposals. The IRRC tracks the proxy votes of over 1,900 firms, including the Fortune 500 and Standard & Poor's 500 (covering fewer firms, however, in the earlier years). Using IRRC's four digit coding of the subject of the proposals, we identify all firms that had a vote on a proposal with the same code before as well as after the date of the mutual fund vote disclosure rule's effective date (i.e., meetings held after June 30, 2003).

To minimize changes in a firm's environment, we adopt the following matching rule: When there is a choice, we include the proposal voted on at the last meeting occurring before, and at the first meeting occurring after, the disclosure rule's effective date. This produced 1,006 proposal pairs (2,012 proposals), offered at 680 firms. After eliminating proposals for which key data were missing (e.g., 26 proposal pairs at 21 firms missing voting outcomes from IRRC) and those proposed at firms with dual class stock,[9] the full sample consisted of 853 proposal pairs offered at 582 firms. This paper analyzes a subset of the full sample of proposal pairs, the largest category by proposal type (408 proposal pairs offered at 390 firms), management-sponsored proposals to adopt or amend executive equity incentive compensation plans ("EEIC" proposals), which are also the management proposals that received the lowest levels of support.

In the full sample, slightly over 80 percent of the proposals were sponsored by management, with the largest category involving requests for shareholder approval of compensation plans (69 percent). Because proposals grouped into the management compensation

[8] The rule's effective date was April 14, 2003, but mutual funds were not required to disclose votes cast before July 1, 2003. We refer to the July date as the rule's effective date, as it is the relevant date for purposes of analysis.

[9] Proposals offered at firms with dual class stock were eliminated from the sample to ensure that institutional ownership accurately measures institutions' voting rights. These deleted proposals (112 proposal pairs at 73 firms) were approximately 20 percent of the original population of matched pairs. We also eliminated proposal pairs of firms with missing accounting performance data, insufficient data to calculate market betas and those for which Thomson Financial Services' database of institutional investor holdings computed the institutions' share as over 120 percent (15 proposal pairs at 13 firms).

category are diverse, we divided them into four subcategories: (i) EEIC proposals; (ii) outside directors' equity incentive compensation plan proposals; (iii) employee stock purchase plan proposals; and (iv) bonus plan proposals.[10] For comparative purposes, Table 1 includes information on the voting outcomes of all of the proposals in the full sample.[11] The table illustrates the well-known relationship that outcomes differ dramatically by proposal type. Management proposals receive considerably more support than shareholder proposals; and among management proposals, EEIC proposals have lower average support levels.

Table 1 also presents voting outcomes by proposal type, separately calculated for proposals voted upon before and after the adoption of the mutual fund vote disclosure rule. For most proposal categories, the voting support for management's position declined after the rule change, and the difference is statistically significant. This striking univariate statistical result is the springboard for our focus of inquiry. Our analysis seeks to determine whether increased opposition to management on EEIC proposals is attributable to the disclosure rule, and thereby indirectly whether the rule reduced conflicted voting by mutual funds, or, more generally, mutual fund passivity as the SEC and the rule's advocates anticipated..

Table 2 provides descriptive statistics for the sample firms, including characteristics that other studies have found to be relevant to voting outcomes on management compensation plan proposals, such as institutional ownership and profitability (e.g., Morgan et al., 2006). The table also presents mean values of firm characteristics at the two points of time under study, when proposals were submitted before, and after, the disclosure rule's adoption.

We obtain the percentage of outstanding shares owned by each of five institutional

[10] Table 1 indicates the IRRC classification codes defining the proposal subcategories. Executive and director incentive compensation plan proposals were separately grouped because institutional investors do not employ the same voting policies for executives and directors' compensation (see Council of Institutional Investors 2008: 16). Reflecting that fact, the average voting support for the two types of proposals differs (see table 2), and we found that mutual fund votes frequently differed for the two types of proposals offered at the same meeting, suggesting that it would be inappropriate to group these two types of proposals together.

[11] The data description and results for all other proposals (non-EEIC management-sponsored and shareholder-sponsored proposals) can be found in , Cremers and Romano (2007). We did not find the mutual fund voting

investor classes from Thomson Financial Services.[12] Ownership of directors (separately classified for independent directors and insiders) is obtained from the IRRC's directors database.[13] We collect additional firm-specific variables that are typically correlated with institutional ownership, for use as further proxies for institutional ownership (small institutions are not subject to the SEC reporting requirements) and as controls: market capitalization and share turnover from CRSP as in Bethel and Gillan (2002). Several performance measures commonly used in the literature are taken from CRSP and Compustat: past stock and market returns calculated over the 12-month interval prior to the date of the meeting at which the proposal is offered, return on assets (ROA), and net profit margin (NPM).

The principal explanatory firm-level characteristics that have been used in the proxy proposal literature (e.g., Gillan and Starks, 2000, Morgan et al., 2006) are performance and ownership. An extensive literature has developed (after the bulk of the research on proxy proposals was undertaken) on the relation between performance and governance structure, although whether a true (causal) relation has been identified is in dispute (e.g., Gompers et al. 2003; Lehn et al. 2007). Because corporate governance is of significant concern to many institutional investors, particularly activist institutions likely to sponsor shareholder proposals, the presence or absence of governance devices those investors deem important could affect voting outcomes, independent of whether they affect performance. We therefore include firms'

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disclosure rule to have an impact on voting outcomes of any of those proposal categories.

[12] Institutional investment managers with discretion over accounts of at least $100 million must report their holdings to the SEC quarterly on form 13-f. Thomson collects data from 13-f filings and sorts the reporting institutions into five classes: (1) banks (2) insurance companies; (3) mutual funds and their advisors; (4) independent investment advisors; and (5) others, which includes public pension funds and university endowments. If the Thomson data produced institutional holdings that summed to over 100 percent but less than 120 percent (58 observations), we rescaled the institutional holdings by the sum total. Following Brickley et al. (1988), Thomson classes 1 and 2 are combined - these institutions may have conflicts (the rationale for their approach) but are not subject to the disclosure rule.

[13] The IRRC collects these data from firms' SEC proxy filings. This database is much smaller than IRRC's voting database. As a consequence, we lose approximately half of our sample observations when the director ownership data are used in the analysis. Moreover, because for many pairs IRRC data exist only for either the 'before' or the 'after' proposal, the usable dataset is far smaller than that implied by the number of observations. The descriptive statistics for those variables in Table 2 are calculated using only the 420 observations comprising pairs where the data are available for both the 'before' and 'after' proposal.

governance features related to takeover defenses and board structure.

Five governance features related to takeovers are used in our analysis: the presence of a poison pill and the four individual charter and by-law provisions comprising the parsimonious takeover defense index constructed by Cremers and Nair (2005), which is a subindex of the G index created by Gompers et al. (2003): ability to issue blank check preferred stock; the presence of a staggered board; restrictions on shareholders' ability to call special meetings; and restrictions on shareholder action by non-unanimous written consent. For the many sample observations that are not in the IRRC's governance database, the source for these data, we hand collect the information from firms' SEC filings.

For governance features related to board structure, we collect from the IRRC's director database board size and composition (percentage of independent directors), in addition to the stock ownership of directors mentioned earlier.[14] These are mechanisms of corporate governance well-recognized in the literature on governance and performance. Table 2 shows that the sample firms have high institutional ownership, numerous takeover defenses, independent boards, and low director stock ownership. The average length of time between the 'before' and 'after' proposals for the same firm is 3.8 years.

**4. Main Results**

Our main analysis seeks to explore whether mutual funds changed their votes on EEIC plans after the vote disclosure regulation came into effect on July 1, 2003. As we do not observe their vote before, we investigate the aggregate voting outcome and its association with mutual fund holdings, and whether there is any difference for proposals before versus after the disclosure rule took effect, controlling for other characteristics of the firm and the compensation plan. Our dependent variable is the aggregate vote in support of the proposal. As the percentage of votes ranges between 0 and 1, it is transformed by a logistical transformation, log [percentage of votes

[14] The IRRC directors' database contains information on more firms' board composition than director ownership, and

for/(100 – percentage of votes for)], to create a continuous variable with negative as well as positive values, for ordinary least squares estimation.

If institutions vote differently from other investors, as a group, we would expect to find a relationship between voting outcomes and institutional ownership. In addition, by comparing the association between mutual fund holdings and voting outcomes before and after July 1, 2003, we can relate the impact of the rule change to change in those institutions' voting. We use aggregate holdings of four classes of institutional investors: banks and insurance companies; mutual funds, the affected class; independent investment advisors; and the remainder other institutions category that includes, among others, activist investors such as public pension funds and hedge funds.

Given our interest in the effect of the mutual fund vote disclosure rule, we include a dummy variable ("after") to indicate whether a proposal was introduced before or after the rule's effective date, and interact the principal independent variables of interest with that 'after' dummy. The interactions of the 'after' dummy with institutional holdings are thus intended to capture changes in aggregate voting before versus after the disclosure rule. As only one class of institutions, mutual funds, was subject to the rule, we would expect a change only for this group. If all classes of institutional investors experienced a similar change, then we would not be able to attribute a change in mutual funds' voting to the disclosure rule. The principal regression model estimated is:

$$Ln\ [votes\_for/(100\text{-}votes\_for)] = \alpha + \beta_1 After + \beta_{2..k} Controls(size,\ profitability,\ governance) + \beta_{k+1...k4}(institutional\ ownership) + \beta_{k+4...k+8}\ (After^{*}\ institutional\ ownership) + \varepsilon.$$

All regressions are estimated using ordinary least squares and robust standard errors after Huber and White. Our primary focus will be on the interaction of mutual fund holdings with the 'after' dummy, in order to see whether there is any effect of the vote disclosure rule change.

We first consider the level of the aggregate voting outcomes before and after the

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we thus lose about 30 percent of the sample observations when board variables are included in the analysis.

disclosure rule change and its relationship with mutual fund holdings (panel A of Table 3). Next, we incorporate different measures of firm governance such as ownership by directors (column 3 of panel A). Then we control for detailed plan features that are available for a subset of the EEIC proposals and investigate confounding events such as the passage of the Sarbanes-Oxley law (panel B).

### 4.1. Votes before and after, basic results

The key finding of panel A of Table 3 is that support for management by mutual funds did not decline after the disclosure rule change. We find a marginally significant negative relation between mutual funds' holdings and voting outcomes unconditionally, but a marginally significant positive interaction term of mutual fund holdings with the 'after' dummy, including other (non-institutional ownership) firm characteristics (column 2). (When the other firm characteristics are excluded (column 1), the negative unconditional relation between fund holdings and votes is significant.[15])

The net effect after the rule change is positive, such that proposals at firms with more mutual fund ownership afterwards had more support. While the latter net effect is not statistically significant in all model specifications, these results clearly do not sustain the SEC and the regulation's advocates' expected view of the benefits of the rule change because, if their analysis were correct, we should find a decrease in mutual funds' support for management after the rule.

[15] If firm fixed effects are added, then all of the variables are insignificant in the full model of column 2. If the standard errors are clustered by year as well, then in the full model of column 2, the results are the same as in the reported table of column 1 (the unconditional relation is significantly negative and the conditional (fund holdings interacted with the 'after' dummy) relation is marginally significantly positive.). While similar to firm fixed effects, we have also tried, as a robustness check and directly exploiting the matched nature of our proposal pairs, using the change in voting outcomes and firm characteristics from the 'before' to the 'after' proposals to analyze the effect of the vote disclosure rule. To summarize, when the data are collapsed to use the difference in proposal pairs' voting outcomes as the dependent variable, if the statistical significance of a regressor is only marginal in Table 3, it is generally no longer significant, but if it is statistically significant at 5 percent in Table 3, then that result is robust (i.e., the interaction of mutual fund holdings with the 'after' dummy becomes insignificant while the triple interaction with independent director holdings remains significant at 5 percent). More generally, we again find no evidence for the SEC's objective in promulgating the rule, and the hypothesis of the advocates for its adoption, that mutual funds would lower their support for management when their votes were disclosed, and some evidence for the opposite

Yet any conclusion to be drawn from the data would be the opposite, namely that mutual funds increased their support for management after adoption of the rule. In this respect, the data could be characterized as lending some support to the view of advocates of confidential voting, that transparency subjects institutions to management pressure to support its position, rather than the view of vote disclosure rule proponents. It could, as well, indicate that the 'after' proposals were more likely to be perceived as value-maximizing by mutual funds than the 'before' proposals, a possibility discussed in greater detail in part 5.

We do not find any significant relation for the other three categories of institutional holdings, which were not directly affected by the rule change and which is thus as expected. That finding bolsters the conclusion that the mutual fund holding results are attributable to the rule and not to some other overall change in the proxy voting environment or the quality of the proposals (if the 'after' proposals were more likely to maximize value than the 'before' proposals, then we would expect the same relations to hold for all of the institutional ownership variables and not solely those for mutual funds).

We find several distinctive results regarding the relation between the control firm characteristics and voting outcomes independent of the rule change. First, the EEIC proposals fare worse in firms with higher stock turnover. In addition, performance is not a significant factor in voting support (all of the performance variables are insignificant, or marginally insignificant with a net insignificant effect (column 2)). The performance finding is in contrast to Thomas and Martin (2000), who report a negative relation between performance and voting support (in a univariate test), but parallels a finding of no significant relation by Morgan et al. (2006). For the defenses, only the presence of a poison pill is ever significantly negatively related to voting outcomes (column 2); the other defenses are insignificant. Because we control for accounting and stock market performance in that model, the negative significance of poison pills does not seem to

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effect.

be a marker for poor performers adopting the defense and shareholders voting against management due to poor performance.

Finally, the presence of confidential voting was included as a control because its proponents contend that it reduces conflicted voting, despite an absence of supporting data (see Romano, 2003). Any such effect would be diluted by the vote disclosure rule because mutual funds' votes on proposals in firms with confidential voting became newly revealed to management after the rule change, along with their disclosure to investors and members of the public, whereas managers of firms without confidential voting could identify how mutual funds voted prior to the rule change. However, the interaction of the 'after' dummy and confidential voting is insignificant if added to the reported regressions (unreported).

### 4.2. Board characteristics

We next explore whether board characteristics affect mutual fund behavior in relation to the rule change. The subsample of proposals for which we have board data, 129 proposal pairs, is similar to the full set of EEIC proposals for the key firm characteristics of interest. Column 3 of Panel A of Table 3 reports the regression results when the four board governance variables are added (insider and independent director holdings, board size and board independence) with triple interactions of these governance variables with mutual fund holdings and the 'after' dummy. However, because this sample is significantly smaller than the overall sample, this analysis is more tentative.

There is one interesting finding: the triple interaction term between mutual fund holdings, independent director holdings, and the 'after' dummy is significantly positive.[16] Further, once these triple interactions are included, mutual fund holdings by themselves or interacted with the 'after' dummy (but not interacted with independent director holdings) become insignificant. In

[16] This result is robust to including fixed effects and clustering standard errors by year.

other words, mutual funds seem to increase their support for management-sponsored EEIC proposals after the rule change at firms where independent directors hold more shares. This effect seems economically meaningful. For example, the triple interaction coefficient (equal to 59) means that a one standard deviation shock (2%) increase in independent director ownership is associated with an increase in the logit-transformed vote of (59 x 0.02 x 0.24 =) 0.28 and thus the actual vote by approximately 5.0 percent (conditioning on average mutual fund ownership of 18%).

Why might independent director ownership impact the voting on management compensation proposals by mutual funds? Directors with higher ownership may be better monitors (and/or advisors) of management than directors with lower ownership, because higher ownership should produce increased incentives to monitor. This explanation is supported by the finding in the literature that the median independent director's stock ownership is positively correlated with performance (Bhagat and Bolton, 2008). Once their votes became publicly disclosed, mutual funds may have begun to key in on outside directors' ownership, as a signal of firm quality, as a defensive strategy, when voting in favor of proposals on executive compensation, a subject that had become increasingly controversial in the post-Enron environment of the vote disclosure period. This further suggests, in contrast to the results regarding confidential voting, that mutual funds may not be completely indifferent to the transparency of the voting environment.

### 4.3. Compensation plan features

Changes in compensation plan features over time are another potential alternative explanation of our results. In a study of EEIC proposals offered in 1998, Thomas and Martin (2000) identify five characteristics of compensation plans that are negatively correlated with voting support: dilution proportion (dilution caused by the specific proposal), total dilution

(dilution due to all compensation plans and not just the plan under consideration), ability to reprice or exchange underwater stock options; extension of loans to exercise options; and awards of time-lapsing (non-performance-based) restricted stock. As they discuss, those features are known to be considered objectionable by institutional investors. In addition, a study of EEIC proposals introduced from 1992-2003 by Morgan et al. (2006) finds both dilution proportion and total dilution are negatively related with voting support. We are able to obtain information regarding at least one of the five undesirable plan features identified by Thomas and Martin for 258 EEIC proposal pairs.[17]

Table 2 reports summary statistics for the plan features, showing that there is no significant difference in dilution (proportion or total) across proposals offered before and after the mutual fund vote disclosure rule's adoption. There is a significant difference in the other three characteristics: significantly fewer plans permit repricing or loans, while significantly more plans award restricted stock post-disclosure.[18]

The results of adding plan features to the analysis of voting outcomes are in Panel B of Table 3. As indicated in column 1, dilution proportion, total dilution and the repricing dummy are significantly negative.[19] These results, which are consistent with those of Thomas and Martin (2000) and Morgan et al. (2006), suggest that the findings regarding fund holdings in the prior

[17] We thank Randall Thomas and Kenneth Martin for generously sharing with us their 1998 data. We use IRRC's online voting database for plan features in order to assure consistent treatment with plan classifications in the Thomas and Martin (2000) study. Because the online IRRC database begins in 2001 and does not always summarize all features of plans in its analyses of proposals, we were able to obtain information on all five features for only 155 proposal pairs.

[18] While these changes would increase support for the plans as they are in the direction desired by institutional investors, they cannot plausibly be related to management's changing proposals in response to the mutual fund vote disclosure rule: The reduction in repricing and loan provisions, which would be expected to increase support for the plans, can be attributed, respectively, to an alteration in the accounting rule for option repricing that imposed unfavorable financial statement treatment of such action (effective in 2001), and to SOX's prohibition of executive loans (e.g., Personick, 2005). The increase in restricted stock usage, which would be expected to decrease support, can be attributed to the change in accounting rule, announced in 2003 with a 2005 implementation date, to require option expensing, because that meant that firms no longer obtained an accounting "benefit" from option awards (e.g., Personick, 2005). Once the accounting treatment was equalized, restricted stock has other benefits compared to options, such as the award retains some value in market downturns (compared to options that become underwater), to make it preferred by managers and firms. Because the changes in plan features go in offsetting directions relative to institutional investor preferences, the overall decline in support for these proposals after 2003 cannot be straightforwardly attributed to changes in compensation plan features.

panel regressions are not due to changes in the compensation plans, because two of the three plan features that changed over time are not significantly related to the voting outcomes, and the one that is significant, the repricing dummy, is negative, while the number of plans permitting repricing declined after 2003. Interacting the plan variables with the 'after' dummy, only the total dilution interaction term is significant (column 2): while average total dilution is unchanged over the time period, after the disclosure rule proposals with higher total dilution attract more no votes.[20] Interactions between the plan variables, mutual fund holdings and the 'after' dummy, are insignificant (unreported), suggesting that the afore-mentioned effect is not due to the rule change (i.e., not due to a change in mutual fund behavior). The results suggest that changes in plan features in the period following the disclosure rule's adoption do not explain our other results, and that mutual funds have not reassessed their voting strategies for compensation plans in relation to plan features post-disclosure.

### 4.4. Broker nonvotes

At the same time as the mutual fund vote disclosure rule was adopted, there was a parallel change in the proxy voting environment: the New York Stock Exchange (NYSE) altered its rule on when brokers can vote shares where the beneficial owner does not provide voting instructions to exclude all EEIC proposals effective July 1, 2003. The previous rule permitted broker votes on plans whose dilution proportion was under 5 percent. Bethel and Gillan (2002) find that under the prior regime, compensation plans received significantly higher support when brokers could vote. Of course, brokers could only vote on plans with low dilution levels, which would render the plans less objectionable to institutional investors and thereby attract more support independent of the broker votes. Nevertheless, it is possible that the inability of brokers to vote shares for all

[19] Results in Panel B do not change when adding firm fixed effects and/or clustering standard errors by year.
[20] Restricted stock and loan dummies are insignificant, and omitted from subsequent estimations, increasing the number of observations. Column 2 of panel B excludes the 'after' dummy and its interaction with other holdings,

compensation proposals after the disclosure rule, compared to only some such proposals before its adoption, could confound the analysis of the impact of the mutual fund vote disclosure rule. We therefore create a dummy variable indicating whether a plan's dilution proportion is less than 5 percent. If managers had been proposing plans with dilution rates below 5 percent before 2003 to avoid the NYSE rule on broker nonvotes as Bethel and Gillan (2002:33) hypothesize, then we would expect the proportion of such proposals to decrease after the rule change because all plans now require a vote.

There is, however, no significant difference between the rate of dilution proposals above and below 5 percent, before and after July 1, 2003 (the mean value of the dilution dummy is .67 before and .62 after, with a t-statistic for the difference in mean of 1.0). In addition, when we include that dummy variable, and its interaction with the 'after' dummy in the full model regression including institutional investor variables along with the two other significant plan features, total dilution and repricing (plan features to which institutions object but that are not related to the broker voting rule), the 'dilution' dummy is significantly positive, while the 'after' interaction is insignificant (column 3, panel B of Table 3). There is greater voting support for proposals with lower dilution rates, and the broker voting rule change did not significantly alter that effect. We therefore believe that our previously-reported results regarding the interaction between the 'after' dummy, mutual funds and independent director stock ownership, are due to the vote disclosure rule and not the NYSE's broker vote rule change.

### 4.5. The enactment of SOX

Because incentive compensation came under increasing scrutiny and challenge by activist investors post-Enron, the 'after' dummy could be picking up changes in the proxy environment following the enactment of SOX, and not the impact of the mutual fund vote disclosure rule. We

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along with total dilution, because VIF tests indicate multicollinearity.

therefore estimate the regressions using an additional "after-SOX" dummy (post-July 2002) and report the results in column 4 (panel B of Table 3). When we interact the institutional holdings variables with both the 'after' and 'after-SOX' variables (column 6), the 'after' interaction with mutual fund holdings remains marginally positively significant while all of the other interactions, particularly the 'after-SOX' interactions, are insignificant. When only 'after-SOX' interactions are used for each class of institution (unreported), none of the interactions are significant. While anecdotal accounts suggest that the proxy environment for incentive compensation plan proposals became increasingly more difficult before the mutual fund vote disclosure rule was enacted, these results suggest that the effect on voting that our estimations capture is associated with the time frame of the rule's adoption and not SOX.

## 5. Selection of before-and-after EEIC proposals pairs and endogeneity

Selection or endogeneity is another possible explanation for our main result that mutual funds seem to have increased their support for management-sponsored EEIC proposals after the rule change. The endogeneity issue is that having a proposal both before and after the rule change is a choice by management. For example, managers may be more likely to sponsor a proposal in any given year if they expect the proposal to pass. Further, this may be related to our main variable of interest, mutual fund holdings. To investigate this question, we create a matched sample of firms that had only a 'before', but no 'after', EEIC proposal. We first describe our matching procedure and any differences between our sample of original firms (those with both 'before' and 'after' proposals) and our sample of matches (those with only 'before' proposals). We then investigate whether differences in firm characteristics, before or after the rule change, are associated with having no proposal afterwards and could therefore partly explain our results.

### 5.1 Match sample: construction and comparison of matched firms to the original sample

We start with the universe of firms in the IRRC proxy voting database from 1994-2005 to identify matches for our sample firms, namely firms with an EEIC proposal offered prior to the disclosure rule and no such proposal after the rule change. From that pool of firms, we select a match for each sample firm by IRRC proposal code and year if possible, by size (market capitalization) and by two-digit SIC code (if possible, for 15 firms we use 1-digit), measured in the year of the 'before' proposal.[21] We end up with a total of 254 usable matches (match firms with no missing information on the basic controls or institutional holdings).

Table 4 presents the difference between the original firms and the match firms, for firms 'before' proposals, using the dates for the original firms for both the original and the match firms and for 'after' proposal dates, which of course are only available for the original firms. On most firm-level dimensions, the groups of firms are very similar, even though the matching criteria were based on industry and firm size only. The main differences for the two groups are that the match firms without an 'after' proposal seemed to have smaller size and lower bank and insurance company and investment advisor institutional holdings, along with greater support for their EEIC proposals (by 2 percent).[22] Most importantly, however, there is no discernable difference in mutual fund holdings across the two groups in the 'before' period.

Table 4 also reports the difference-in-difference of how each variable changed from the original firms' 'before' to "after" proposal dates.[23] For four variables, there is a significant difference for the original firms versus the match firms: firms without 'after' proposals experienced lower growth in market capitalization, a reduction in market beta, an increase in the holdings of independent investment advisors and a decrease in the holdings of mutual funds. The match firms also have lower mutual fund holdings in the 'after' period. Clearly, those variables

[21] When matching on IRRC proposal, if there is no firm with a same code proposal in the same year as the original firm's proposal, we select the proposal offered in the closest year to the year of the original firm's proposal .

[22] If measured at the time of the actual match firms' 'before' proposal, size is no longer significant and different non-mutual fund institutional holdings are significant .

[23] The difference-in-difference in column 4 is not equal to the difference of the values in columns 2 and 3 because for columns 2 and 3 the requirement for a pair's inclusion is no missing information for either the 'before' or the 'after'

that differ across groups (and especially those that changed differently after the vote disclosure rule change across groups) are the prime variables of interest in our consideration of whether endogeneity could explain our main result (that mutual funds' support for management seems to have increased rather than decreased after the rule change).

**5.2 Exploring Selection Effects**

As a benchmark for whether our matching procedure will assist in identifying endogeneity in proposals offered after the rule change, we examined whether there are differences in explanatory factors for the voting outcomes of the match firms' proposals and the original sample firms' 'before' proposals. To investigate how the voting outcomes for all those proposals before the rule change differ for our original sample firms versus the match firms, we ran regressions (unreported) paralleling those in table 3, panel A, for all the "before" proposals, including an 'original' dummy to indicate an original sample firm and interacted the independent variables with this 'original' dummy. The 'original' dummy itself, all interactions of the institutional holdings with the 'original' dummy, and, and the all interactions between all independent variables and the 'original' dummy are all statistically insignificant These results indicate that the effect on voting outcomes of firm characteristics is indistinguishable across the two groups of firms. This provides support for using the matching process to examine endogeneity in post-rule proposals (as best as we can tell, the factors affecting the baseline voting before the rule change in the two sets of firms are the same).

Table 5 presents the results for logit regressions estimating the likelihood of not having an EEIC proposal after the rule change (i.e., the dependent variable equals 1 for match firms). Our sample consists of the original-firm – match-firm pairs for which we have no missing information. We include the basic controls plus the institutional holdings. For all these variables, we include both the value before the rule change (at the date of the proposal of the original firm,

dates, but for column 4 there must be no missing data for both dates. As a result, the samples are different.

for the relevant match firm as well), and the change in that value from the original firms' 'before' proposal date to the date of its proposal after the rule change. We further include the voting outcome of the 'before' proposal as an independent variable, as management might be more likely to offer a proposal if the prior voting support was high. Finally, we include the number of months since the 'before' vote (i.e., the difference between the date of the original firm's 'after' proposal and the date of the firms' actual proposals in the 'before' period), in case a longer period would make it more likely for a firm to revisit its previous plan, independent of other firm characteristics. Such a scenario would imply a negative coefficient. Results are reported for two logit estimations, one including and the other excluding the two accounting profitability measures.

The results indicate that across the two logit specifications, the main variable that is consistently and statistically significantly related to the likelihood of having no proposal after the rule change is the holdings by mutual funds. Specifically, both larger mutual fund holdings 'before' and a large increase in mutual fund holdings 'after' are associated with a greater chance of having a proposal after the rule change (the former is marginally significant with a p-value of 8 percent and the latter is clearly significant with a p-value of less than 3 percent). In addition, in the full model of column 2, three other variables' 'before' levels are positively related to the likelihood of having an 'after' proposal: holdings by banks and insurance companies, restrictions on shareholders' ability to call special meetings, and NPM (the latter two being only marginally significant at 10 percent). However, for none of those three variables are changes from 'before' to 'after' significant. Neither the 'before vote outcome' nor the 'time since the before vote' variables are consistently significant (the former being insignificant and the latter being significant only in column 1, though with a positive coefficient, opposite of the expected sign). This suggests that the most obvious endogeneity issue may not be a substantial concern, in that management does not appear to choose to offer an 'after' proposal because of the level of voting support for a 'before'

proposal.

Table 5 provides some evidence that, after the rule change, management seems more likely to sponsor EEIC proposals in relation to ownership composition. As we previously found that after the rule change mutual funds show greater support for these proposals, the increased likelihood of having a proposal after the rule change for firms with a greater increase in mutual fund holdings could explain part of our results.

However, this result would not be predicted by the overall association between mutual fund voting before the rule change, which (see panel A of Table 3) indicated that, if anything, higher voting outcomes were associated with lower mutual fund holdings. Moreover, as previously reported, if we regress the voting outcome of the 'before' proposals of both original firms and match firms jointly on their firm characteristics, we do not find any difference between the support of these proposals and the level of mutual fund holdings across the two groups.

Of course, the sample is limited to proposals offered within two years of the rule change, and it is probable that the match firms will propose EEIC plans after the end of our sample period. Accordingly, the suggested endogeneity of management's proposing an 'after' EEIC plan in relation to the size of mutual funds' holdings may be more apparent than real, in that the finding may alternatively be interpreted as indicating how quickly after the rule change such a proposal was offered, and not whether a proposal will be offered at all. That might suggest that over time EEIC proposals will be offered independent of the size of fund holdings, as was the case before the rule.

Because our matched sample comparison indicates that mutual fund ownership increased following the vote disclosure rule for firms with an 'after' proposal and not for those without one, it is possible that firms sponsoring EEIC proposals in both periods had unobserved 'before' period characteristics that mutual funds found attractive and that led to the increase in their holdings and thereby to increased support for EEIC proposals, after the rule change. This

unobserved "attractiveness" to mutual funds, in turn, may have induced these firms to offer the 'after' proposal, expecting greater voting support from the mutual funds' increased ownership. In such a scenario, managers who expect mutual funds to oppose their proposals do not offer them, and it is changed characteristics of firms, and not the vote disclosure rule per se, that would explain the main results.

We therefore considered three different subsamples in which the selection effects may be greatest, i.e., where the unobserved "attractiveness" to mutual funds may be largest, and compare the difference in voting results before and after the rule change across these subsamples. The first subsample consists of firms with relatively large mutual fund ownership at the time of the 'before' proposal; the second subsample consists of firms with the greatest increases in mutual fund ownership from the 'before' to the 'after' proposal; and the final subsample consists of firms with relatively high profitability (NPM) at the time of the 'before' proposal. However, we find no significant differences in changes in voting support related to mutual funds across these subsamples. We thus find no support for the explanation of the main results as due to a selection effect based on fund ownership.[24]

## 6. Inferences from individual mutual fund votes

Thus far, we have analyzed the effect of the mutual fund vote disclosure rule on voting outcomes by inference from institutional holdings. As mutual fund votes are available for post-disclosure rule proposals, we can use actual voting data to estimate which mutual fund characteristics and fund family matter for voting behavior. This information can then be used to differentiate whether mutual funds or their voting behavior changed. In particular, the previous results only relate the aggregate mutual fund ownership in each firm to voting outcomes. That

[24] In unreported pooled panel regressions, we also added interactions of the 'after' dummy and mutual fund holdings with a dummy variable indicating above-median mutual fund holdings 'before' (i.e., a triple interaction term). This tests whether the association of mutual fund holdings with voting outcomes 'before' versus 'after' changes depending

assumes that all firms are held by funds with similar voting behavior. However, different funds may vote differently and the composition of fund ownership changes over time. This may be important because fund holdings are clearly endogenous (especially the holdings of the funds for which we obtain votes, which are funds that have the largest stake relative to their assets under management).

Specifically, our previous result that mutual funds did not decrease (and even seemed to have increased) their support for management-sponsored EEIC proposals after adoption of the disclosure rule could be due to changes in which funds hold the firms sponsoring such proposals, rather than changes in the voting behavior of any individual fund. For example, it is possible that funds that are consistently (i.e., both before and after the rule change) more likely to vote in favor with management increased their holdings more in firms that sponsor EEIC proposals after the rule change. Therefore, in this section, we investigate whether this selection hypothesis drives our results by considering individual fund holdings in conjunction with actual votes.

We collect the votes of mutual funds whose holdings of the outstanding shares of the issuer of a sample proposal introduced after the rule change equals at least 0.75 percent of the mutual fund's stock portfolio's assets under management. This criterion results in a sample of funds that are more than average invested in our sample firms, but is not weighted towards larger funds.[25] We identify the funds from Thomson Financial's CDA/Spectrum mutual funds database, which contains quarterly report information on individual mutual funds' domestic equity portfolio holdings.

We seek to predict the mutual funds' actual votes on the 'after' proposals as a function of fund characteristics, which are obtained from the CRSP mutual fund database.[26] The fitted

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on whether firms had relatively low or high mutual fund holdings 'before.' All are insignificant.

[25] We selected this cutoff for feasibility of data collection. If that cutoff resulted in our collecting votes for less than one-third of the issuer's equity that is held by mutual funds, then for that proposal we used instead a cutoff of 0.25 percent of a fund's stock portfolio.

[26] Because CRSP – Thompson database links are available only for all-equity mutual funds (a subset of the funds in the Thomson database), we obtain fund characteristics for only this subsample of the funds for which we collect

regression of the actual votes produces the expected mutual fund vote for all 'after' proposals. Applying these coefficients to the fund characteristics at the time of the 'before' vote (for which we obviously do not observe actual fund votes), we obtain an estimate for the expected fund vote variable there as well. Next, we interact the expected fund vote with the percentage of total fund holdings to get an estimate of the total fund vote. This 'total mutual fund vote' estimate is then used rather than the aggregate mutual fund holdings, to refine the previous analysis of whether the mutual fund vote disclosure rule affected fund behavior and consequently, voting outcomes.

Because we only observe the fund vote after the rule change, it is necessary to make an assumption regarding the relation between fund characteristics and voting in order to calculate the expected fund votes before the rule change. We assume that the relationship is stable such that the only change in mutual fund voting ('before' versus 'after') is related to changes in mutual fund characteristics 'before' versus 'after', or due to changes in firm characteristics included in our fund vote regression. As a result, in the second-stage regressions that employ the total mutual fund vote estimate, we test a joint assumption: (i) that the fitted fund vote regression contains all of the relevant characteristics (of funds and firms) that affect mutual fund voting, and (ii) that the relation between those characteristics and voting is stable over time.

If the coefficient on the 'total fund vote' variable differs 'before' versus 'after', it could be either because the rule affected mutual fund votes (that is, their voting indeed changed 'before' versus 'after' in ways that are unrelated to their fund characteristics or fund family), or because of misspecification (i.e., the fitted regression of what factors affect fund voting has omitted important variables that changed 'before' versus 'after'). If the interaction of the 'total fund vote' estimate with the 'after' dummy is no longer significant, we cannot reject the possibility that the finding of increased support by mutual funds for EEIC proposals after the rule is due to increased

votes. This limitation does not affect our results, as the results remain the same if we use for the dependent variable in the regressions predicting votes only the votes of the funds for which we have characteristics information.

ownership of funds that are more likely to support such proposals, rather than because funds have changed their voting behavior in response to the rule.

### 6.1. Mutual fund votes and characteristics

On average, mutual funds voted no differently from other shareholders (73.1 percent in support of proposals compared to 72.7 percent in support overall. However, mutual funds voted against management at a higher frequency than other shareholders for both management-sponsored EEIC proposals and for shareholder-sponsored proposals.

Table 6 provides information on the characteristics of the mutual funds holding stock in our sample of firms. Average fund characteristics differ significantly over time, with higher average turnover and expense ratios, and lower average net asset values, before the vote disclosure rule was adopted. These differences are consistent with general trends in the mutual fund industry that are independent of the rule change: turnover rates and expenses have declined, and assets have increased, over the past decade. In addition, the table reports the average holdings in the sample firms of the five largest fund families (as measured by their holdings in the sample firms). The average holding varies across the fund families, but is still relatively small, approximately 1 percent.

The estimated regressions of actual fund votes, which will be used to derive expected fund votes, are reported in Table 7. The fund characteristics used to predict fund votes are expense ratio, turnover ratio, load,[27] the log of total net assets, and the percentage held by the five largest fund families. Because actively managed funds' voting policies may differ from passively managed funds, we include expense and turnover ratios. We include net assets under management because larger funds have more resources to consider voting issues (firms with fewer resources would, for instance, be more likely to rely primarily on the default rules of proxy voting services, such as ISS). We also include average load, in case funds with sales charges follow different

[27] The load variable is the sum of the maximum front- and rear-end loads. We average fund characteristics across all

voting policies from funds without sales charges. Given the dramatic alteration in the individual fund characteristics of the average mutual fund over the sample period, we de-trend those fund characteristics by subtracting annual means. Finally, we include the largest family fund holdings because voting policies are often set at the fund family level, which thereby affects voting outcomes independent of the individual funds' characteristics, and the larger the family holdings the more independently informed the family's voting policies could be. We do not de-trend family fund holdings, however, despite there being a significant increase in most of the families' holdings over time, because holdings could be directly related to voting outcomes if voting policy is set at the family level.

We also include in the regressions firm characteristics that might affect funds' voting policies. The included firm characteristics are the three profitability measures, confidential voting and the five individual takeover defenses used in the regressions reported in the prior sections. As reported in section 4.1, interactions between the 'after dummy' and these characteristics are insignificant, indicating that the relation between voting outcomes and those characteristics did not change over time. Consequently, including those variables should improve our ability to predict the 'before' votes with these regressions of 'after' votes.

As Table 7 indicates, although most fund characteristic regressors are insignificant, the overall regression is significant (the regression F-statistic is significant at less than 1 percent).[28] The correlation between the expected fund votes (i.e., the fitted values from the regression in Table 7) and the actual fund votes -- another measure of the goodness of the regression's "fit" --

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funds holding the proposal firms (the regression observation units).

[28] The regression in Table 7 is estimated using all funds and not solely those for which we collect votes, on the assumption that the funds for which we have votes are representative of all of the funds holding the shares. There are too many cases of "zero" observations for family fund holdings to be able to estimate the regressions reliably for those variables using only the smaller number of funds for which we collect votes (for example, there are 350 zero observations for the Fidelity fund family). A regression using only funds for which we collect votes can be estimated if the fund family holding variables are excluded. Compared to a regression using all observations on only the individual fund and firm characteristics in the reported regression, the regressors using only funds for which we have votes are less significant. Also, if the fund characteristic variables are not adjusted by their annual means, their significance levels are unchanged but the significance of some of the fund family holdings variables decreases.

equals 28 percent and is highly statistically significant. This lends confidence to the efficacy of using the two-stage approach. As the next two sections report, in general, the results of the voting regressions using expected votes replicate those reported earlier for the regressions inferring mutual fund voting from mutual fund holdings that are estimated without the additional information that can be gleaned from some funds' actual votes.

### 6.2. Total mutual fund votes and EEIC proposals

Table 8 reports the results for voting outcomes using our estimate of the 'total mutual fund vote,' which is computed by multiplying the total mutual fund ownership by the expected mutual fund vote fitted from column 1 of Table 8.[29] We also include the new variable 'percent same,' which is the percentage of continued share ownership by mutual funds across the 'before' and 'after' proposals for which we obtain the funds' votes. If this percentage is relatively high, the funds holding that stock before the rule change should be relatively more similar to the funds holding that stock after it. Firms for which this percentage is relatively low should be more likely to have funds whose characteristics differ before and after the rule change (because there is a greater difference between which funds own the stock before and after). As we find that 'percent same' is never significant, this suggests that differences in funds holding the firm (and thus their characteristics) 'before' versus 'after' are not significantly related to aggregate voting outcomes.

Table 8 indicates that the added information from fund votes and characteristics increases the statistical power of the analysis and confirms the previous results: the coefficient of the total fund vote unconditionally is negative and interacted with the 'after' dummy positive, and both are statistically significant (columns 1 and 2). These columns closely parallel the specifications in

[29] Because mutual fund holdings data were not available for each sample firm for both before- and after- disclosure rule change proposal years, the sample for the analysis using actual votes is smaller than that for the prior analysis: 362 'after' proposals are used in the derivation of expected votes. The second-step estimates take the estimation risk of the first-step into account by bootstrapping the first-stage residuals and adding those residual estimates to the fitted values of the expected fund vote. We report the mean coefficients and their mean robust standard errors, obtained by averaging over 10,000 bootstraps.

panel A of Table 3, where no fund-specific information is used, and the corresponding coefficients using fund holdings are only marginally significant.

The regression in column 1 of Table 8 can be used to estimate economically how mutual fund voting could impact the overall voting outcome. For example, we can consider the impact of an increase of the expected vote by mutual funds by a one standard deviation shock (equal to 0.07 either before or after the rule change). The net effect 'after' is zero, but the net effect 'before' lowers the logit-transformed vote (by -1.6 x 0.07 = 0.11) and thus the actual vote by approximately 2.0 percent.

Finally, the regression model in column 3 of Table 8 again considers board governance variables (paralleling column 3 of panel A of Table 3) and also confirms those previous results. The triple interactions of total fund vote interacted with independent director stock ownership and the 'after' dummy is positive and significant at 10 percent.[30] Therefore, while the raw data reveal that mutual funds are less likely to vote for management than all other investors, their lower level of support is not a function of the vote disclosure rule. For that to be the case, the 'after'-interaction must be significantly negative as well. However, these new results tend to indicate more strongly than the analysis in Table 3 (that did not use information from the actual fund votes) that the disclosure rule increased, rather than reduced, mutual funds' voting support for management on EEIC proposals. The 'after' interaction is significantly positive. Accordingly, while we cannot, of course, rule out the possibility that a change in some unobservable firm, fund, or proposal characteristic is the cause of our main result, that result seems robust to controlling for the endogeneity of which types of funds hold firms with EEIC proposals. An alternative interpretation of the result could be that the relation between fund characteristics and fund votes is not stable over time, such that funds with the same characteristics voted in support of

[30] It is positive and significant at less than 5 percent if firm fixed effects are included and standard errors are clustered by year. In this case, the total fund vote without the director holdings interaction is significant as well, and again suggests that mutual funds have greater support for EEIC proposals after the disclosure rule change.

management after, and against management before, the rule change. Although we prefer the former explanation because the 'percent same' variable is insignificant, neither interpretation is consistent with the rationale for the vote disclosure rule of its advocates, that transparency would lower mutual funds' support for management.

## 7. Conclusion

This paper investigates whether the SEC's requirement of mutual fund proxy vote disclosure impacted the voting behavior of the funds and voting outcomes for management-sponsored proxy proposals on executive equity incentive compensation plans (EEICs) by comparing outcomes of similar proposals sponsored at the same firm both before and after the rule change. We do not find evidence that the rule altered mutual funds' behavior as predicted by the rule's advocates and as perhaps feared by its opponents: support for management did not decline after the rule's implementation. Rather, we find some evidence that mutual funds' support for management has increased after the disclosure of their votes. Moreover, for the subset of firms for which we have board ownership data, we further find that the funds' increased support for such proposals after the rule change seems related to the magnitude of independent directors' shareholdings. No other feature of firms' corporate governance affects voting outcomes, whether or not associated with mutual fund holdings before or after the rule change.

Taking account explicitly of changes in the fund characteristics or fund composition (i.e., the largest mutual fund family's ownership) does not change our results regarding EEIC proposals. However, there is some evidence that the finding may be due to the endogeneity of management's choice to propose an EEIC plan. For example, firms proposing such plans both before and after the rule change have greater mutual fund ownership than matched firms sponsoring these plans only before the rule change. Of course, this finding is inconsistent with the expectation of the rule's advocates, which was that mutual fund support for management should

decrease unconditionally after the rule change.

This does not mean that mutual funds are conflicted, nor do we have data distinguishing which funds in our sample have potential conflicts to determine if the apparent increase in support reflects an increase in the holdings of such funds. The most straightforward reason for fund support of management-sponsored EEIC proposals, in our judgment, is that they expect the plans to benefit shareholders. Moreover, the endogeneity of management's choice does not appear to reach to the content of the proposal: our findings are not a function of a reduction in the features of compensation plans that are most objectionable to institutional investors. .

The evidence of endogeneity with respect to proposal selection is, however, inconclusive, as matched firms with no 'after' proposal may well propose an EEIC plan in the future. We also offer additional evidence inconsistent with a selection effect related to mutual fund holdings: there are no significant differences in voting support for firms across subsamples where selection effects may be strongest, e.g., for firms with above-median mutual fund holdings before the rule, with an above-median increase in mutual fund holdings 'before' to 'after' the rule change, or with above-median profitability before the rule.

Finally, we can reject several alternative explanations of the overall decline in management support for EEIC proposals that are related to changes in the regulatory environment besides the mutual fund vote disclosure rule. We also do not find evidence that the decline is explained by the impact of SOX or the elimination of broker votes for EEIC plans.

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**Table 1. Types of Proposals and Voting Outcomes in Relation to the Mutual Fund Vote Disclosure Rule**

The table presents voting outcomes (average percentages voting for and voting against) for our sample's proposals by type (management or shareholder-sponsored) and within type by group, detailing the IRRC codes comprising the groups, over the full time period as well as split at the rule's effective date, July 1, 2003 ('votes for before' and 'votes for after'), and the t-statistic for the difference in mean between the percentages of votes for before and votes for after calculated pair-wise; ** means significant at less than 5 percent and * means significant at 10 percent; N/A means statistical test non-applicable.

| Proposal Type | # of proposal pairs | IRRC codes* | Votes for | Votes against | Votes for before | Votes for after | T-stat difference in mean |
|---|---|---|---|---|---|---|---|
| ***All Management*** | 673 | 1100-1589 | 81.7 | 15.9 | 82.9 | 80.5 | 4.67** |
| Common stock issuance | 68 | 1100-03 | 80.1 | 9.9 | 79.5 | 80.6 | -0.67 |
| Miscellaneous | 10 | 1020, 1151, 1332 | 92.8 | 2.7 | 94.4 | 91.3 | 0.98 |
| Remove defenses | 3 | 1402, 1444 | 72.5 | 4.7 | 66.5 | 67.3 | -1.39 |
| Merger | 1 | 1200 | 69 | 0.6 | 70.4 | 78.4 | N/A |
| *All Compensation* | 591 | 1500-1589 | 81.8 | 16.8 | 83.2 | 80.4 | 5.39** |
| Executive equity incentive plan (EEIC) | 408 | 1500-09; 1530-39 | 77.6 | 20.9 | 78.9 | 76.2 | 3.91** |
| Outside director equity incentive plan | 36 | 1510-19; 1540-49 | 83.5 | 15.3 | 86.3 | 80.7 | 3.12** |
| Employee stock purchase plan | 77 | 1520-29 | 92.9 | 6.3 | 94.3 | 91.4 | 2.72** |
| Bonus plan | 70 | 1560-64, 1580-82 | 93.2 | 5.7 | 93.9 | 92.4 | 1.73* |
| ***All Shareholder*** | 180 | 2000-2906 | 42.8 | 56.9 | 40.1 | 45.5 | -4.77** |
| Takeover defenses | 90 | 2220, 2300-41 | 57.4 | 42.2 | 54.9 | 59.9 | -3.7** |
| Executive compensation | 57 | 2400-14 | 32.7 | 67.1 | 28.6 | 36.9 | -3.83** |
| Board independence | 18 | 2201-14 | 22.8 | 77 | 23.4 | 22.3 | 0.4 |
| Director elections | 1 | 2231 | 9 | 91 | 8.2 | 9.7 | N/A |
| Miscellaneous | 14 | 2002, 2030, 2131, 2342, 2417, 2901, 2906 | 18 | 81.8 | 15.6 | 20.5 | -0.75 |

**Table 2. Descriptive Statistics - Mean and Standard Deviation**

The table presents descriptive statistics of firm-level characteristics at firms that had an EEIC proposal pair before and after the mutual fund vote disclosure rule's effective date of July 1, 2003. For all characteristics, we report the mean, with the standard deviation given between parentheses, calculated for all proposals ("full sample") and for proposals offered 'before' versus 'after' the rule change (the number of observations used to compute those values for the "full sample" is 816 (i.e., 408 proposal pairs), unless otherwise indicated below). 'Return(-12)', 'Turnover (-12)' and 'Market return (-12)' are the average monthly return, the average monthly turnover (in percentages) and the average monthly value-weighted market return, respectively, in the 12 months before the proposal's meeting date. 'Beta(-60)' is the firm's market beta estimated using the 60 monthly returns before the proposal's meeting date. These variables are obtained from the University of Chicago Graduate School of Business Center for Research in Securities Prices (CRSP) database. 'ROA' is the return on assets and 'NPM' is the net profit margin from the annual Compustat file for the previous fiscal year. 'Institution %' is the percentage of equity held by institutional investors. '% Banks & insurance cos', '% Mutual funds', '% Ind invt advisors' and '% Other institutions' are the percentage held by those types of institutional investors, where 'Mutual funds' includes mutual funds and mutual fund investment advisors, 'Ind invt advisors' refers to independent investment advisors, and 'Other institutions' includes university endowments, private and public pension and labor union funds. All institutional holdings are for the quarter before the proposal's meeting date and are obtained from Thomson Financial Services. 'Classified board' is a dummy variable for the presence of a staggered board; 'Special meeting restr.' is a dummy variable for restrictions on shareholders' ability to call special meetings; 'Written consent restr.' is a dummy variable for restrictions on shareholder action by non-unanimous written consent; 'Poison pill' is a dummy variable for the presence of a poison pill; 'Blank check preferred' is a dummy variable for the ability to issue blank check preferred stock, and 'Confidential voting' is a dummy variable for confidential voting of proxies. These variables are obtained from IRRC's governance database or hand-collected from the firms' SEC filings. The following four board characteristics are computed using 258 observations (i.e., 129 proposal pairs): '% Bd independent' is the percentage of independent directors on the board; 'Number directors' is the number of directors, abbreviated as 'Numdir' in interaction terms in subsequent tables; 'Ind directors % stock' and 'Inside directors % stock' are the percentages of equity held by independent (non-employee and non-affiliated) and insider directors, respectively, and in subsequent tables are abbreviated as 'Ind %stk' and 'Insid %stk' in interaction terms. These variables are obtained from the IRRC's directors database. The following six compensation plan characteristics are computed using 310 observations (i.e., 155 proposal pairs): 'Dilution prop' is the dilution caused to a firm's outstanding shares by a specific proposal on an executive equity incentive compensation plan (EEIC); 'Total dilution' is the dilution due to all compensation plans outstanding at the time a proposal is presented and not just that due to the specific proposal being voted on; 'Repricing' is a dummy variable indicating that the proposed plan permits repricing of underwater options; 'Loans' is a dummy variable indicating that the proposed plan permits the extension of credit to executives to purchase stock or exercise options granted by the plan; 'Restricted stock' is a dummy variable indicating that the plan permits awards of restricted stock; and 'Dilut less than 5%' is a dummy variable indicating that the dilution caused by the proposed plan (its 'dilution proportion') is less than 5 percent. These variables are obtained from the IRRC. 'Difference in prop. year' is the difference between the 'before' and the 'after' proposal year.

| Variable | Full sample | Before proposals | After proposals |
|---|---|---|---|
| Market cap (000s) | 8,268,423 (21,984,527) | 7,207,354 (20,086,001) | 9,329,492 (23,709,093) |
| Return (-12) | 0.0199 (.03) | 0.0147 (.04) | 0.0250 (.03) |
| Turnover (-12) | 1.8 (1.4) | 1.7 (1.5) | 1.9 (1.3) |
| Beta (-60) | 0.1422 (.10) | 0.1428 (.10) | 0.1416 (.09) |
| Market return (-12) | 0.0085 (.01) | 0.0017 (.02) | 0.0154 (.01) |
| ROA | 0.0419 (.11) | 0.0448 (.10) | 0.0390 (.12) |
| NPM | 0.0514 (.16) | 0.0476 (.17) | 0.0552 (.16) |
| Institution % | 0.7162(.18) | 0.6679 (.19) | 0.7704 (.17) |
| % Banks & insurance cos | .1522 (.06) | 0.1491 (.07) | 0.1552 (.05) |
| % Mutual funds | 0.1779 (.09) | 0.1719 (.10) | 0.1840 (.09) |
| % Ind invt advisors | 0.2444 (.10) | 0.2412 (.10) | 0.2476 (.09) |
| % Other institutions | 0.1418 (.08) | 0.1042 (.06) | 0.1794 (.07) |
| Classified board | 0.6213 (.49) | 0.6250 (.49) | 0.6177 (.49) |
| Special meeting restr. | 0.5172 (.50) | 0.4828 (.50) | 0.5515 (.50) |
| Written consent restr. | 0.4902 (.50) | 0.4706 (.50) | 0.5098 (.50) |
| Poison pill | 0.5956 (.49) | 0.5711 (.50) | 0.6201 (.49) |
| Blankcheck preferred | 0.9105 (.29) | 0.9044 (.29) | 0.9167 (.28) |
| Confidential voting | 0.1299 (.34) | 0.1201 (.33) | 0.1397 (.35) |
| Ind directors % stock | 0.0065 (.02) | 0.0068 (.02) | 0.0062 (.02) |
| Inside directors % stock | 0.0469 (.10) | 0.0503 (.11) | .0436 (.10) |
| Number directors | 9.9 (2.8) | 9.9 (2.9) | 9.8 (2.7) |
| % Bd independent | 0.6777 (.18) | 0.6603 (.19) | 0.6952 (.17) |
| Dilution prop | 4.71 (3.0) | 4.74 (2.7) | 4.67 (3.2) |
| Total dilution | 19.5 (14.2) | 18.4 (8.0) | 20.1 (17.6) |
| Repricing | .20 (.40) | .35 (.48) | .07 (.26) |
| Loans | .34 (.47) | .42 (.5) | .34 (.47) |
| Restricted stock | .69 (.46) | .55 (.5) | .69 (.46) |
| Dilut less than 5% | .65 (.48) | .67 (.47) | .62 (.49) |
| Difference in prop. year | 3.8 (1.9) | | |

**Table 3, Panel A. Votes 'Before' and "After' for EEIC Proposals**

The table reports the pooled panel regression results for all EEIC proposal pairs in columns 1 and 2, and for all pairs for which director ownership data is available from IRRC in column 3. The dependent variable is the aggregate vote in support of the proposal, transformed by a logistical transformation, log [percentage of votes for/(100 – percentage of votes for)]. Each firm has two proposals in the sample: one proposal before and one after the mutual fund vote disclosure rule's effective date (July 1, 2003). The main independent variables are the percentage of stock held by four different categories of institutional investors: (i) banks and insurance companies ('% Banks & insurance'), (ii) mutual funds ('% Mutual funds'), (iii) independent investment advisors ('% Ind invt advisors') and (iv) other institutions, including pension funds ('% Other institutions or % Other'). The other independent variables are described in Table 2. '*after' indicates a variable's interaction with an 'after' dummy variable indicating the proposal was adopted after the rule's effective date. Robust standard errors are given between parentheses; ** indicates significant at 5 percent; * indicates significant at 10 percent.

| Variable | (1) | (2) | (3) |
|---|---|---|---|
| Constant | 2.15 (.16)** | 1.6 (.4)** | .57 (.84) |
| After | -0.12 (.25) | -.27 (.24) | -.63(.55) |
| Ln (Market cap) | | .05 (.03)* | .13 (.06)** |
| Return (-12) | | -.68 (.86) | -3.4(1.7)** |
| Beta(-60) | | .22 (.3) | .08 (.58) |
| Market return (-12) | | 1.8 (2.4) | -.38 (4.9) |
| Turnover(-12) | | -.14 (.02)** | -.14 (.05)** |
| ROA | | -.85 (.46)* | -1.3 (1.0) |
| NPM | | .66 (.35)* | 1.7 (.64)** |
| Confidential voting | | -.14 (.09) | -.34 (.16)** |
| Blank check preferred | | -.13 (.1) | .02 (.17) |
| Classified board | | .11 (.06)* | .25 (.11)** |
| Special meeting restr. | | -.03 (.06) | -.2 (.11)* |
| Written consent restr. | | .009 (.06) | -.08 (.11) |
| Poison pill | | -.20 (.06)** | -.13 (.12) |
| % Banks & insurance | 0.55 (.63) | -.07 (.66) | -.11 (1.3) |
| % Mutual funds | -1.44 (.44)** | -.84 (.44)* | -.45 (.70) |
| % Ind invt advisors | -0.94 (.43)** | -.36 (.43) | -.40 (.88) |
| % Other institutions | -2.40 (.70)** | -.93 (.76) | -1.2 (1.3) |
| % Banks& insurance*after | -0.49 (.95) | -.11 (.92) | .95 (2.1) |
| % Mutual funds*after | 1.11 (.62)* | 1.1 (.6)* | 1.4 (2.9) |
| % Ind invt advisors*after | -0.19 (.57) | -.27 (.56) | -.08 (1.2) |
| % Other*after | 0.23 (.93) | .16 (.95) | 1.6 (1.7) |
| Ind directors %stock | | | 63 (2.9) |
| Inside directors % stock | | | .55 (.80) |
| Number directors | | | -.03 (.02) |
| %Bd independent | | | -.45 (.43) |
| Ind %stk*% Mutfund*after | | | 59.1 (24)** |
| Insid %stk*% Mutfund*after | | | -11.6 (8.1) |
| %Bd ind*% Mutfund* after | | | 1.7 (3.6) |
| Numdir*% Mutfund*after | | | -.1 (.19) |
| R2 | .0924 | .1667 | .2468 |
| # of observations | 816 | 816 | 258 |

**Table 3, Panel B. Regressions with Compensation Plan Features and After-SOX Interactions**

The table reports the pooled panel regression results for all EEIC proposal pairs for which more detailed compensation plan features are available from IRRC. The dependent variable is the aggregate vote in support of the proposal, transformed by a logistical transformation, log [percentage of votes for/(100 – percentage of votes for)]. Each firm has two proposals in the sample: one proposal before and one after the mutual fund vote disclosure rule's effective date (July 1, 2003). The main independent variables are the percentage of stock held by four different categories of institutional investors: (i) banks and insurance companies ('% Banks & insurance'), (ii) mutual funds ('% Mutual funds' or '% Mutfund'), (iii) independent investment advisors ('%Ind invt advisors') and (iv) other institutions, including pension funds (% Other institutions or %Other'). The six detailed plan features are (i) 'Dilution proportion,' dilution caused to a firm's outstanding shares, (ii) 'Total dilution,' the dilution due to all compensation plans outstanding at the time a proposal is presented and not just that due to the specific proposal being voted on, (iii) 'Repricing,' a dummy variable indicating that the proposal permits repricing of underwater options, (iv) 'Loans,' a dummy variable indicating that the proposed plan permits the extension of credit to executives to purchase stock or exercise options granted by the plan, (v) 'restricted stock,' a dummy variable indicating that the plan permits awards of restricted stock, and (vi) 'Dilut less than 5%,' a dummy variable indicating that the dilution caused by the proposed plan (its 'dilution proportion') is less than 5 percent. All the other standard controls of Panel A are also included but not shown. '*after' indicates a variable interacted with an 'after' dummy variable indicating the proposal was adopted after the rule's effective date, and '*after_SOX' is an interaction with an indicator variable for a proposal after the enactment of the Sarbanes-Oxley Act (post-July 2002). Robust standard errors are given between parentheses; ** indicates significant at 5 percent; * indicates significant at 10 percent.

| **Variable** | **(1)** | **(2)** | **(3)** | **(4)** |
|---|---|---|---|---|
| % Banks & insurance | -2.3 (.90)** | -1.9 (.88)** | -1.9 (.85)** | -.20 (.73) |
| % Mutual funds | -.77 (.76) | -.78 (.70) | -.95 (.66) | -.50 (.52) |
| % Ind invt advisors | -.19 (.61) | -.20 (.57) | -.22 (.54) | -.77 (.5) |
| % Other institutions | -.5 (1.1) | -.74 (.70) | -.68 (.69) | -1.8 (.88)** |
| % Banks& insurance*after | .07 (1.3) | -.68 (.96) | -.74 (.92) | -.09 (1.6) |
| % Mutual funds*after | .04 (.86) | .12 (.75) | .15 (.73) | 1.9 (.89)** |
| % Ind invt advisors*after | -.57 (.79) | -.59 (.65) | -.68 (.62) | -.94 (.84) |
| % Other*after | .01 (.01) | | | -1.5 (1.9) |
| Total dilution | -.02 (.01)** | | -.02 (.01)** | |
| Dilution proportion | -.06 (.02)** | -.07 (.02)** | | |
| Restricted stock | -.12 (.10) | | | |
| Repricing | -.37 (.12)** | -.47 (.12)** | -.42 (.11)** | |
| Loans | -.15 (.09) | | | |
| Totaldilution*after | | -.01 (.005)** | | |
| Dilutionprop*after | | .01 (.02) | | |
| Repricing*after | | .31 (.25) | | |
| Dilution less than 5% | | | .28 (.12)** | |
| Dilution less than 5%*after | | | -.10 (.15) | |
| After_SOX | | | | -.30 (.41) |
| % Banks& insurance*after_SOX | | | | -.11 (1.6) |
| % Mutual funds*after_SOX | | | | -1.1 (.93) |
| % Ind invt advisors*after_SOX | | | | 1.1 (.91) |
| % Other*after_SOX | | | | 2.6 (2.0) |
| Controls of panel A included | Yes | Yes | Yes | Yes |
| R2 | .3646 | .3215 | .3286 | .1743 |
| # of observations | 310 | 342 | 342 | 816 |

**Table 4. Differences between Original Firms and Matches**

This table presents the mean difference (standard deviations are given between parentheses) between the original firms (sample firms with proposals before and after the rule change) *minus* the matched firms (firms with only 'before' proposals) for 'before' proposals, using the proposal dates for the original firms for both the original and the matched firms in the 'Mean difference before' column; and for 'after' proposal dates (using the dates of the original firms' proposals voted on after June 30, 2003) in the 'Mean diff. after' column. The difference in the difference before and after across the two groups is provided in the 'Difference-in-difference'column. The last column, '# matched pairs,' provides the number of matched pairs without any missing information for the difference-in-difference calculation. Differences for some firm characteristics are not included to save space, but none of these had any significant differences in any column. The variables are described in Table 2. ** indicates significant at 5 percent; * indicates significant at 10 percent.

| Variable | Mean diff. before | Mean diff. after | Difference-in-difference | # matched pairs |
|---|---|---|---|---|
| Before voting outcome | -.0224** | | | 254 |
| | (0.010) | | | |
| Ln(Market cap) | 0.3005 | 0.4019 | 0.1483 | 254 |
| | (2.17)** | (3.00)** | (2.37)** | |
| Beta(-60) | -0.0036 | 0.0130 | 0.0177 | 254 |
| | (0.39) | (1.65) | (2.03)** | |
| Market return(-12) | 0.0013 | -0.0003 | -0.0003 | 254 |
| | (0.05) | (0.41) | (0.16) | |
| Turnover(-12) | 0.1748 | 0.3128 | 0.1131 | 254 |
| | (1.43) | (3.10)** | (1.29) | |
| ROA | 0.0069 | 0.0069 | -0.0005 | 236 |
| | (0.93) | (1.12) | (0.07) | |
| NPM | 0.0302 | 0.0134 | -0.0163 | 236 |
| | (1.71)* | (0.92) | (0.75) | |
| Ind directors %stock | 0.1929 | 0.0699 | 0.1513 | 78 |
| | (0.75) | (0.38) | (0.40) | |
| Inside directors %stock | -1.6157 | -1.7530 | -0.6026 | 78 |
| | (1.22) | (1.69) | (0.63) | |
| % Banks & insurance | .01777 | .0169 | -0.0004 | 259 |
| | (3.64)** | (2.95)** | (0.08) | |
| % Mutual Funds | 0.0138 | 0.0324 | 0.0196 | 259 |
| | (1.69) | (4.14)** | (2.61)** | |
| % Ind invt advisors | 0.0239 | 0.0041 | -0.0194 | 259 |
| | (2.76)** | (0.49) | (2.67)** | |
| % Other institutions | 0.1023 | 0.0004 | 0.0037 | 259 |
| | (0.77) | (0.07) | (0.60) | |
| Date of before vote (difference in months) | 3.05 (1.60) | | | 259 |

**Table 5. Probability of Not Having a Management-sponsored EEIC Proposal after the Rule Change**

This table presents the results for two logit estimations of the likelihood of having no EEIC proposal after the mutual fund vote disclosure rule's effective date (July 1, 2003), for the sample of original firms (firms with both 'before' and 'after' proposals) and their matches (firms with a 'before' but no 'after' proposal). The independent variables are described in Table 2; 'voting outcome_0' is the percentage of votes for the 'before' proposal; 'Months since before vote' is the number of months between the original firm's 'before' and 'after' proposals. All variables with an underscore '_0' are level variables, with values as of the date of the original firm's proposal before the rule change, and all variables starting with 'D_' are differences, calculated as the change in value from the original firms' 'before' proposal date to the original firm's 'after' proposal date. Robust standard errors are given between parentheses. ** indicates significant at 5 percent; * indicates significant at 10 percent.

| Variable | (1) | (2) |
|---|---|---|
| Voting outcome_0 | .008 (.009) | .007 (.009) |
| Months since before vote | .02 (.008)** | .014 (.009) |
| Ln(market cap)_0 | -0.046 (0.09) | .007 (0.10) |
| Return(-12)_0 | 1.05 (5.46) | -.76 (5.67) |
| Beta(-60)_0 | 0.69 (1.31) | 1.46 (1.41) |
| Market return(-12)_0 | 21.8 (15.8) | 17.7 (16.4) |
| Turnover(-12)_0 | -0.14 (0.10) | -0.11 (0.11) |
| Confidential voting_0 | -0.23 (0.32) | -0.39 (0.33) |
| Blank check preferred_0 | -0.44 (0.37) | -0.41 (0.39) |
| Classified board_0 | -0.05 (0.22) | .07 (0.24) |
| Special meeting restr._0 | -0.34 (0.23) | -0.39 (0.25) |
| Written consent restr._0 | 0.15 (0.23) | 0.10 (0.24) |
| Poison pill_0 | 0.11 (0.24) | 0.18 (0.25) |
| ROA_0 | | 2.58 (2.43) |
| NPM_0 | | -2.40 (1.21)** |
| % Banks & insurance_0 | -6.29 (2.47)** | -5.31 (2.60)** |
| % Mutual funds_0 | -2.46 (1.39)* | -2.53 (1.48)* |
| % Ind invt advisors_0 | -0.14 (1.30) | .35 (1.45) |
| % Other institutions_0 | -.16 (2.64) | 1.23 (2.91) |
| D_ln(market cap) | -0.34 (0.18)* | -0.25 (0.21) |
| D_return(-12) | 0.29 (4.31) | -1.04 (4.50) |
| D_beta(-60) | -2.61 (1.32)** | -2.12 (1.37) |
| D_market return(-12) | 4.59 (12.8) | 6.82 (13.4) |
| D_turnover(-12) | -0.17 (0.14) | -0.16 (0.15) |
| D_confidential voting | -0.16 (0.74) | -0.29 (0.73) |
| D_blank check preferred | 0.31 (0.74) | 0.42 (0.75) |
| D_classified board | 0.45 (0.50) | 0.57 (0.51) |
| D_special meeting restr. | 0.31 (0.33) | 0.16 (0.34) |
| D_written consent restr. | -0.10 (0.39) | -0.07 (0.40) |
| D_poison pill | -0.45 (0.34) | -0.53 (0.37) |
| D_ROA | | .26 (2.48) |
| D_NPM | | -.54 (.95) |
| D_% banks & insurance | -2.43 (2.38) | -.99 (2.55) |
| D_% mutual funds | -4.00 (1.48)** | -3.36 (1.60)** |
| D_% ind invt advisors | 2.00 (1.47) | 2.88 (1.59)* |
| D_% other institutions | .57 (1.86) | 1.13 (2.06) |
| Constant | 2.47 (1.68) | .99 (1.84) |
| # observations | 496 | 446 |
| Pseudo R2 | 0.0974 | 0.0882 |

**Table 6. Mutual Fund Characteristics**

This table provides information on the mutual fund characteristics of funds holding the firms with management-sponsored EEIC proposals, and the holdings of the five largest fund families in the proposal firms, over the entire sample time period, and also for the individual mutual fund characteristics, the average values before and after the mutual fund vote disclosure rule's effective date (July 1, 2003) and the t-statistic for the difference in mean between the variables before and after calculated pairwise; ** indicates significant at 5 percent. 'Expense ratio' is the total annual expense ratio of the fund, 'Turnover ratio' is the fund's annual turnover, 'Load' is the sum of the 'Maximum Front load' and the 'Maximum Rear load,' which have to be paid if money is transferred into and out of the fund, respectively. '% Fidelity fund family' is the percentage of holdings held by all equity funds in the Fidelity fund family in the quarter of the vote, and the same for the other 4 large fund families.

| **Fund Characteristic** | **Average of funds** | **Standard deviation of funds** | **Average of funds as of before proposals** | **Average of funds as of after proposals** | **T-stat difference in mean** |
|---|---|---|---|---|---|
| Expense ratio | 0.01 | .002 | 0.01 | 0.01 | 1.6 |
| Turnover ratio | 0.65 | .25 | 0.7 | 0.59 | 8.1** |
| Load | 0.02 | .02 | 0.02 | 0.02 | 2.6** |
| Maximum Front load | 0.02 | .01 | 0.02 | 0.01 | 5.6** |
| Maximum Rear load | 0.005 | .02 | 0.006 | 0.005 | 0.9 |
| Total Net Assets (millions) | 9,120 | 8,426 | 7,304 | 10,937 | -10.3** |
| | | | | | |
| **Fund Family Holdings** | | | | | |
| % Fidelity fund family | .019 | .029 | | | |
| % Vanguard fund family | .011 | .014 | | | |
| % Capital research fund family | .009 | .021 | | | |
| % T. Rowe Price fund family | .006 | .015 | | | |
| % Putnam fund family | .004 | .009 | | | |

**Table 7. Predicting Mutual Fund Votes: Regressions of Fund Votes on Fund Characteristics**

The table reports the results of the regression of actual mutual fund votes for all management-sponsored EEIC proposals, submitted after the mutual fund vote disclosure rule's effective date (July 1, 2003), for which mutual fund characteristics were available, on fund characteristics (averaged for the proposal firms across funds). The dependent variable is the percent of mutual funds voting for the proposal. For a description of the variables see Tables 2 and 6; $^{+}$ indicates the variable value was adjusted by subtracting the sample annual mean. Robust standard errors are given between parentheses, ** indicates significant at 5 percent and * indicates significant at 10 percent. The 'Regression F-statistic' is for the test of whether all independent variables together are insignificant (rejected).

| **Variable** | |
|---|---|
| Expense ratio+ | 23.5 (14.5) |
| Turnover ratio+ | -.19 (.09)** |
| Ln(Total net assets)+ | .02 (.03) |
| Load+ | .01 (.23) |
| % Fidelity fund family | .09 (.53) |
| % Vanguard fund family | 1.4 (1.3) |
| % Capital Research fund family | 1.3 (.65)** |
| % T. Rowe Price fund family | 1.7 (1.0)* |
| % Putnam fund family | -3.5 (1.4)** |
| Return (-12) | 1.3 (.54)** |
| NPM | .32 (.17)* |
| ROA | -.29 (.21) |
| Blank check preferred | -.08 (.05) |
| Classified board | .02 (.03) |
| Special meeting restr. | -.01 (.03) |
| Written consent restr. | -.03 (.03) |
| Poison pill | .02 (.03) |
| Confidential voting | -.01 (.05) |
| Constant | .75 (.06)** |
| | |
| Regression F-statistic | 2.06** |
| R2 | .0770 |
| # of observations | 362 |

**Table 8. Regressions of Votes for Using Expected Fund Votes**

The table reports the pooled panel regression results for all EEIC proposal pairs. The dependent variable is the aggregate vote in support of the proposal, transformed by a logistical transformation, log [percentage of votes for/(100 – percentage of votes for)]. Each firm has two proposals in the sample: one proposal before and one after the mutual fund vote disclosure rule's effective date (July 1, 2003). The independent variables are described in Table 2; 'Total MF vote' is the estimated total vote by mutual funds (the percentage of mutual fund holdings multiplied by the predicted voting outcome from the regression of actual mutual fund votes on mutual fund characteristics reported in Table 7, taking the estimation risk into account by bootstrapping the first-stage residuals and adding those to the fitted values of the expected fund vote); "*after" indicates an interaction between the variable and an 'after' dummy variable indicating that the proposal was adopted after the rule's effective date. Robust standard errors are given between parentheses, ** indicates significant at 5 percent and * indicates significant at 10 percent.

| Variable | (1) | (2) | (3) |
|---|---|---|---|
| Constant | 1.3 (.35)** | 1.2 (.41)** | 0.56 (0.89) |
| After | -.32 (.13)** | | |
| Percent same | -.06 (.16) | -.07 (.16) | -0.41 (0.32) |
| Ln(Market cap) | .06 (.02)** | .07 (.03)** | 0.14 (0.06)** |
| Return (-12) | | -.80 (.88) | -3.49 (1.77)* |
| Beta (-60) | .10 (.32) | .12 (.32) | -0.30 (0.68) |
| Market return (-12) | -.66 (2.4) | .03 (2.4) | -0.88 (4.81) |
| Turnover (-12) | -.13 (.02)** | -.14 (.02)** | -0.15 (0.06)** |
| ROA | | -.84 (.46)* | -1.37 (1.17) |
| NPM | | .62 (.35)* | 1.39 (0.66)** |
| Confidential voting | | -.15 (.09)* | -0.31 (0.19)* |
| Blank check preferred | | -.15 (.12) | 0.03 (0.19) |
| Classified board | | .07 (.06) | 0.29 (0.12)** |
| Special meeting restr. | | -.02 (.06) | -0.22 (0.12)* |
| Written consent restr. | | .03 (.06) | 0.01 (0.12) |
| Poison pill | | -.18 (.06)** | -0.18 (0.13) |
| % Banks & insurance | -.61 (.52) | -.19 (.65) | 0.11 (1.31) |
| % Banks & insurance*after | | -.82 (.73) | -1.06 (1.21) |
| Total MF vote | -1.6 (.52)** | -1.4 (.58)** | -0.29 (0.88) |
| Total MF vote *after | 1.6 (.74)** | 1.47 (.72)** | 1.09 (1.48) |
| % Ind invt advisors | -.48 (.30) | -.06 (.42) | -0.72 (0.63) |
| % Ind invt advisors*after | | -.57 (.53) | |
| % Other institutions | -1.1 (.51)** | -.72 (.81) | 0.06 (1.00) |
| % Other*after | | -.30 (.90) | |
| Ind directors %stock | | | 0.96 (2.68) |
| Inside directors %stock | | | -0.46 (0.85) |
| Number directors | | | -0.04 (0.02)* |
| % Bd independent | | | -0.36 (0.35) |
| Ind %stk*Total MF vote *after | | | 71.46 (38.61)* |
| R2 | .1484 | .1703 | .2238 |
| # of observations | 724 | 724 | 226 |