Shareholders' Say on Pay: Does It Create Value?

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Abstract

Congress and activists recently proposed giving shareholders a say (vote) on executive pay. We find that when the House passed the Say-on-Pay Bill, the market reaction was significantly positive for firms with high abnormal CEO compensation, with low pay-for-performance sensitivity, and responsive to shareholder pressure. However, activist sponsored say-on-pay proposals target large firms, not those with excessive CEO pay, poor governance, or poor performance. The market reacts negatively to labor sponsored proposal announcements and positively when these proposals are defeated. Our findings suggest that say-on-pay creates value for companies with inefficient compensation, but can destroy value for others.

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Since Congress passed Sarbanes-Oxley (hereafter SOX), regulators and activist shareholders have advocated, debated, and in some cases, implemented additional measures that give shareholders more influence in the boardroom and challenge the powers of managers and directors. These initiatives include prohibiting broker votes in director elections, shifts to majority voting and increased shareholder access to the boardroom. Few, if any, issues under consideration are as contentious as executive compensation. Indeed, excessive executive pay has been an issue throughout the past century, long before the SOX-related scandals. [1] Recently, Congress has taken up the issue through a say-on-pay initiative, which allows shareholders to have an annual advisory vote on executive compensation. The objective of this paper is to examine whether say-on-pay initiatives create shareholder wealth.

In classic principal-agent theories, such as Jensen and Meckling (1976), the owner of a firm (principal) designs the compensation contract of the manager (agent) to maximize the value of the firm. The ownership of most public companies in the U.S. is, however, widely dispersed which makes it infeasible for shareholders to help negotiate the managerial compensation contract. In most U.S. public companies, shareholders do not have a say, or a vote, on how management is compensated. Instead, shareholders delegate this right to their representatives – the board of directors.

Fama (1980) argues that competitive managerial labor markets induce directors to act in the best interest of the shareholders. Similarly, opponents of say-on-pay assert that current pay practices of most companies are efficient; thus, allowing shareholder votes on executive compensation will distract the board and management and reduce the effectiveness of the board. Opponents point out that if say-on-pay were beneficial, then boards could freely adopt it, without the need for legislation. Some opponents also argue that Federal legislation usurps state authority. In addition, they worry that say-on-pay initiatives will be divisive or driven by special interests. (See Deane (2007)).

Shivdasani and Yermack (1999), Bebchuk (2003), and Cai, Garner, and Walkling (2009a, 2009b),

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[1] A quick survey of the New York Times found the following historical headlines, quite similar to those of today. : October 5, 1939: "Proposes Change in Executive Pay"; October 4, 1937: "Executive Pay Rise Above Workers' Gain"; April 28, 1935: "Big Salaries in Hard Times"; July 15, 1933: "Lowering High Salaries"; August 18, 1929: "Suggests a Gauge for Executive Pay"; December 24, 1922: "Explains Big Salary of Railroad Head".

among others, argue, that under the current director election system, it is often the manager, instead of the shareholders, who decides the composition of the board of directors. Given the manager's influence over board nominations, a board may have the incentive to design a compensation contract in the interest of the manager instead of the shareholders. Consistent with this conjecture, Core et al. (1999) find that less effective boards are associated with higher CEO compensation and poorer operating and stock performance. In addition, many studies find evidence that board design, as well as director incentives and actions are imperfectly aligned with shareholders.[2]

Given the controversy over executive compensation, it is important to ask whether compensation related initiatives and legislation create value. Recent events provide us opportunities to study this issue. During the 2006-2008 proxy seasons, activist shareholders (mostly labor unions) submitted 136 proposals to individual companies requesting an advisory vote on executive compensation. A handful of companies have agreed to implement say-on-pay. On April 20, 2007, the House of Representatives passed the Say-on-Pay Bill (House Bill 1257: Shareholder Vote on Executive Compensation Act) by a 2-1 margin. On the same day, then-Senator Barack Obama introduced a companion bill (S.1181) in the Senate. The Bill is currently on hold at the Senate Banking committee.[3] The Say-on-Pay Bill does not limit executive compensation but requires a non-binding shareholder vote on it. This bill provides a natural experiment to examine whether shareholder votes on executive compensation in particular, and access to the proxy in general, add value to a company.

With Barack Obama elected President and Democrats controlling both houses of Congress, however, the Say-on-Pay Bill may soon become law. Moreover, the government recently required over

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[2] For example, Yermack (1996) finds that firms with larger boards have lower valuation. Shivdasani and Yermack (1999) and Coles, Daniel, and Naveen (2007) find outside directors appointed by the CEO are less effective in monitoring the CEO. Fich and Shivdasani (2006) find that firms with busy boards have lower market-to-book ratios, profitability, and sensitivity of CEO turnover to firm performance. Bebchuk, Fried, and Walker (2002) argue that managerial power and rent extraction can better explain the empirical evidence on executive compensation practices. Yermack (2006) finds that CEOs' personal use of company airplanes is associated with lower stock returns to shareholders. Burns and Kedia (2006) find that CEOs' option portfolio sensitivity to stock price is associated with accounting misreporting.

[3] In a highly expected move, the House Financial Services Committee passed, along party lines, a measure on executive compensation on July 28, 2009. The measure passed the full House by a vote of 237-185 on July 31, 2009. Say-on-pay was part of this measure.

300 financial firms receiving federal bailout money, including Citigroup and AIG, to give shareholders a say-on-pay vote and limit executive's salary to $500,000. Indeed, one article refers to limits on pay as the "name and shame" part of the legislation.[4] Another article refers to President Obama as "shamer in chief" with regard to executive compensation.[5] With more frequent use of public shaming by regulators to curb CEO pay, say-on-pay may attract more public attention.

The objective of this paper is to examine whether allowing shareholder votes on executive compensation creates shareholder wealth. We perform three experiments to examine this issue. In our primary experiment, we examine the market reaction to the passage of the House Bill on April 20, 2007. In our second experiment, we examine the shareholder sponsored say-on-pay proposals targeting individual companies. In our third experiment, we ask whether shareholder votes are related to excess CEO compensation when they are asked to approve equity-based compensation plans.

In our primary experiment, we focus on the day the bill passed the House and examine the stock price reaction of 1,270 of the largest corporations in the United States. The passage of the Say-on-Pay Bill might not be surprising to the market since Democrats were in control of the House. However, its 2-1 margin (269 positive votes vs. 134 votes against) was a surprise, as well as the fact that 55 Republican Congressmen also supported the Bill. According to Cox News Service, Capital Hill staffers described the House's vote as "lopsided."[6] In sharp comparison, just two days before the full House vote, only one Republican voted for the procedural resolution (H. Res. 301) that provides consideration to the Say-on-Pay Bill. Earlier at the House Financial Services Committee, only two Republicans voted for the Bill on March 28, 2007. However, 55 Republican votes helped the House Say-on-Pay Bill to reach the two-thirds

[4] Weisman, J and Lublino, J., 2009. Obama Lays Out Limits on Executive Pay, Wall Street Journal, February 5.
[5] http://www.nydailynews.com/news/politics/2009/02/04/2009-02-04_president_obama_caps_executive_compensat.html
President Obama caps executive compensation limits at $500K for firms receiving bailout funds
By Kenneth R. Basinet, Michael MCauliff and Richard Sisk, Daily News Washington Bureau Updated Wednesday, February 4th 2009, 10:37 PM.
[6] Geewax, M., 2007. House Approves Shareholder Advisory Vote On CEO Pay, Cox News Service, April 21.

majority that is required to override a presidential veto. [7] The same day the bill passed the House Senator Barack Obama introduced a companion bill (S.1181) in the Senate. As a candidate for the Democrat presidential nominee at that time, Obama's endorsement of say-on-pay undoubtedly increased the market's awareness of the bill and may have increased the perceived probability of its eventual passage.

Analyzing the impact around the day the bill passed the House is likely to understate the economic significance of shareholders' say on executive pay. Obviously, passage in the House does not guarantee passage in the Senate, let alone approval by the White House and implementation into law. Nevertheless, we find striking results. Stocks of firms with positive abnormal CEO pay and low CEO pay-for-performance sensitivity react positively to the Say-on-Pay Bill.

Arguably, three conditions are necessary for firms to benefit from say-on-pay. First, firms with excessive or ineffective executive compensation are those most likely to benefit. Our results are consistent with this argument. Second, firms with independent-minded shareholders willing to vote against management are likely to face more pressure if say-on-pay is implemented. We find that abnormal returns are higher for firms with a higher fraction of mutual fund shareholders that often vote against management (hereafter "vote-no" mutual funds). Third, since the say-on-pay vote is non-binding, it is likely to be more effective in firms that are willing to reform as a result of shareholder pressure. Consistent with this conjecture, we find a more favorable reaction to the bill for a subset of firms that have previously responded to shareholder dissatisfaction as expressed in director elections. Additionally, we find that the positive stock price reaction is more pronounced for firms with relatively weak, but not the weakest governance. These firms are likely to benefit from better compensation design if they implement such improvements under shareholder pressure. Conversely, firms with the weakest governance may not respond to advisory shareholder votes at all. The findings of the first experiment suggest that giving shareholders a vote on executive compensation may benefit firms with inefficient compensation design and weaker corporate governance.

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[7] The Bush White House opposed the bill arguing that Congress should not dictate the process by which executive compensation is approved.

In our second experiment, we examine shareholder-sponsored say-on-pay proposals targeting individual companies. Using a sample of 113 say-on-pay shareholder proposals between 2006 and 2008, we find that the companies targeted are not ones likely to benefit from say-on-pay. On average, the CEOs of these firms are not overpaid. Moreover, targeted firms have similar performance and governance as typical firms. Activist shareholders appear to target large firms. In addition, most of these proposals are sponsored by labor unions with very small stock holdings in the companies targeted. The stock prices of targeted firms react negatively to the announcement of union-initiated proposals and these proposals receive lower support from other shareholders. Finally, when shareholders vote down these proposals, the stock prices of targeted firms react positively, and the reaction is higher when more shareholders vote against the proposals.

In our third experiment, we ask whether shareholder votes are related to excess CEO compensation. We examine shareholder votes concerning management proposals for approval of incentive compensation (mostly equity-based compensation plans). Using a sample of 2,511 management-sponsored compensation proposals voted on at 1,853 shareholder meetings during the 2003-2008 period, we find that shareholder support for such proposals is lower when abnormal CEO compensation is high and CEO pay-for-performance sensitivity is low.

Taken together, our evidence suggests that say-on-pay may benefit firms with questionable compensation practices but can hurt firms targeted by special interests. Thus, say-on-pay is not one size fits all. From a regulatory point of view, our work is important in providing evidence with regard to shareholder access to the proxy and Say-on-Pay legislation in particular. Our findings also provide some evidence of how shareholders may vote if say-on-pay is implemented by either the Congress or individual companies.

The remainder of this paper is organized as follows: In section I, we examine the literature relating to the say-on-pay initiative and develop our empirical hypotheses. Section II describes our research design and contains preliminary descriptive characteristics of our sample. In section III, we

present the three sets of analyses regarding say-on-pay. Section IV concludes.

I. Background and Hypotheses

A. Background and literature

Shareholder concern about executive pay is not new. The seminal work of Jensen and Murphy (1990) published nearly 20 years ago was motivated by similar concerns that captured the business headlines prior to that period. As lists of the highest paid executives are published each year, the headlines and editorials of the popular press are filled with criticisms objecting to excess.[8]

The current post-SOX climate is no exception. Shareholders complain about the levels and form of executive pay. The "exit packages" of Robert Nardelli of Home Depot and of other executives are referred to as "pay for failure." Over 200 firms have announced probes into option backdating. The recent fiasco about bonus payments to AIG executives outraged the public, particularly in view of the rescue of the firm with taxpayer funds. In view of these events, shareholders appear receptive to reform. In a recent survey conducted by the CFA Institute, over 70% of U.S. respondents support advisory votes on executive compensation. Support for legislation mandating the votes, however, is mixed. Only 25% of respondents support legislative action requiring such votes and two-thirds of the respondents oppose such legislation. Further support for say-on-pay initiatives comes from the Counsel of Institutional Investors and TIAA-CREF.

Shareholder approval has been required for equity-based compensation plans since 2003 (SEC Release No. 34-48108). In our primary sample of 1,270 firms, equity based compensation on average accounts for 42% of total CEO compensation.[9] Say-on-pay, if implemented, will allow shareholders to express their views on other compensation components, such as salary, bonus, retirement benefits, and

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[8] A Google search of the phrase "Excessive CEO pay" produces 569,000 cites.
[9] Equity-based compensation as a portion of total CEO compensation increased from close to zero in early 1980's to over 50% in early 2000s. Since then, this ratio has declined in the last several years. For more detailed discussion, see Bryan, Hwang, and Lilien (2000), Core, Guay and Verrecchia (2000), Hall and Murphy (2003), Bebchuk and Grinstein (2005), and Chhaochharia and Grinstein (2009).

perquisites.[10] In addition, under the current SEC requirement shareholders approve equity compensation plans if a company intends to use such compensation. If a company, however, decides not to use equity compensation, it doesn't need shareholder approval. That is, if a company does not use enough equity compensation and has low pay-for-performance sensitivity, shareholders can do little. Therefore, say-on-pay may enable shareholders to voice their dissatisfaction in ways not currently available.

Shareholders in some companies are not waiting for government-imposed say-on-pay and have taken a proactive approach. According to Deane (2007), shareholders in the U.S. have filed 261 pay-related proposals (including but not limited to say-on-pay proposals) during the first five months of 2007. This doubles the 131 proposals from a similar period in 2006. Of the 136 say-on-pay proposals voted on in the period 2006-2008, 15 received majority shareholder support. Several proposals have been implemented by boards of directors: AFLAC and Verizon Communications agreed to non-binding votes by 2009, TIAA allows its policyholders to vote on executive compensation in its 2008 proxy statement, and Blockbuster, Par Pharmaceuticals, Intel, and Hewitt-Packard recently agreed to have a shareholder vote.[11] Among these companies, AFLAC and TIAA voluntarily adopted say-on-pay without the pressure of a shareholder proposal on this issue.

Internationally, Australia, the Netherlands, Norway, Sweden, and the United Kingdom have statutes requiring shareholder votes on executive compensation. Interestingly, countries with higher investor protection (Australia and U.K.) as measured by La Porta, Lopez-de-Silanes, and Shleifer (2006) have required advisory shareholder votes, while countries with lower investor protection (Netherlands, Norway, and Sweden) have required binding shareholder votes.

Even non-binding shareholder votes can have a real effect. For example, in May 2003, the compensation package of GlaxoSmithKline (GSK), a British company, was rejected by advisory

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[10] We do not specifically examine CEO pensions, golden parachutes, SERPs, and perquisites. To the extent they are reported and included in total compensation, their effect on say-on-pay and shareholder votes are analyzed together with other forms of compensation. Further, CEO pension and termination-related benefits are often closely related to CEO cash compensation, since these compensation are typically set as a multiple of annual salary or cash pay.

[11] About a dozen companies participated in a work group for say-on-pay in February 2007. None of these firms, however, adopted a say-on-pay policy before the passage of the House Bill on April 20, 2007.

shareholder votes. As a result, the board of GSK substantially reduced executive severance pay and increased hurdles for option awards later that year. In addition, the entire compensation committee was replaced in the following year. Consistent with this anecdotal evidence, Ferri and Maber (2007) find that there is improved sensitivity between CEO compensation and firm performance after the British say-on-pay legislation in 2002, particularly for firms with overpaid CEOs and firms receiving a high number of dissenting shareholder votes.

Although we are unaware of existing empirical literature on the U.S. Say-on-Pay legislation, the topic is related to shareholder activism in general. Earlier literature on shareholder activism suggests little impact. Activism may affect governance, but it does not impact operations, earnings or returns.[12] Activism focusing exclusively on executive compensation proposals also finds little impact [Johnson and Shackell (1997)]. More recently, Cai, Garner, and Walkling (2009a) examine the determinants and efficacy of shareholder votes in director elections during the period 2003-2005. They find that while shareholder votes have little impact on directors' continued tenure at a firm, fewer votes for directors of the compensation committee lead to abnormal CEO compensation declines. Their empirical evidence also suggests that even non-binding shareholder votes can affect director decisions on executive compensation.

B. The Interference Hypothesis

The arguments relating to the say-on-pay initiative can be categorized by three hypotheses: the *interference, alignment*, and *neutral effect hypotheses*. The interference hypothesis argues that the say-on-pay initiative will be disruptive. The reasons for opposing say-on-pay are articulated by Deane (2007) and Bainbridge (2008). Opponents argue that the current pay practices of most companies are efficient and there is no need for the Federal government to regulate the process of determining executive compensation. They further argue that the bill will distract the board and management and reduce the

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[12] See, for example, Karpoff, Malatesta, and Walkling (1996), Black (1998), Karpoff (2001), and Gillan and Starks (2007). Barber (2006) is a recent exception. He finds that the announcement of the Calpers focus list is associated with significantly positive wealth changes.

authority of the board. Moreover, they worry that the initiatives will be divisive or driven by special

interests.[13] This concern could be warranted; on average the sponsoring shareholder of company specific

say-on-pay proposals in our sample holds about 0.04% of the firm's outstanding shares. Opponents also

worry that companies would not understand the reason for a low vote. Finally, the legislation will create

compliance costs which may not be offset by its benefits.[14] Consequently, the interference hypothesis

suggests:

H₁: Say-on-Pay legislation and proposals will reduce firm value

C. The Alignment Hypothesis

In spite of the concerns that the votes will interfere, Davis (2007) reports increased accountability

and communication between the board and shareholder when required shareholder votes are implemented

internationally. Allowing shareholders to have a say in executive pay may help reduce the agency costs

between executives, directors, and shareholders, result in more efficient compensation contracts, and add

value to the firm. The supporting anecdotal evidence in Deane(2007) and Davis(2007) suggests the

alignment hypothesis: say-on-pay will better align owner-manager interests and improve governance and

performance. Grundfest (1993) notes that while advisory votes are symbolic, symbols can have

consequences through negative publicity and embarrassment. To avoid the embarrassment of a low

approval vote on executive compensation, management may be more willing to start dialogues with

shareholders and listen to their concerns. Moreover, Paul Danos, Dean of Dartmouth's Tuck School of

Business notes in The Economist that

> "if shareholders are able to adopt corporate-governance reforms that increase shareholder
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> democracy and hold [executives] properly accountable for their performance, then they should be

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[13] Cai, Garner, and Walkling (2009b) find that almost all proposals for majority voting are initiated by unions.
[14] Bushee and Leuz (2005) find that the SEC "eligibility rule" of 1999 results in significant cost for firms trading on OTC bulletin board. Greenstone, Oyer, Vissing-Jorgensen (2006), however, find that the 1964 Amendment which extends mandatory disclosure requirement to large OTC firms adds value to the affected firms.

more willing to let them get on with the job."[15]

The firms most likely to benefit from a shareholder vote on executive compensation, however, are those with overpaid managers. To protect their own interest, these managers are unlikely to voluntarily allow a shareholder vote on their pay. Therefore, the Say-on-Pay legislation mandating a shareholder advisory vote may add value, in particular to firms with overpaid managers.[16] The alignment hypothesis suggests:

H_2: *Say-on-Pay legislation and proposals will, on average, increase firm value.*

We also explore a variation of this hypothesis focused on firms that overpay managers.

D. The Neutral effect Hypothesis

Historically there has been little market impact surrounding the announcement of, or voting on, shareholder proposals. For example abnormal returns surrounding advisory proposals sponsored by shareholders are generally found to be insignificant in the literature (see, for example, Karpoff, Malatesta, and Walkling (1996), Gillan and Starks (2000), and Thomas and Cotter (2007)). This may be because the votes are symbolic or because management generally does not adopt these proposals even when they receive majority votes. Thomas and Martin (1999) find that shareholder proposals do not have a significant impact on CEO compensation. The trend towards adoption of shareholder proposals, however, is increasing. Ertimur, Ferri, and Stubben (2007) note that the rate of adoption has almost doubled from 22% in the 1997-2002 period to over 40% in the 2003-2004 period.

The uncertainties surrounding the Say-on-Pay Bill at the time it passed the house (April 20, 2007) also support the idea of limited market reaction. At the time it was an open question whether the Bill would ever become law. Although it has passed the House, Presidential candidate Barack Obama had just introduced the bill in the Senate. Even if it did pass the Senate, President Bush said (at that time) he

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[15] The Economist, June 2, 2007.
[16] Lo (2003) shows that the 1992 revision of executive compensation disclosure rules added value to the firms that lobbied against the rule change.

would not sign it. Moreover, the outcome of the next Presidential election or even the ultimate

Democratic candidate was in doubt. Thus, the market may not have viewed the House passage of the Bill

as representing a significant increase in the probability of its eventual passage. The neutral effect

hypothesis suggests no significant market reaction to the Say-on-Pay legislation.

H₃: the Say-on-Pay legislation will not impact firm value.

II. Research Design and Descriptive Statistics

To test hypotheses regarding say-on-pay, we conduct three experiments using three different

samples. First, for all firms with available data we examine the market reaction to the House passage of

the Say-on-Pay Bill on April 20, 2007. Specifically, we analyze the relation between the market reaction

for these firms and various compensation and governance characteristics. Second, we examine firms that

receive a (company specific) shareholder proposal requesting say-on-pay. For these firms, we examine

the market reaction to the announcement and resolution of the proposal, as well as the determinants of

shareholder votes on these proposals. Third, we examine management proposals for approval of incentive

compensation (mostly stock option plans) to discern the relation between the level of abnormal CEO pay

and shareholder votes.

To identify legislative events associated with the Say-on-Pay Bill, we search the Library of

Congress website (http://thomas.loc.gov/) and the *Wall Street Journal* during the one-year period between

April 23, 2006 and April 23, 2007. Table I provides the sequence of the seven Say-on-Pay legislation

events over this period. To make sure we do not capture the effects of other contemporaneous events, we

search the *Wall Street Journal* "Business and Finance" and "World Wide" headlines for confounding

events. Table I shows that many earlier developments have confounding events. In addition, the early

events relate to the introduction, delay, and subsequent narrow passage of the bill in committee. These

events are unlikely to have the impact of the ultimate passage of the bill in the House. Thus, we focus on

the date when the House of Representatives passes the Say-on-Pay Bill.[17] To avoid bias, we exclude the days surrounding the earlier events from the non-event estimation window. To the extent that these early actions signal ultimate passage of the bill, however, we bias against our finding significant results on that date.

We test our hypotheses by examining changes in the market value of firms during the three-day period centered on the announcement of the House's passage of the bill. Since all firms share this event window, abnormal returns across firms may be correlated. Thus, traditional event study methodology may understate the standard error and lead to biased statistical inference. Schwert (1981) and Campbell, Lo, MacKinlay (1997), among others, recommend forming portfolios by firm characteristics to diversify away this cross-sectional correlation among the stocks and then testing whether the portfolio return during the event window is significantly different from that during a non-event period. Many studies on the effects of regulatory actions use this approach.[18]

We adopt this approach and form portfolios by abnormal compensation, corporate governance, and other firm characteristics. We use the Fama-French-Carhart four-factor model as the benchmark and estimate the following regression

$$R_{p,t} - R_{f,t} = \alpha + \beta_1(R_{m,t} - R_{f,t}) + \beta_2 SMB_t + \beta_3 HML_t + \beta_4 UMD_t + \beta_5 D\_Event_t + e_t \quad (1)$$

Where $R_{p,t}$ is the portfolio return at date t, $R_{f,t}$ is the risk-free rate, $R_{m,t}$ is the market return, SMB is the size factor, HML is the book-to-market factor, and UMD is the momentum factor. The dummy variable D_Event equals one for the three trading days between April 19 and April 23, 2007, and zero for all other dates. The estimation period spans the 222 trading days between April 23, 2006 and April 23, 2007 and excludes the confounding event windows in Table I. The coefficient β_5 is the estimated average daily

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[17] In sensitivity tests, we also include the House committee passage of the Say-on-Pay Bill on March 28, 2007 as an event. Out main results are qualitatively similar.

[18] See, for example, Schipper and Thompson (1983), Chow (1983), Sefcik and Thompson (1986), Karpoff and Malatesta (1989, 1995), Brook, Hendershott, and Lee (1998), Johnson, Kasznik, and Nelson (2000), Berger, Li, and Wong (2005), Greenstone, Oyer, Vissing-Jorgensen (2006), Li, Pincus, and Rego (2007), Chhaochharia and Grinstein (2007), Litvak (2007), and Zhang (2007).

abnormal return during the Say-on-Pay Bill event window and its t-statistic provides the statistical significance of the abnormal return.

The sample consists of 1,270 firms that have data available from ExecuComp, CRSP, and the IRRC Directors and Governance databases. These data requirements effectively exclude very small U.S. firms, as well as all foreign firms. Table II presents summary statistics of our sample. The 1,270 CEOs in our sample have an average salary and bonus of $1.9 million, average stock option and restricted stock compensation of $3.3 million, and average total compensation of $5.7 million.

Of course, shareholders should not be concerned with the level of executive pay but rather with the level of pay that is unjustified by performance and the managerial labor market. Consequently, we calculate abnormal CEO compensation as the three year average of residuals from compensation regressions using all ExecuComp companies (i.e., not limited to our say-on-pay sample) as our benchmark. Our compensation regressions include 5,525 firms/year observations, or about 1,842 firms per year.[19] Dependent variables of the compensation regressions are the natural log of three measures of CEO compensation: salary and bonus, equity-based compensation, and total compensation (including option grants). Independent variables common to all three regressions include firm size (the natural log of market value of equity), the three year cumulative stock return, industry classification (two-digit SIC codes), leverage, and calendar year dummies.[20,21] For the salary and bonus regression, we also include return on assets as an independent variable since bonus is often linked to accounting performance. For the equity-based compensation regression, we also include book-to-market ratio as an independent variable to

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[19] To avoid survivorship bias, we do not require the firms in the compensation regression to be available for all three years. Nevertheless, we find similar results when we limit our sample to firms available in all three years.

[20] Pressure from product market competition may act as an external governance mechanism to supplement internal governance mechanisms such as the proposed say-on-pay. We do not directly control for product market competition since it is an industry-wide variable and we have already controlled for industry dummies in our compensation regression. Nevertheless, in a robustness test, we include the Herfindahl index of industry market share in the compensation regression without the industry dummies (See DeFond and Park, 1999 and Harris, 1998). The results are similar.

[21] In sensitivity tests, we find similar results using the log of total assets to measure firm size and the Fama-French (1997) 48 industry classifications instead of the two-digit SIC codes.

proxy for growth firms.[22] Both return on assets and book-to-market are included in the total

compensation regression.[23]

Table II reveals that for our primary sample of firms, the average abnormal compensation is close

to zero. Following Core and Guay (1999), we calculate pay-for-performance sensitivity as the CEO's

wealth change from stock and options for a 1% increase in company stock price. The "pay" in this

measure may not come directly from the compensation package. Regardless of whether the shares were

previously granted to the CEO, inherited from family, or from other sources, this measure represents the

reward the CEO receives for better stock performance. The average CEO gains $1.6 million for a 1%

increase in stock price. There is, however, substantial cross-sectional variation in pay-for-performance

sensitivity, as the standard deviation for this measure is over $13 million.

Since we want to examine how corporate governance explicitly affects the market reaction to the

Say-on-Pay legislation, we do not control for governance characteristics or CEO entrenchment measures

in the compensation regressions but examine their impact directly in subsequent tests. Thus, the pay

variations due to poor internal control and management entrenchment are captured in our abnormal

compensation measure.

In later tests of our hypotheses, we will examine the role of governance and mutual fund stock

holdings. The average Gompers, Ishii, and Metrick (2003) Index (hereafter GIM Index) is 9.3, typical of

the literature. In an average firm, just over 42% of the outside directors are appointed by the current CEO,

and one quarter of the outside directors are busy, as defined by holding three or more board seats. Outside

directors hold about 1.2% of outstanding shares. The average board consists of nine directors.

In our tests of company specific say-on-pay proposals, we will examine the level of votes a

proposal receives. The level of support for a company specific proposal is unknown prior to the vote. The

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[22] The literature finds mixed results on the relation between a firm's growth opportunity and its stock option awards to executives. Smith and Watts (1992), Gaver and Gaver (1993), and Mehran (1995), among others, find a positive relation between the two variables, while Bizjak et al (1993) and Yermack (1995) find a negative relation. We control for growth opportunity as an independent variable in the pay regression.

[23] In sensitivity tests, we include all independent variables in all three regressions. We find similar results.

level of "vote-no" mutual fund holdings, however, gives an indication of the level of votes known to be

supportive of similar issues. We define a mutual fund family as a "vote-no" (or "vote-yes") fund if it

votes against the company manager's recommendation more (less) frequently than the median mutual

fund family. Since this study focuses on executive compensation and funds may vote differently on

compensation and non-compensation proposals, we define the "vote-no" funds using only the

compensation-related proposals.[24] The mutual fund voting records during the period 2003-2006 are

obtained from Institutional Shareholder Service (ISS), a subsidiary of RiskMetrics. We find that in 98%

of all proposals voted at shareholder meetings, all funds in the same family cast the same vote. Thus, we

aggregate the votes of all funds in a family. We next manually match the mutual fund families in ISS to

those in Thomson Financial's CDA/Spectrum Mutual Funds Holding Data. Our sample includes 130

mutual fund families, and given our definition, half of them are classified as "vote-no" funds and the

other half are "vote-yes" funds.[25] Finally, we calculate the percent of a firm's outstanding shares held by

"vote-no" or "vote-yes" mutual funds prior to April 19, 2007. The level of "vote-no" mutual fund

holdings averages about 13% and the level of "vote-yes" mutual fund holdings average about 9%. Note

that the variation of "vote-no" mutual fund holdings across firms in our sample is quite large with a range

from 1.2% to over 40%.

Institutions own just over three fourths of the shares in our sample. The average Herfindahl

index, which measures the concentration of institutional holdings, is 4.7%. Hartzell and Starks (2003) and

Almazan, Hartzell, and Starks (2005) find that a high concentration of institutional holdings may help to

monitor managers and reduce excess compensation. Some institutions are likely to have existing or

potential business relations with a company, others are likely to be independent. We define public

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[24] We find similar results if we define "vote-no" mutual funds using all proposals. In a sensitivity test, we define the
"vote-no" funds as those in the top quartile when ranked by votes against management. The results are similar.
[25] A recent study by the AFL-CIO also classifies a selected set of funds by their voting records. The AFL-CIO study
includes 29 mutual fund families with voting records for 1,590 management proposals and 75 shareholder proposals
during 2005 and 2006. The total number of votes they examine is 51,297. In contrast, we examine the records of 130
mutual fund families voting for 31,377 management proposals and 861 shareholder proposals between 2003 and
2006. The total number of votes we use is 1,121,511. Despite the significant sample difference between the two
studies, the correlation between the mutual fund voting records of the two studies, measured by the percent of times
a mutual fund vote against management recommendations, is 0.78, and is statistically significant at the 1% level.

pension funds and university and endowment funds as independent institutions. Independent institutions hold, on average, 6.5% of the outstanding shares of the firms in our sample.

In our second experiment, we obtain the sample of shareholder proposals from ISS. ISS identifies 136 shareholder proposals (targeting 96 companies) during the period 2006-2008 that ask the board of directors to adopt an advisory shareholder vote on executive compensation. We find 113 proposals targeting 81 firms with available data in CRSP, IRRC, ExecuComp, and Compustat.

In the third experiment, we obtain from ISS a sample of the management-sponsored compensation proposals seeking shareholder approval. We next match these proposals to prior year compensation, governance, and performance data from CRSP, IRRC, ExecuComp, and Compustat. The final sample consists of 2,511 proposals voted on at 1,853 shareholder meetings during the 2003-2008 period.

III. Empirical results

A. Market reaction to Say-on-Pay Bill

Table III.A presents a univariate analysis of the market reaction to the passage of the Say-on-Pay Bill. We first sort the firms in our sample into four portfolios based on their quartile ranking of abnormal CEO compensation (using salary and bonus, equity compensation, or total compensation as appropriate). Next we use the Fama-French-Carhart four-factor model in equation (1) to estimate the abnormal returns to the portfolios during the event window. If the Say-on-Pay Bill is beneficial, firms that would benefit the most (i.e., firms with the highest level of abnormal CEO pay) should experience significantly positive abnormal returns. This is precisely what we find. When pay is measured by abnormal salary plus bonus, we find that the market reacts positively for firms with the most highly paid CEOs (a significantly positive 0.56% over the three-day event window) and negatively for firms with the lowest paid CEOs (a negative 0.08%). A zero-investment portfolio that buys the firms with highest abnormal CEO pay and sells the firms with the lowest abnormal CEO pay earns a risk-adjusted three-day abnormal return of

0.64%, which is statistically significant at the 5% level. This return difference is unlikely to be driven by differences in the level of expected returns since the annualized difference across the quartiles is 71% $((1+0.64\%)^{252/3} - 1)$. In addition, to the extent that the four-factor model proxies for the risk factors that affect expected stock returns, our abnormal returns have controlled for these factors. To verify that the return patterns are not driven by outliers, we also calculate the percent of stocks in a portfolio that have positive abnormal returns, where an individual stock abnormal return is calculated in the same fashion as the portfolio abnormal return using the Fama-French four-factor model. Table III.A shows that this statistic follows a pattern similar to that of the portfolio CAR.[26]

Investors also seem to trade on the House passage of the Say-on-Pay Bill. Based on untabulated results, we find that the zero investment portfolio that buys the firms with highest abnormal CEO pay and sells the firms with the lowest abnormal CEO pay among a subset of firms in the highest abnormal volume quartile earns an abnormal return of 1.05%, which is statistically significant at the 5% level.[27]

To examine whether our abnormal compensation measure is a proxy for raw compensation, and to test whether the market cares about the level of compensation or the level of abnormal compensation, we expand our analysis. Specifically, we look at the subset of firms in the highest quartile of raw cash compensation that also have negative abnormal cash compensation.[28] While the level of compensation appears high for executives of these firms, they are actually underpaid relative to the compensation model. These firms have an insignificant abnormal return of 0.18%, or 0.06% lower than the rest of the sample, surrounding the Say-on-Pay Bill passage. This result suggests that the Bill won't benefit firms with highly paid but not overpaid CEOs. It also suggests that the market differentiates overpaid executives from highly paid executives and illustrates the importance of using abnormal compensation measures in our empirical analyses. We find similar results when the subset is further limited to the firms

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[26] The percent of firms in a portfolio with positive abnormal returns is based on individual stock returns rather than portfolio returns. Thus, they may be more affected by the potential clustering in stock returns.
[27] Following Hsieh and Walkling (2005), we calculate the abnormal volume as the average turnover ratio over the event window minus the average turnover ratio over the non-event window, where turnover ratio equals the daily trading volume divided by the number of shares outstanding.
[28] We thank Laura Starks and the referee for this suggestion.

with above industry median prior-year stock returns.

In unreported tests, we find that the market reaction to the Say-on-Pay Bill is insignificantly (p value = 0.22) related to abnormal equity compensation. This result is not surprising since shareholder votes on equity compensation already exists. Since June 30, 2003, the SEC has required shareholder approval for all equity-based compensation plans. In our third experiment, we examine how shareholders vote on these equity-based compensation plans. The abnormal returns of the portfolios sorted by abnormal CEO total compensation show a similar pattern to those of the abnormal cash compensation although the abnormal returns are statistically insignificant.

Annual equity compensation usually makes up only a small fraction of a CEO's total equity holdings. In our sample of 1,270 firms, the annual equity compensation accounts for 10.7% of a CEO total stock and option holdings. Thus, the lion's share of a CEO's incentive to increase shareholder wealth comes from her total equity holdings, rather than just the current-year equity compensation awards. Consequently, any market reaction to the Say-on-Pay Bill should be related to the CEO's overall pay-for-performance sensitivity due to equity holdings, rather than annual equity compensation. When we sort the firms by their CEO pay-for-performance sensitivity in Table III.B, we find a significantly positive market reaction of 0.53% for the firms in the lowest pay-for-performance sensitivity quartile. This portfolio also has the highest percent of firms with positive abnormal stock returns. This result suggests that shareholder votes allowed by the Say-on-Pay Bill may lead to more efficient compensation design for these companies and increase their firm values.

These results are consistent with the alignment hypothesis. The market reaction suggests that the legislation could help reduce the compensation of overpaid CEOs and improve compensation design for firms with lowest CEO pay-for-performance sensitivity, thus benefiting their shareholders. We, however, caution the readers not to interpret the abnormal returns as the capitalized value of pay reduction or value creation due to better compensation practice, since the market reaction is scaled by the perceived increase in the probability of eventual Say-on-Pay legislation. For example, firms in the highest abnormal cash

compensation quartile have an average market value of equity of $10 billion. Hypothetically, suppose the perceived probability of eventual Say-on-Pay legislation increased by 50% on April 20, 2007. This implies that the average amount of value created for shareholder of these firms is $108 million (0.54%×$10 billion÷50%). The present value of the possible reduction of abnormal CEO pay is unlikely to explain this level of value creation since CEOs in this group are overpaid by an average of $1.8 million annually. The market reaction is consistent with the belief that allowing a shareholder vote on executive compensation for this subset of firms can do more than reduce overpay. In particular, improving the structure of CEO incentives can translate into improved firm performance (see the discussion of Jensen and Murphy (1990) and Mehran, (1995), among others).

B. Corporate governance and market reaction to Say-on-Pay Bill

Firm specific characteristics influence the value of the Bill to each firm and the probability that the firm will take corrective action if the Bill is implemented. In subsequent sections, we examine several firm level characteristics that may influence the impact of the Bill. First, we analyze the impact of corporate governance. We note that the relation between the market's reaction to the Say-on-Pay Bill and a firm's corporate governance quality need not be linear or even monotonic. As a firm starts to deviate from good corporate governance, giving shareholders an opportunity to voice their dissatisfaction with executive compensation may help improve governance and compensation design, thus increasing firm value. Since the shareholder vote proposed by the Bill is advisory, however, it is up to the board of directors to make changes when facing shareholder dissatisfaction. If a firm's corporate governance is so bad that the CEO is entrenched, the board may choose to ignore shareholder discontent and the legislation may have little effect on these firms. Ultimately, the relation between governance measures and market reaction to Say-on-Pay is an empirical issue. Our analysis recognizes the possibility of non-linear effects by looking at quartiles of governance measures.

In Table IV we examine the market reaction to Say-on-Pay Bill and six measures of corporate governance. As in Table III, we first sort our sample firms into four portfolios based on these governance

variables. Since the governance variables are often discrete, the four portfolios do not always have the same number of firms.[29] Next, we estimate abnormal portfolio returns during the event window using the four-factor model in equation (1).

Table IV reveals the relation between the market reaction to the Say-on-Pay Bill and a firm's governance. Panels A through D examine the quality of the board of directors, while the last two panels relate the market reaction to a firm's level of takeover defenses. Shivdasani and Yermack (1999) and Coles, Daniel, and Naveen (2007) find outside directors appointed by the CEO are less effective in monitoring the CEO. Thus, we calculate the percent of outside directors of a firm joining the board after the current CEO starts her tenure. We show in Table IV.A that firms in the third quartile of this measure have the highest average abnormal return of 0.49% over the three-day event window; this return is statistically significant at the 5% level. This portfolio also has the highest percent of firms with positive abnormal stock returns. At first, this result may seem surprising. These are firms in the third, but not in the highest, or poorest governance quartile of the fraction of outside directors appointed by CEO. As we have noted, however, firms with the very poorest governance, in this case with over 90% of outside directors appointed by CEO, may be expected to ignore an advisory vote.

Fich and Shivdasani (2006) find that busy boards are less effective in monitoring managers. They use a dummy variable to measure whether a majority of outside directors are busy, where busy is defined as holding three or more board seats. To have a continuous measure of busy boards, we calculate the

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[29] The compensation committee usually consists of only a few directors. As a result, many board governance measures take on a few discrete values. In some cases it is difficult to construct a sufficient number of diversified portfolios to test the nonlinear relation between governance and market reaction to Say-on-Pay Bill. Therefore, we do not use any board measures at the committee level. For the same reason, we do not use the duality variable of whether the CEO is the chairman of the board. Further, the executive compensation of a company often requires the approval by the entire board. In addition, the Sarbanes Oxley Act related regulations require the compensation committee of all public firms to be independent. Thus, there is little cross-sectional variation in the independence of the compensation committee. We find that on average over 93% compensation committee directors in our sample are independent and 82% firms in our sample have their compensation committees made up entirely of independent directors. Firms with more grey directors serving on their compensation committee do react more positively to the Say-on-Pay Bill than the other firms. Perhaps due to small sample size, however, the difference is not statistically significant.

percent of a firm's outside directors who hold three or more board seats.[30] Table IV.B shows that as the outside directors of a board becomes busier (moving from the lowest to the third quartile), the market reaction to the Say-on-Pay Bill becomes more positive, with the third quartile having the highest abnormal portfolio return of 0.57% over the three-day event period. This figure is statistically significant at the 1% level. For the firms with the highest percentage of busy directors, however, the abnormal portfolio return is an insignificant 0.24%. The third quartile also has the highest percentage of portfolio firms with positive abnormal stock returns.

Yermack (1996) finds that firms with larger boards have lower market valuation. Thus, our next measure of board quality is the number of directors serving on a board. Table IV.C shows that for firms in the first three quartiles of board size the abnormal returns increase monotonically as the board size increases, with the third quartile having the highest abnormal portfolio return of 0.48% over the three-day event period. This figure is statistically significant at the 5% level. The abnormal portfolio return equals an insignificant 0.08%, however, for firms with the largest boards. The third quartile also has the highest percent of firms with positive abnormal stock returns.

Stock ownership by outside directors affects their incentive to monitor the managers. In Table IV.D, we form portfolios by the stock ownership of outside directors and we again find similar results. Firms in the third (second lowest) ownership quartile have the most positive price reaction to the Say-on-Pay Bill, with an average abnormal portfolio return of 0.44% over the three-day event period. This figure is statistically significant at the 10% level. The percentage of firms with positive abnormal stock returns, however, shows a more monotonic pattern.

Table IV.E reports the market reaction to the Say-on-Pay Bill for firms categorized by the

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[30] Fich and Shivdasani (2006) measure busy boards with a dummy variable equal to one if the majority of outside directors are busy. To test for possible non-linearity effects, we perform a sensitivity test dividing our sample into three portfolios: below 25%, between 25% and 50%, and over 50% busy outside directors. We find firms with between 25% and 50% busy outside directors have the highest abnormal returns of 0.48% around the passage of the Say-on-Pay Bill, and this figure is statistically significant at the 5% level. Firms with below 25% or over 50% busy outside directors do not experience significant abnormal returns.

Gompers, Ishii, and Metrick (2003) index of takeover defense. We find that firms in the third quartile of the Governance index have the highest market reaction, with a portfolio abnormal return of 0.42% over the three-day event window which is statistically significant at the 10% level. The percentage of firms with positive abnormal stock returns shows a more monotonic pattern.

Table IV.F reports the relation between the market reaction to Say-on-Pay and the index of Bebchuk, Cohen, and Ferrell (2005) (hereafter BCF index). The results are similar to that of the GIM index in Table IV.E. As the BCF index increases from quartile one to quartile three, the abnormal portfolio return increases monotonically, reaching a peak at 0.48% for quartile three, which is statistically significant at the 5% level. The average abnormal return becomes lower, however, and insignificant for firms with highest BCF index. In addition, the third quartile has the highest percentage of firms with positive abnormal stock returns.

Overall, the results of Table IV are consistent with the following interpretation. Firms are more likely to benefit from improved practices from say-on-pay under two conditions: (1) a need for the improvement and (2) a willingness to change. Firms with weak governance are more likely to benefit from the Say-on-Pay legislation if they are willing to implement better compensation practices. Entrenched managers at firms with very weak governance, however, are likely to ignore an advisory shareholder vote. Consistent with this interpretation, we later show that firms that are responsive to shareholder pressure are more likely to be in the third quartile for five out of the six governance variables examined here. Taken together, the results of Table IV provide support for the alignment hypothesis.

C. "Vote-no" mutual fund holdings and market reaction to Say-on-Pay Bill

We define "vote-no" mutual funds as institutions that frequently vote against management on compensation issues. A higher level of mutual fund share holdings that consistently "vote-no" increases the probability that a vote on executive compensation will receive fewer supporting votes. This, in turn, increases the likelihood of reforms to executive compensation at these firms. To test this, we sort our sample into four portfolios by the level of "vote-no" mutual fund holdings and then examine the market's

reaction to Say-on-Pay Bill for each of the four portfolios. The details of our methodology are described in Section II and the Appendix.[31]

Table V presents results across the four portfolios of "vote-no" fund holdings. Since previous research (Ertimur, Ferri, and Stubben, 2007) shows that firms are more likely to adopt shareholder-sponsored proposals that receive higher shareholder support, it follows that firms facing more shareholder pressure are more likely to reform executive compensation. We note that firms with higher "vote-no" mutual fund holdings react more positively to the Say-on-Pay Bill. The portfolio of firms with the highest "vote-no" fund holdings earn a cumulative abnormal return of 0.56% during the three day event window, while the corresponding abnormal return of the portfolio of firms with the lowest "vote-no" fund share holdings is -0.05%. The abnormal return difference between the two portfolios is statistically significant at the 10% level with a t-statistic of 1.95. The percent of firms with positive abnormal stock returns shows a similar pattern. These results support the alignment hypothesis.

D. Multivariate Results

In Table VI we present multivariate regressions explaining the abnormal return around the passage of the Say-on-Pay Bill. The dependent variable is the three-day cumulative abnormal return (CAR) for each firm during the Say-on-Pay Bill event window. Our estimates use the four-factor model in equation (1).[32] The coefficient β_5 captures the average (one-day) abnormal return over the three days of the event period.

Since the abnormal stock returns may exhibit cross-sectional correlation, which can bias the OLS standard errors, we estimate robust standard errors adjusted for industry clustering and calculate t-statistics based on these robust standard errors. In addition, we also use a bootstrap methodology similar to Zhang (2007) to estimate the *p*-value of the regression coefficients. Specifically, we first randomly select a three-day non-event period from our estimation window. Second, we estimate the abnormal return

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[31] The classification of the mutual fund families is available from the authors upon request.
[32] Since the coefficient estimates of the four factor regression are noisy at the *individual firm* level, we winsorize the estimated CAR at the 1% and 99% level.

for each sample firm during this non-event window using the four-factor model in equation (1), with the dummy variable equaling one during this random non-event window and zero otherwise. That is, we estimate an abnormal return for each firm on this same non-event window. Third, we estimate the regression specifications in Table VI using the CAR from this random non-event window. We repeat the three steps above 1,000 times to generate an empirical distribution of the regression coefficients from the non-event days. Finally, we compare the OLS-estimated regression coefficients from the event window to the distribution of coefficients from non-event windows. The bootstrap *p*-value equals the percent of the 1,000 coefficients that are higher (lower) than the OLS coefficient if the OLS coefficient is positive (negative).

Our main variables of interest are abnormal CEO compensation, pay-for-performance sensitivity, corporate governance, "vote-no" mutual fund holdings, and institutional holdings. In addition, we control for firm characteristics that may affect cross-sectional stock returns, such as beta, size, book-to-market ratio, leverage, and industry dummies. We also control for the percentage of outside directors and the existence of a previous shareholder proposal for say-on-pay in all specifications. Regression (1) shows that abnormal CEO compensation has a significant positive effect on the market reaction to the Say-on-Pay Bill even after controlling for firm characteristics. Both the robust t-statistic and the bootstrap p-value are significant at the 5% level. Using the coefficient of 0.28, we calculate that a one standard deviation increase in abnormal CEO salary and bonus leads to 0.21% increase in CAR. The univariate results in Table III show that the firms with lower CEO pay-for-performance sensitivity experience more positive abnormal returns. Regression (2) shows that this result holds in a multivariate setting after controlling for other firm characteristics. The log of pay-for-performance sensitivity has a coefficient of -0.13, and both the robust t-statistic and the bootstrap p-value are significant at the 5% level.

In Regression (3), we include both abnormal CEO cash compensation and pay-for-performance sensitivity, along with appropriate control variables. Both variables are statistically significant at the 5% level. In addition, their coefficients are similar to those of Regressions (1) and (2) where the two variables

are included separately. This result suggests that the Say-on-Pay legislation can help to reduce excess compensation for overpaid CEOs and improve incentive alignment for CEOs with insufficient pay-for-performance sensitivity. The two effects do not appear to proxy each other. Firms with low pay-for-performance sensitivity and those that over-pay their CEOs with cash compensation may be able to benefit the most from the mandatory say-on-pay. To test this prediction, in Regression (4) we interact a dummy variable of below median pay-for-performance sensitivity and abnormal cash compensation. We find that the interaction term is statistically significant at the 5% level using both the robust t-statistics and the bootstrap p-value. The coefficient of 0.66 suggests that among the firms with low pay-for-performance sensitivity, a one standard deviation increase in abnormal CEO compensation increases the market reaction to the Say-on-Pay Bill by 0.49%. Consistent with our univariate results, these findings suggest that firms with excessive CEO compensation and poor compensation design will benefit the most from mandatory Say-on-Pay legislation.

To explore the potential non-linearity in how the market reacts to the Say-on-Pay Bill with regard to abnormal compensation, we use two dummy variables: one for firms in the top quartile of abnormal CEO salary and bonus and the other one for firms in the bottom quartile. Regressions (5) to (7) include the high abnormal compensation dummy, the low abnormal compensation dummy, and both dummies, respectively, among other control variables. We find significantly positive coefficients for the high abnormal compensation dummy. This suggests that the Say-on-Pay Bill is likely to benefit firms with overpaid CEOs. The market reaction for firms in the lowest quartile of abnormal compensation (i.e. underpaid) is negative but insignificant.

Since the univariate tests in Table IV suggest that the market reaction to Say-on-Pay Bill is non-linear in corporate governance, we include both linear and square terms of the governance variables in the Regressions (8) and (9). To recognize the combined effect of the four board variables, we construct a board index that equals the sum of the quartile rankings of the four variables: the percentage of outside directors appointed by the current CEO, the percentage of busy outside directors, board size, and the

outside director stock holdings in the firm. The value of this board index ranges from 4 to 16. In both

regressions, the coefficients of the linear term of the corporate governance variables (BCF index and

board quality index) are significantly positive and the squared terms are significantly negative. The

bootstrap p-value is statistically significant at the 5% level for two of the four coefficients and at the 10%

level for the other two coefficients. This result further confirms the inverse-U shape relation between the

market reaction to the Say-on-Pay Bill and corporate governance. [33]

Regression (10) shows that higher "vote-no" mutual fund holdings lead to a more positive market

reaction; the coefficient is statistically significant at the 5% level using the robust t-statistics and at the

10% level using the bootstrap p-value. The coefficient of 2.66 suggests that a one standard deviation

increase in "vote-no" fund holdings leads to 0.16% higher CAR. In contrast, we find the stock holdings

by "vote-yes" mutual funds have a negative effect on the market reaction to the Say-on-Pay Bill, although

the coefficient is statistically insignificant.

Regression (11) reveals that abnormal returns increase with the level of institutional holdings but

decline with the concentration of institutional holdings, although both coefficients are statistically

insignificant. Regression (12) shows the stock holdings by the independent institutions also have a

positive but insignificant effect on the market reaction to the legislation. Hartzell and Starks (2003) and

Almazan, Hartzell, and Starks (2005) find that a higher Herfindahl index of institutional holdings is

associated with lower excess pay. Similarly, we find a significantly negative correlation of -0.10 between

the Herfindahl index of institutional holdings and abnormal CEO cash compensation. However, we find

no association between the market reaction to the Say-on-Pay Bill and the Herfindahl index. In unreported

tests, we also find no significant relation between an institutional blockholder dummy (above 5%

holdings) and the market reaction to the Say-on-Pay Bill.

To this point, our results are supportive of the alignment hypotheses, that Federal Say-on-Pay

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[33] In a sensitivity test, we replace the BCF index with the GIM index in Regression (8). The coefficients have the same sign, although they become statistically insignificant (Bootstrap p-value of 0.113 for the linear term and 0.142 for the squared term).

legislation is associated with increased firm value for firms where it would provide expected benefits. Specifically, the expected benefit would occur in firms with excessive CEO pay and in those likely to implement changes as a result of shareholder votes. In a subsequent section, we present results related to company specific say-on pay proposals submitted by activist shareholders. To preview those results, the firms targeted by company specific shareholder proposals do not appear to have excessive CEO pay, nor do they have weak corporate governance. Consequently, they are unlikely to benefit from the proposals. Consistent with this, we find that in all twelve regressions, the coefficients on a dummy variable for receiving a company specific say-on-pay proposal prior to the House Bill passage are negative with bootstrap p-values between 0.09 and 0.19.

E. Responsiveness to shareholder pressure

The shareholder vote proposed by say-on-pay is non-binding. Thus, when facing a low vote, it is up to the board of a company to reduce excessive executive pay or design better compensation package. Whether say-on-pay can create value depends on whether a board is responsive to shareholder pressure. Next, we examine whether companies that are more responsive to shareholder votes have a different reaction to the Say-on-Pay Bill. There is evidence that shareholder votes affect CEO compensation. Cai, Garner and Walkling (2009a) find that on average, CEOs are more likely to experience declines in abnormal CEO pay the year after their compensation committee members receive lower votes in director elections.

Using data from Table V of Cai, Garner and Walkling (2009a), we identify 91 firms in our current sample as responsive to shareholder votes. In each of these cases the directors serving on compensation committees received more withhold votes in director elections than the median compensation committee member and their CEO experience declines in abnormal compensation the following year. We also identify 40 non-responsive firms. In each of these cases the directors serving on compensation committees received more withhold votes than did the median compensation committee but their CEOs do not experience a decline in abnormal compensation in the following year. The Say-on-Pay

legislation may induce these more responsive firms to reduce abnormal compensation and thus lead to higher firm value.

Results from Table VII.A reveal that responsive firms experience significantly higher abnormal portfolio returns (0.69%) in comparison to non-responsive firms (-0.39%), and the difference is statistically significant at the 5% level, although the percent of stocks with positive abnormal returns is evenly split. As a result of their response to shareholder pressure, the responsive firms have lower abnormal compensation than the non-responsive firms. The positive abnormal compensation of the responsive firms suggests, however, that the managers of these firms are still overpaid. Thus, allowing shareholders to have a say on executive compensation may further reduce CEO pay for these firms and add to firm value. Table VII.B shows that after controlling for various firm characteristics and industry affiliations, the responsive firms still have a higher abnormal return surrounding the House passage of the Say-on-Pay Bill. Both the industry-clustering robust t-statistic and the bootstrap p-value are statistically significant at the 5% level.

We show in Table IV that firms in the third quartile of the governance variables (second weakest governance) have the strongest market reaction to the Say-on-Pay Bill. We interpret this result as suggesting that these firms not only are likely to be affected by the bill, but also are willing to improve their governance under shareholder pressure. Consistent with this interpretation, we find in untabulated results that the responsive firms are more likely than non-responsive firms to have their corporate governance ranking in the third quartile of the sample for five out of the six governance variables.

F. What types of companies receive individual say-on-pay shareholder proposals?

Some shareholders appear unwilling to wait for Say-on-Pay legislation to be signed into law. , These shareholders, mostly labor union pension funds, have submitted say-on-pay proposals directly to the boards of a number of companies. These proposals provide another opportunity to examine the efficacy of say-on-pay and in this case jointly test the proposition that company specific proposals target firms that are likely to benefit from changes in their compensation practices.

First, we examine the firm characteristics associated with the probability of receiving a shareholder-sponsored say-on-pay proposal. The alignment hypothesis predicts that firms most likely to benefit from say-on-pay are more likely to receive such proposals. Consistent with the interference hypothesis, however, labor unions may have objectives that transcend shareholder wealth maximization. In fact, the average sponsoring shareholder in our sample holds about 0.04% of the company's outstanding shares. Thus, if the proposals do affect shareholder wealth the loss or gain to sponsoring shareholders is not great.

To tests these issues, we estimate a logistic regression where the dependent variable equals one if a company receives a say-on-pay shareholder proposal during the period 2006-2008 and zero otherwise. The independent variables include firm characteristics related to size, performance, and governance. Table VIII shows that larger firms are significantly more likely to receive proposals. In unreported tests, we only include firm size and industry and calendar year dummies as independent variables; the regression R^2 equals 0.469, which is very close to the R^2 in Table VIII where additional governance and performance variables are included. These results suggest that these proposal-sponsoring shareholders mainly target large firms. In addition, excessive pay does not seem to be a concern for these shareholders: Regressions (1) and (3) show that the level of abnormal CEO pay is not significantly related to the existence of a shareholder-sponsored say-on-pay proposal. Regressions (2) and (4) show that even raw compensation is not significantly related to the say-on-pay proposal after controlling for size and other firm characteristics. In unreported tests, we find that the targeted firms tend to have higher raw compensation, which may be why they are targeted. However, after we control for size, performance, and other firm characteristics, the probability of being targeted is no longer associated with compensation. Further, all four specifications in Table VIII show that firms with higher pay-for-performance sensitivity are more likely to be targeted. This evidence suggests that the sponsoring shareholders do not target the "right" firms.

Table VIII also shows that the targeted firms have similar performance and corporate governance

as other firms. Finally, we find that stock holdings by the independent institutions significantly increase a firm's probability of receiving a shareholder sponsored say-on-pay proposal. Some large public pension funds, such as Calpers, have publicly endorsed say-on-pay. Large stock holdings by these institutions may attract labor unions to submit shareholder say-on-pay proposal in anticipation of increased support.

G. Market reaction to the announcement of company specific say-on-pay shareholder proposals

Results in Table VIII suggest the say-on-pay proposals target companies that are unlikely to benefit. Their performance and corporate governance are similar to other firms and they do not appear to suffer from abnormal CEO pay. The primary factor driving the decision to target these firms appears to be their large size. We next examine the market reaction to the announcement of say-on-pay shareholder proposals. We define the announcement date as the earlier of the SEC filing date or the proxy mailing date. Table IX.A shows that while on average these firms have insignificant proposal announcement returns, when the say-on-pay proposals are sponsored by labor unions, the market reacts significantly more negatively than otherwise.[34]

We examine the cross-sectional variation of the market reaction to say-on-pay proposals by estimating regressions of the abnormal returns in Table IX.A. Table IX.B reports that when the say-on-pay proposal is submitted by a labor union, the market reaction is significantly more negative (-1.3% using the multivariate regression coefficient), and the results hold in both univariate and multivariate tests. This result suggests that say-on-pay may be used by special interest groups for agendas not in the best interest of the shareholders. On the other hand, the significantly positive coefficient of the interaction of a union dummy and the CEO's abnormal cash compensation suggests that when the unions happen to target firms with overpaid CEOs market reaction is less negative. Overall, these results are consistent with both the interference hypothesis (for firms targeted by unions) and the alignment hypothesis (when these firms happen to have overpaid CEOs).

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[34] For a small sample of 23 firms, we find insignificant abnormal returns when they announce the implementation of say-on-pay. Due to small sample size, we caution the readers about the interpretation of this result.

H. Voting outcome of say-on-pay shareholder proposals and market reaction

Table X.A shows that the say-on-pay proposals on average do not receive majority shareholder backing. On average, less than 30% of all outstanding shares support the proposals. This finding is consistent with earlier results that the companies receiving the proposals are unlikely to benefit from say-on-pay.

In Table X.B we examine the determinants of shareholder support for the say-on-pay proposals. The dependent variables are three measures of voting outcome. In all three regressions, we find that proposals sponsored by labor unions receive significantly lower shareholder support. Two of the three coefficients are statistically significant at the 5% level and the third one is significant at the 10% level. The significantly positive coefficients of abnormal CEO pay suggest that shareholders tend to support the say-on-pay proposals if the company overpays its CEO. The interaction terms of the union sponsor dummy and abnormal CEO pay have negative coefficients with similar magnitudes to those of abnormal CEO pay. We interpret this result as follows: the negative impact of having a proposal sponsored by a labor union offsets shareholder concern about excess pay.

Firms with more outside directors also receive more support for the say-on-pay proposals. Board holdings have significantly negative coefficients. This is consistent with the fact that boards typically recommend voting against these proposals and presumably vote their own shares accordingly. Finally, stock holdings by independent institutions are positively related to the voting outcome. This is not surprising since some public pension funds, such as Calpers, have publicly endorsed say-on-pay.

Table X.C further shows that when these proposals are voted down by the shareholders, the average abnormal return is 2.3% higher than when the proposals pass. We next examine the cross-sectional variation of the market reaction to say-on-pay proposal votes by estimating multivariate regressions of the abnormal returns. Regressions (1) to (3) of Table X.D show that the market reaction to vote outcomes is negatively related to the votes in favor of the say-on-pay proposal and the coefficients are statistically significant at the 10% level for two out of three measures of votes. Regression (4) shows

that when the proposal is defeated, abnormal returns are about 2.3% higher, consistent with the univariate result. These results support the interference hypothesis. When a proposal is defeated, however, the market reaction is also negatively related to abnormal CEO compensation. This result supports the alignment hypothesis. The results are consistent with the following interpretation: in general company specific say-on-pay proposals target firms that are unlikely to benefit from compensation related changes. Thus, the market reaction is negative when proposals targeting these firms receive higher levels of support. To the extent that a firm's CEO is overpaid, however, the negative effect is reduced.

I. Evidence of shareholder voting on incentive compensation plans

Our findings suggest that future shareholder votes on executive compensation, mandated by the Say-on-Pay Bill, will create value for firms with overpaid CEOs and firms more likely to respond to shareholder votes. If shareholders care about executive compensation, their votes on proposals should be related to the level of abnormal CEO pay. Our last experiment examines *past* compensation proposals to see if abnormal pay does indeed influence shareholder voting. We focus on management proposals for approval of incentive compensation plans because they are most similar to the proposals that would be submitted for shareholder approval if the Say-on-Pay Bill became law. The sample for this third experiment consists of 2,511 compensation proposals voted on at 1,853 shareholder meetings during the 2003-2008 period. Most of these proposals are for the approval of equity-based compensation plans. The dependent variable is the percent of votes supporting these proposals which equals the number of favorable votes divided by a base of votes as reported by ISS.[35] ISS reports the base of votes in three alternative ways, namely as the sum of "for" and "against" votes, the sum of "for" "against" and "abstain" votes, or the number of shares outstanding.

Table XI shows that shareholder support is significantly lower when abnormal CEO compensation is higher (in particular if the abnormal equity-based compensation is higher). Shareholder

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[35] We measure the voting outcome with the number of "for" votes divided by the base votes as this ratio is what companies report and it determines whether a proposal passes or fails. In a sensitivity test, we measure the votes with the number of "for" votes divided by the total number of shares outstanding and find qualitatively similar results.

support is also significantly higher when the CEO pay-for-performance sensitivity is higher. Shareholder votes are also significantly lower when "vote-no" mutual fund holdings, as well as the aggregate institutional holdings are higher. These are consistent with our prior results suggesting that if the Say-on-Pay Bill is signed into law, firms with high abnormal CEO compensation, low pay-for-performance sensitivity, and independent-minded shareholders are likely to receive lower approval votes from the shareholders.

IV. Conclusion

The post-SOX period is associated with several initiatives designed to give shareholders an increased voice in the boardroom. The latest of these initiatives, say-on-pay, would allow shareholders to vote on executive compensation. The House of Representatives passed the Say-on-Pay Bill on April 20, 2007 by a 2-to-1 margin. The Bill does not limit CEO pay, but requires a non-binding advisory shareholder vote on executive compensation packages. Proponents argue that the bill will increase shareholder democracy and align owner-manager interests. Opponents argue it will usurp power that is best left to the management and boards of specific firms.

We perform three separate experiments to test hypotheses related to say-on-pay. In our primary experiment, we analyze the abnormal return of 1,270 firms surrounding the House passage of this bill. Stocks of firms with the highest abnormal CEO pay and low pay-for-performance sensitivity react in a significant, positive manner to the Say-on-Pay Bill. Mandatory Say-on-Pay legislation seems to create value for these firms. We find that the positive market reaction is stronger for firms with weak but not the weakest governance. This result suggests that while the advisory shareholder vote proposed by the Say-on-Pay Bill may benefit firms with overpaid CEO, it is up to the board of directors to make these changes. The legislation is unlikely to affect deeply entrenched managers. In addition, we find that the Say-on-Pay Bill will create more value for firms with greater proportions of shares held by "vote no" mutual funds. These funds tend to vote against management recommendations and are more likely to exert pressure on firms during votes on executive compensation. Finally, the results suggest that higher value can be

created for firms that are more willing to improve compensation practice under the pressure of shareholder votes.

These findings are surprising given that several uncertainties at that time bias against us finding significant results. First, while the measure passed the House, it had yet to reach the floor of the Senate. Then-Senator Barack Obama introduced the bill in the Senate Banking Committee on the day it passed the House. Second, even if the bill passed the Senate in its original form, the Bush White House had promised to veto it. Third, even if the bill became law, it is an advisory vote without binding management to a particular action. The significant findings obtained in spite of these facts suggest our results understate the value impact of the bill.

Say-on-pay does not, however, benefit all firms. In a second experiment we examine individual companies targeted by shareholder say-on-pay proposals. This sample provides additional evidence on say-on-pay and on the joint test that the targeted firms would benefit from the proposals. Our results show that targeted firms suffer negative abnormal returns when proposals sponsored by labor unions are announced. These proposals tend to receive lower shareholder support, and when they are voted down the market reaction is positive. We also find that, after controlling for size, performance, and other firm characteristics, firms targeted by shareholder proposals are not overpaying their CEOs. In addition, the targeted firms have similar performance and corporate governance to the other firms. It appears that these firms are targeted because of high CEO compensation driven by large firm size. These results are supportive of the interference hypothesis. In a third experiment, we confirm that shareholders vote as if they care about the level of abnormal executive compensation.

Our results provide important evidence pertaining to the current initiatives being considered by Congress. Our work also provides evidence of the importance of activist shareholders and corporate governance in general. Say-on-pay creates value only in those firms which could benefit from an improvement in compensation practices and where the vote is likely to lead to changes in firm compensation policy.

Appendix: Definition of Variables

The abnormal CEO compensation variables are the residuals from compensation regressions using all ExecuComp companies with available data during the 2004-2006 period as the benchmark. The dependent variables of the three compensation regressions are CEO's cash compensation (salary and bonus), equity-based compensation (stock options and restricted stocks), and total compensation (including option grants). The common independent variables for all three regressions are three-year stock returns, the log of the market value of equity, two-digit SIC codes, leverage, and calendar year dummies. Additionally, we include ROA in the cash compensation regression, the book-to-market ratio in the equity-based compensation regression, and both variables in the total compensation regression as independent variables. Since compensation variables are highly skewed, we use the natural logarithm of the three compensation measures in the regressions. The reported compensation variables take the average value during the three years.

Pay-for-performance sensitivity equals the dollar change of a CEO's stock and option wealth for every 1% increase in company stock price, where the change in stock value equals the number of shares times a 1% increase of stock price and the change in option value equals the number of options times the delta of the options times a 1% increase of stock price. We use the procedure of Cai and Vijh (2007) to infer the terms of the option holdings of a CEO. We then calculate the pay-for-performance sensitivity based on the CEO's portfolio of stock and options at each of the last three fiscal year ends, and use the three-year average.

The **GIM index** is from IRRC following the methodology of Gompers, Ishii, and Metrick (2003). The **BCF index** is the sum of six anti-takeover provisions following Bebchuk, Cohen, and Ferrell (2005).

We define an **outside director as being appointed by the CEO** if she joins the board after the current CEO, where outside directors are identified by IRRC. We classify a **busy director** as one that holds three or more board seats. We then calculate for each firm the percent of its outside directors that are appointed by the current CEO or are busy. **Board size** equals the number of directors serving on the

board. **Outside director stock holdings** equals the total number of shares owned by outside directors divided by the number of shares outstanding.

We define a mutual fund family as a **"vote-no" fund** if it votes against a company manager's recommendation more frequently than the median mutual fund family, and a **"vote-yes" fund** if otherwise. Since this study focuses on executive compensation, we define "vote-no" funds using only the *Compensation*-related proposals. The mutual fund voting records during the 2003-2006 period are obtained from Institutional Shareholder Service (ISS). We find in 98% of all proposals voted at shareholder meetings, all funds in the same family cast the same vote. Thus, we aggregate the votes of all funds in a family. We next manually match the mutual fund families in ISS to those in Thomson Financial. Finally, we calculate the percent of a firm's outstanding shares held by "vote-no" and "vote-yes" mutual funds prior to April 19, 2007.

Institutional holdings are from Thomson Financial. We classify an **institution as independent** if it is a public pension fund or a university or foundation endowment fund. We then aggregate the percent of a firm' outstanding stock held by independent institutions. We thank Professor Brian Bushee of Wharton for providing classification data for institutions.

Beta is estimated with daily stock returns during the non-event period between April 23, 2006 and April 18, 2007 and excluding the confounding event windows in Table I.

Leverage equals the book value of debt divided by the book value of debt and equity.

We estimate the **Portfolio CAR** as the average daily abnormal returns times three since there are three days in the event window. The **average daily abnormal returns** are estimated as the regression coefficient of the event window dummy using the Fama-French-Carhart four-factor model as in Equation (1), where the *dependent variable equals the average daily stock return of the firms in a portfolio*. The independent variables include the market excess return, the size factor SMB, the book-to-market factor HML, the momentum factor UMD, and the event window dummy that equals one for the three trading days during April 19-23, 2007, and zero otherwise. The estimation period spans the 222 trading days between April 23, 2006 and April 23, 2007 and excluding the confounding event windows in Table I.

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Table I
Chronology of Say-on-Pay Legislation

We establish the sequence of the Say-on-Pay legislation by searching the Library of Congress website (http://thomas.loc.gov/) and the *Wall Street Journal* (WSJ). We identify possible confounding events by searching the *Wall Street Journal* "Business and Finance" and "World-Wide" headlines around the legislation event dates.

Date	Say-on-Pay Legislation Event	Possible Confounding Event
January 4-22, 2007	A Reuter's article (1/22/2007) mentions that Rep. Barney Frank plans Say-on-Pay legislation in 2007 as part of the Democratic economic agenda since 1/4/2007.	1) Other Democratic economic agenda mentioned. 2) On 1/23/2007, the WSJ reports that the SEC declined to back H-P's effort to block a shareholder resolution aimed at greater proxy access.
March 1, 2007	Rep. Barney Frank introduces the Say-on-Pay Bill to the House	1) On 2/27/2007, the stock market in Shanghai declines 9%. The Dow industrials drop 3.3%. 2) On 3/1/2007, the House passes legislation to make it easier for unions to organize workers.
March 8, 2007	Lucian Bebchuk and AFSCME testify to the House Committee on shareholders' say on pay.	1) On 3/8/2007, the WSJ reports that the SEC is trying to decide whether and how harshly to penalize firms that backdated stock options.
March 21, 2007	House Committee postpones vote on the Say-on–Pay Bill.	1) On 3/20/2007, the WSJ reports that the SEC is probing to see if any rules were broken in connection with revelations of problems related to sub-prime mortgages. 2) On 3/21/2007, the Fed dropped its stated bias to raise rates.
March 28, 2007	House Committee Passes the Say-on-Pay Bill (37- 29)	1) On 3/28/2007, the WSJ reports that the SEC will have more say in the process governing appointments to FASB.
April 17, 2007	House starts debate on the Say-on-Pay Bill	1) On 4/16/2007 the WSJ reports that the SEC is exploring a new policy that would allow companies to resolve complaints by aggrieved shareholders through arbitration, limiting their ability to sue in court. 2) On 4/16/2007 the WSJ reports that SEC will give mutual-fund fees and disclosure a close look this year.
April 20, 2007	House passage of the Say-on-Pay Bill (269 – 134)	

Table II
Summary statistics

The sample consists of 1,270 firms that have data available from ExecuComp, the IRRC Directors and Governance databases, and CRSP. See the Appendix for the definition of all variables. The compensation variables take the three-year average over the period 2004-2006. The other variables are as of the most recent fiscal year end before April 20, 2007.

Variable	N	Mean	Median	Std Dev	Minimum	Maximum
Compensation						
CEO salary & bonus ($000)	1,270	1,868	1,364	3,085	0	91,818
CEO equity-based compensation ($000)	1,270	3,272	1,763	4,810	0	53,978
CEO total compensation ($000)	1,270	5,658	3,579	6,723	0	91,818
Pay-for-Performance Sensitivity ($000)	1,270	1,593	360	13,185	0	428,277
Abnormal CEO salary & bonus	1,270	-0.004	0.03	0.736	-8.066	2.743
Abnormal CEO equity-based compensation	1,270	0.033	0.745	2.227	-9.523	5.432
Abnormal CEO total compensation	1,270	-0.002	0.029	0.656	-8.452	2.278
Governance measures						
Governance Index	1,270	9.34	9.00	2.51	2.00	17.00
Entrenchment Index	1,270	1.52	2.00	1.10	0.00	5.00
Fraction of outside directors	1,270	0.71	0.73	0.15	0.11	1.00
Fraction of outside directors appointed by CEO	1,270	0.42	0.40	0.36	0.00	1.00
Fraction of busy outside directors	1,270	0.25	0.22	0.22	0.00	1.00
Board Size	1,270	9.39	9.00	2.49	1.00	24.00
Outside director stock holdings (%)	1,270	1.17	0.30	3.85	0.00	59.06
Shareholdings						
"Vote-no" mutual fund holdings (%)	1,270	13.45	12.23	6.00	1.21	41.12
"Vote-yes" mutual fund holdings (%)	1,270	8.72	7.96	5.41	0.00	35.91
Institutional Holdings (%)	1,091	76.78	79.34	15.22	6.87	99.99
Herfindahl index of institutional holdings (%)	1,091	4.70	4.02	3.16	1.41	51.16
Independent institutional holdings (%)	1,091	6.47	5.51	3.39	0.27	27.01
Firm Characteristics						
Beta	1,270	1.22	1.17	0.50	0.01	3.14
Total Assets ($000,000)	1,270	21,172	2,451	108,939	53	1,884,318
Market Value of Equity ($000,000)	1,270	10,038	2,502	27,411	13	383,564
Book-to-Market ratio of equity	1,270	0.45	0.42	0.37	-6.09	6.16
Leverage	1,269	0.34	0.32	0.25	0.00	1.00

Table III
Market reaction to Say-on-Pay Bill by Abnormal CEO compensation

The sample consists of 1,270 firms described in Table II. We sort the sample firms into four portfolios based on their average abnormal CEO cash compensation and pay-for-performance sensitivity during the last three years. The details of the compensation regressions, calculation of the pay-for-performance sensitivity measure, and the estimation of the portfolio CAR are discussed in the Appendix. Percent positive is calculated as the number of stocks in a portfolio with positive abnormal returns, where an individual stock abnormal return is calculated in the same fashion as the portfolio abnormal return. *, **, and *** denote statistical significance at 10%, 5%, and 1% levels, respectively.

Panel A: Market reaction to Say-on-Pay Bill by Abnormal CEO Salary and Bonus

	Number of Firms	Abnormal Compensation ($million)	Portfolio CAR (%)	T-statistic	% positive
1 Lowest	317	-0.543	-0.084	-0.35	47.5
2	318	-0.021	0.261	1.11	52.1
3	318	0.367	0.258	1.21	55.5
4 Highest	317	1.834	0.558	1.98**	55.6
Difference (4-1)			**0.642**	**2.30****	

Panel B: Market reaction to Say-on-Pay Bill by Pay-for-Performance Sensitivity

	Number of Firms	Pay for performance ($million)	Portfolio CAR (%)	T-statistic	% positive
1 Lowest	317	0.072	0.528	1.99**	55.4
2	318	0.235	0.069	0.28	53.2
3	318	0.559	0.303	1.16	54.3
4 Highest	317	5.514	0.092	0.37	47.8
Difference (4-1)			-0.435	-1.31	

Table IV
Market reaction to Say-on-Pay Bill by Corporate Governance
The sample consists of 1,270 firms described in Table II. We sort the sample firms into four portfolios based on six governance variables. The definition of the governance variables and the estimation of the portfolio CARs are described in the Appendix. Percent positive is calculated as the number of stocks in a portfolio with positive abnormal returns, where an individual stock abnormal return is calculated in the same fashion as the portfolio abnormal return. *, **, and *** denote statistical significance at 10%, 5%, and 1% level.

Panel A: Market reaction to Say-on-Pay Bill by percent of outside directors appointed by CEO

	Number of Firms	Mean percent of outside directors appointed by CEO	Portfolio CAR (%)	T-statistic	% Positive
1 Lowest	336	0.0%	0.026	0.10	50.3
2	298	23.4%	0.272	1.28	54.0
3	317	54.5%	**0.489**	**2.06****	**54.9**
4 Highest	319	91.7%	0.219	0.90	51.7

Panel B: Market reaction to Say-on-Pay Bill by percent of busy outside directors

	Number of Firms	Mean percent of busy outside directors	Portfolio CAR (%)	T-statistic	% Positive
1 Lowest	354	0.0%	-0.075	-0.31	50.0
2	272	15.9%	0.281	1.07	51.8
3	326	29.2%	**0.573**	**2.67*****	**57.4**
4 Highest	318	54.4%	0.243	1.03	51.5

Panel C: Market reaction to Say-on-Pay Bill by board size

	Number of Firms	Mean board size	Portfolio CAR (%)	T-statistic	% Positive
1 Lowest	299	6.4	0.161	0.55	47.2
2	175	8.0	0.197	0.64	54.9
3	419	9.4	**0.483**	**1.96****	**58.2**
4 Highest	377	12.3	0.080	0.33	49.9

Panel D: Market reaction to Say-on-Pay Bill by outside directors stock holdings

	Number of Firms	Mean outside director stock holdings	Portfolio CAR (%)	T-statistic	% Positive
1 Highest	317	3.96%	0.077	0.29	47.3
2	318	0.50%	0.179	0.78	51.3
3	318	0.19%	**0.438**	**1.75***	**54.7**
4 Lowest	317	0.05%	0.295	1.38	57.4

Panel E: Market reaction to Say-on-Pay Bill by GIM Index

	Number of Firms	Mean Governance Index	Portfolio CAR (%)	T-statistic	% Positive
1 Lowest	295	6.07	0.090	0.34	48.8
2	396	8.53	0.147	0.64	51.3
3	331	10.50	**0.423**	**1.78***	**54.7**
4 Highest	248	12.96	0.363	1.38	56.8

Panel F: Market reaction to Say-on-Pay Bill by Entrenchment Index

	Number of Firms	Mean Entrenchment Index	Portfolio CAR (%)	T-statistic	% Positive
1 Lowest	266	0.0	-0.120	-0.44	50.7
2	368	1.0	0.348	1.49	49.5
3	383	2.0	**0.477**	**2.25****	**55.9**
4 Highest	253	3.2	0.143	0.56	54.5

Table V
Do "vote-no" mutual fund holdings affect market reaction to Say-on-Pay Bill and CEO compensation?

The sample consists of 1,270 firms described in Table II. We sort these 1,270 firms into four portfolios by "vote-no" mutual fund holdings. The definition of "vote-no" mutual funds and the estimation of portfolio CAR are described in the Appendix. Percent positive is calculated as the number of stocks in a portfolio with positive abnormal returns, where an individual stock abnormal return is calculated in the same fashion as the portfolio abnormal return. Statistical significance is determined by the t-test for differences in means, and by the Wilcoxon test for differences in medians. *, **, and *** denote statistical significance at 10%, 5%, and 1% level.

		Stock Holdings by "Vote-no" Mutual Funds				
		1 (Lowest)	2	3	4 (Highest)	Difference (4-1)
	N	317	318	318	317	
Portfolio CAR (%)	Mean	-0.048	0.254	0.224	0.564	0.612
	t-stat	-0.21	1.15	1.00	1.89*	1.95*
	% Positive	47.3	53.7	52.9	56.3	
"Vote-no" Fund Holdings (%)	Mean	6.93	10.50	14.56	21.80	14.87***
	Median	7.13	10.45	14.51	20.73	13.60***

Table VI
Multivariate regressions

The sample consists of 1,270 firms described in Table II. *For each firm* we estimate the average daily abnormal return for the three days in the window (-1, +1) surrounding April 20, 2007. The CAR is defined as the average daily abnormal returns times three (since there are three days in the event window). The estimation of the average daily abnormal returns is described in the Appendix. Since the coefficient estimates of the four factor regression can be noisy at the *individual firm* level, we winsorize the estimated CAR at the 1% and 99% level. The Low Pay-for-performance sensitivity dummy equals one if a firm's average CEO pay-for-performance sensitivity during the three years before April 20, 2007 is below the median. The board index equals the sum of quartile rankings (from Table IV) of the four board governance variables: percent of busy outside directors, percent of outside directors appointed by current CEO, the board size, and stock ownership of outside directors. Thus, the board index ranges from 4 to 16. Institutional holdings are from Thomson Financial. In our sample, 36 firms received a shareholder proposal prior to the Say-on-Pay Bill. We also include industry dummies (two digit SIC codes) in all regressions. The definitions of other independent variables are described in the Appendix. *t*-statistics are based on standard errors adjusted for industry clustering and are reported in parentheses. Bootstrap *p*-values, which equal the percent of 1,000 repetitions that generate coefficients higher (lower) than the OLS coefficient if the OLS coefficient is positive (negative), are reported in brackets. In each repetition, we select one three-day non-event period from the estimation window and then estimate the CAR for each sample firm during this non-event window using the four-factor model in Equation (1). *, **, and *** denote statistical significance at the 10%, 5%, and 1% level, respectively.

Independent variables and Statistics	Dependent variable = CAR over April 19- April 23 2007 (Industry clustering robust t-statistics) [Bootstrap p-value]											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Intercept	0.37 (0.36) [0.416]	0.52 (0.46) [0.370]	0.90 (0.78) [0.275]	0.23 (0.23) [0.443]	0.00 (0.00) [0.481]	0.18 (0.17) [0.465]	0.12 (0.12) [0.480]	0.12 (0.11) [0.492]	-1.82 (-1.31) [0.228]	-0.04 (-0.04) [0.481]	-0.12 (-0.11) [0.467]	-0.12 (-0.11) [0.476]
Abnormal CEO Salary & Bonus	0.28 (2.56)** [0.031]**		0.27 (2.52)** [0.035]**	0.09 (0.69) [0.218]				0.27 (2.47)** [0.035]**	0.25 (2.25)** [0.049]**	0.27 (2.51)** [0.035]**	0.27 (2.22)** [0.049]**	0.26 (2.22)** [0.049]**
Log (Pay for performance)		-0.13 (-2.22)** [0.034]**	-0.13 (-2.17)** [0.034]**									
Abnormal CEO Salary & Bonus * Low Pay-for-performance Dummy				0.66 (2.57)** [0.017]**								
High Abnormal CEO Salary & Bonus dummy					0.41 (2.24)** [0.032]**		0.36 (2.00)** [0.055]*					
Low Abnormal CEO Salary & Bonus dummy						-0.27 (-1.61) [0.115]	-0.15 (-0.94) [0.194]					
BCF Index								0.38 (1.99)** [0.028]**				
Square of (BCF Index)								-0.10 (-1.86)* [0.053]*				
Board index									0.47 (2.79)*** [0.050]**			
Square of (Board index)									-0.02 (-2.52)** [0.065]*			
Stock holdings by "vote-no" mutual										2.66 (2.08)**		

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
funds											[0.056]*	
Stock holdings by "vote-yes" mutual funds											-1.09 (-0.70) [0.278]	
Institutional holdings											0.56 (0.99) [0.262]	
Herfindahl Index of Intuitional Holdings											-0.92 (-0.38) [0.385]	
Independent Institutional Holdings												2.87 (1.01) [0.123]
Percent of Outside directors	0.21 (0.42) [0.357]	0.18 (0.34) [0.342]	0.09 (0.17) [0.437]	0.23 (0.47) [0.338]	0.29 (0.58) [0.316]	0.25 (0.49) [0.333]	0.25 (0.50) [0.333]	0.17 (0.34) [0.375]	0.25 (0.51) [0.333]	0.18 (0.36) [0.357]	0.46 (0.74) [0.214]	0.52 (0.92) [0.203]
Dummy for receiving a shareholder proposal prior to the Bill.	-0.58 (-1.19) [0.148]	-0.69 (-1.31) [0.094]*	-0.60 (-1.23) [0.139]	-0.56 (-1.12) [0.167]	-0.69 (-1.31) [0.094]*	-0.65 (-1.29) [0.103]	-0.68 (-1.32) [0.098]*	-0.55 (-1.10) [0.162]	-0.52 (-1.02) [0.187]	-0.61 (-1.26) [0.118]	-0.60 (-1.15) [0.129]	-0.62 (-1.20) [0.128]
Beta	-0.17 (-0.51) [0.361]	-0.19 (-0.54) [0.346]	-0.21 (-0.61) [0.326]	-0.20 (-0.61) [0.345]	-0.16 (-0.49) [0.361]	-0.15 (-0.44) [0.370]	-0.16 (-0.48) [0.365]	-0.16 (-0.49) [0.361]	-0.15 (-0.46) [0.361]	-0.22 (-0.66) [0.326]	-0.25 (-0.78) [0.294]	-0.22 (-0.69) [0.330]
Log Assets	-0.02 (-0.28) [0.494]	0.07 (1.00) [0.269]	0.05 (0.76) [0.316]	-0.04 (-0.57) [0.423]	-0.02 (-0.29) [0.493]	-0.02 (-0.22) [0.494]	-0.02 (-0.34) [0.488]	-0.01 (-0.09) [0.475]	-0.06 (-0.80) [0.373]	0.02 (0.27) [0.405]	-0.01 (-0.08) [0.460]	0.00 (0.05) [0.452]
Book-to-Market	-0.73 (-2.15)** [0.097]*	-0.81 (-2.47)** [0.083]*	-0.82 (-2.56)** [0.077]*	-0.72 (-2.18)** [0.097]*	-0.73 (-2.08)** [0.097]*	-0.73 (-2.10)** [0.097]*	-0.73 (-2.11)** [0.097]*	-0.73 (-2.15)** [0.097]*	-0.73 (-2.19)** [0.092]*	-0.79 (-2.29)** [0.083]*	-0.73 (-1.95)* [0.102]	-0.74 (-2.01)** [0.108]
Leverage	0.16 (0.55) [0.405]	0.01 (0.02) [0.492]	0.03 (0.12) [0.485]	0.21 (0.70) [0.369]	0.13 (0.42) [0.424]	0.16 (0.50) [0.405]	0.14 (0.45) [0.429]	0.15 (0.52) [0.406]	0.11 (0.37) [0.448]	0.14 (0.50) [0.428]	0.11 (0.32) [0.436]	0.09 (0.27) [0.467]
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,090	1,090
OLS R^2	0.126	0.125	0.130	0.133	0.125	0.122	0.125	0.129	0.132	0.129	0.142	0.142

Panel B: Multivariate regressions	Dependent variable = CAR over April 19- April 23 2007
	(Industry clustering robust t-statistics)
Independent variables and statistics	[Bootstrap p-value]
Intercept	5.67
	(1.49)
	[0.048]**
Dummy for responsive to shareholder vote on compensation committee	1.38
	(2.44)**
	[0.023]**
Percent of outside directors	-0.94
	(-0.81)
	[0.284]
Dummy for receiving a shareholder proposal prior to the Bill.	-0.80
	(-0.80)
	[0.192]
Beta	-2.12
	(-2.84)***
	[0.028]**
Log Assets	-0.22
	(-0.90)
	[0.219]
Book-to-Market	0.29
	(0.18)
	[0.404]
Leverage	-1.24
	(-1.29)
	[0.221]
Industry Dummies	Yes
N	131
OLS R^2	0.304

Table VIII

Probability of receiving a shareholder-sponsored say-on-pay proposal

We identify from ISS 136 company specific shareholder-sponsored proposals targeting 96 companies that request the board of directors to adopt an advisory shareholder vote on executive compensation during the period 2006-2008. The sample in the following regressions includes 3,401 shareholder meetings during the period 2006-2008 that satisfy data availability requirement. Among the 3,401 meetings, a say-on-pay proposal is voted at 113 meetings of 81 individual companies. The independent variables are as of the year before the shareholder meeting. The definitions of the independent variables are described in the appendix. T-statistics are reported in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% level, respectively.

| | Dependent variable = Say-on-pay proposal dummy | | | |
	(1)	(2)	(3)	(4)
Intercept	-20.90	-20.79	-20.59	-19.83
	(-0.24)	(-0.25)	(-0.38)	(-0.37)
Log assets	0.94	0.96	0.92	0.95
	(7.69)***	(7.74)***	(7.69)***	(7.56)***
Abnormal CEO Cash compensation	-0.03			
	(-0.24)			
Abnormal CEO equity compensation	-0.09			
	(-1.14)			
Log CEO Cash compensation		-0.01		
		(-0.07)		
Log CEO equity compensation		-0.10		
		(-1.25)		
Abnormal CEO total compensation			-0.13	
			(-1.23)	
Log CEO total compensation				-0.07
				(-0.66)
Log pay for performance sensitivity	0.29	0.30	0.34	0.34
	(3.00)***	(3.06)***	(3.44)***	(3.47)***
Industry adjusted ROA	2.02	2.11		
	(1.08)	(1.12)		
Prior year excess stock return			-0.53	-0.50
			(-0.93)	(-0.88)
Book-to-market ratio	-0.09	-0.10	-0.25	-0.28
	(-0.21)	(-0.23)	(-0.60)	(-0.67)
BCF index	-0.14	-0.14	-0.11	-0.12
	(-1.08)	(-1.06)	(-0.89)	(-0.93)
CEO is chairman	0.19	0.19	0.20	0.19
	(0.72)	(0.72)	(0.75)	(0.71)
Percent of outside directors	-1.11	-1.11	-0.94	-0.97
	(-1.07)	(-1.07)	(-0.91)	(-0.94)

Outside director stock ownership	-0.64	-0.66	-0.48	-0.55
	(-0.22)	(-0.23)	(-0.17)	(-0.19)
Board size	0.02	0.02	0.02	0.02
	(0.99)	(0.97)	(1.15)	(1.08)
Percent of outside directors appointed by current CEO	-0.64	-0.65	-0.64	-0.65
	(-1.49)	(-1.51)	(-1.47)	(-1.51)
Percent of outside directors with three or more board seats	1.58	1.59	1.71	1.71
	(2.43)**	(2.45)**	(2.63)***	(2.63)***
Independent Institutional holdings	0.33	0.33	0.32	0.31
	(2.54)**	(2.52)**	(2.40)**	(2.36)**
Calendar year Dummy	Yes	Yes	Yes	Yes
Industry Dummy	Yes	Yes	Yes	Yes
N (Dependent variable = 1)	113	113	113	113
N(Dependent variable = 0)	3,286	3,286	3,286	3,286
R2	0.499	0.500	0.499	0.498

Table IX

Shareholder-sponsored say-on-pay proposal announcement and market reaction

The sample of 113 shareholder sponsored say-on-pay proposals is described in Table VIII. We define the announcement date as the earlier of the SEC filing date or the proxy mailing date. In Panel A, statistical significance is determined by the t-test for differences in means, and by the Wilcoxon test for differences in medians. In Panel B, the independent variables are as of the year before the shareholder meeting. The definitions of the independent variables are described in the appendix. T-statistics are reported in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% level, respectively.

Panel A: Market reaction to the announcement of shareholder-sponsored say-on-pay proposals

Announcement CAR (%)	N	Mean (%)	t-stat	Median (%)	% positive
Full sample	113	-0.12	-0.33	-0.10	47.8%
Union sponsored	48	-0.94	-1.52	-0.64	39.6%
Non-union sponsored	65	0.48	1.16	0.28	53.8%
Difference		1.42**		0.92*	

Panel B: Multivariate regressions

Independent variable and statistics	Dependent variable = Announcement CAR of shareholder-sponsored say-on-pay proposals (%)	
	(1)	(2)
Intercept	0.48 (1.03)	1.58 (1.93)*
Dummy for labor union sponsor	-1.43 (-1.98)**	-1.29 (-1.83)*
Abnormal CEO cash compensation		-0.35 (-1.03)
Union Dummy * Abnormal CEO cash compensation		1.26 (2.80)***
Dummy for first proposal		-0.82 (-1.08)
Dummy for proponent disclose share holdings		-0.83 (-1.15)
Dummy for proponent disclose share holdings *Proponent share holdings		-2.34 (-0.97)
N	113	113
Adjusted R^2	0.025	0.108

Table X

Shareholder-sponsored say-on-pay proposal voting outcome and market reaction

The sample of 113 shareholder sponsored say-on-pay proposals is described in Table VIII. ISS reports three measures of voting outcomes: the number of "For" votes divided by the sum of "For" and "Against" votes, the number of "For" votes divided by the sum of "For," "Against," and "Abstain" votes, and the number of "For" votes divided by the total number of shares outstanding. ISS also reports the vote measure a company designates to determine whether the proposal passed or failed. The defeat dummy equals one if the designated voting measure is less than 50%, and zero if otherwise. In Panel C, statistical significance is determined by the t-test for differences in means, and by the Wilcoxon test for differences in medians. In Panels B and D, the independent variables are as of the year before the shareholder meeting. The definitions of the independent variables are described in the appendix. T-statistics are reported in parentheses. [*], [**], and [***] denote statistical significance at the 10%, 5%, and 1% level, respectively.

Panel A: Distribution of Votes for say-on-pay shareholder proposals

	N	Mean	Minimum	Median	Maximum
For / (For + Against) (%)	113	40.9	17.1	41.3	69.6
For / (For + Against + Abstain) (%)	113	38.6	16.7	39.4	66.6
For / Outstanding shares (%)	113	29.0	14.4	28.6	54.6

Panel B: Multivariate regressions

Independent variable and statistics	Dependent variable =		
	For / (For + Against) (1)	For / (For + Against + Abstain) (2)	For / Outstanding shares (3)
Intercept	17.46 (2.67)[***]	16.02 (2.52)[**]	16.22 (3.05)[***]
Dummy for Union Sponsor	-3.39 (-2.25)[**]	-3.37 (-2.31)[**]	-2.18 (-1.78)[*]
Abnormal CEO cash compensation	1.47 (2.08)[**]	1.26 (1.84)[*]	0.97 (1.69)[*]
Union Dummy [*] Abnormal CEO cash compensation	-2.00 (-2.13)[**]	-1.58 (-1.74)[*]	-0.73 (-0.95)
Percent of outside directors	0.24 (3.47)[***]	0.22 (3.26)[***]	0.11 (1.91)[*]
Board stock ownership	-0.22 (-3.97)[***]	-0.20 (-3.68)[***]	-0.13 (-2.87)[***]
Independent Institutional Holdings	2.84 (2.64)[***]	3.09 (2.95)[***]	2.28 (2.60)[***]
N	113	113	113
Adjusted R^2	0.293	0.273	0.170

Panel C: Market reaction to the voting outcome of say-on-pay shareholder proposals

Voting Day CAR (%)	N	Mean (%)	t-stat	Median (%)	% positive
Full sample	113	0.18	0.56	-0.32	44.2
Proposal defeated	102	0.41	-1.22	-0.26	46.1
Proposal passed	11	-1.89	-1.60	-0.59	27.2
Difference		2.30**		0.33	

Panel D: Multivariate regressions

Independent variable and statistics	Dependent variable = Voting day CAR (%)			
	(1)	(2)	(3)	(4)
Intercept	2.53 (1.72)*	2.43 (1.68)*	2.70 (1.93)*	-1.89 (-1.91)*
For / (For + Against) (%)	-0.06 (-1.65)*			
For / (For + Against + Abstain) (%)		-0.06 (-1.61)		
For / Outstanding shares (%)			-0.08 (-1.87)*	
Proposal is defeated				2.26 (2.17)**
Defeat Dummy * Abnormal CEO Cash compensation	-0.67 (-2.97)***	-0.68 (-2.98)***	-0.66 (-2.92)***	-0.71 (-3.16)***
N	113	113	113	113
Adjusted R^2	0.087	0.086	0.093	0.103

Table XI
Determinants of votes for compensation proposals
The sample includes 2,511 management-sponsored compensation proposals seeking shareholder approval at 1,853 shareholder meetings during the 2003-2008 period. The dependent variable is the percent of votes supporting these proposals, which equals the number of "For" votes divided by the base of votes. ISS identifies the base of votes as the sum of "For" and "Against" votes, the sum of "For", "Against", and "Abstain" votes, or the total shares outstanding. If more than one proposal is voted on at a shareholder meeting, we calculate the average supporting votes. The abnormal CEO compensation variables are the residuals from compensation regressions using all ExecuComp companies during 2002-2007 as the benchmark. The details of the compensation regressions are described in the Appendix. Then we use the abnormal compensation before the shareholder meeting as the key independent variable. CEO stock holdings are calculated from ExecuComp. The Fama-French 4-factor regression is estimated during the 36 months prior to the shareholder meeting. EBITDA/Assets equals the earnings before interest, tax, depreciation, and amortization during the fiscal year before shareholder meeting divided by the total assets at the beginning of the fiscal year. All other independent variables are described in the Appendix. t-statistics are based on standard errors adjusted for industry and calendar year clustering and are reported in parentheses. *, **, and *** denote statistical significance at 10%, 5%, and 1% level.

Independent variables and statistics	Dependent Variable = Votes For management compensation proposals (%)					
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	84.37	86.47	82.09	83.89	86.81	81.88
	$(21.69)^{***}$	$(21.34)^{***}$	$(20.46)^{***}$	$(21.22)^{***}$	$(21.52)^{***}$	$(20.46)^{***}$
Abnormal log CEO total compensation	-1.14					
	$(-3.46)^{***}$					
Abnormal log CEO cash compensation		0.17				
		(0.55)				
Abnormal log CEO equity-based compensation			-0.30			
			$(-3.41)^{***}$			
Top quartile of Abnormal log CEO total compensation				-1.30		
				$(-1.85)^{*}$		
Bottom quartile of Abnormal log CEO total compensation				0.98		
				(1.44)		
Top quartile of Abnormal log CEO cash compensation					0.40	
					(0.56)	
Bottom quartile of Abnormal log CEO cash compensation					-0.54	
					(-0.74)	
Top quartile of Abnormal log CEO equity-based compensation						-1.18
						$(-1.72)^{*}$
Bottom quartile of Abnormal log CEO equity-based compensation						1.56
						$(2.39)^{**}$
Log (CEO pay for performance sensitivity)	0.77	0.75	0.86	0.84	0.71	0.85
	$(3.43)^{***}$	$(3.42)^{***}$	$(3.84)^{***}$	$(3.48)^{***}$	$(3.25)^{***}$	$(3.78)^{***}$
"Vote-no" fund holdings	-0.16			-0.16		
	$(-4.54)^{***}$			$(-4.42)^{***}$		
Institutional holdings		-0.06			-0.06	
		$(-3.40)^{***}$			$(-3.37)^{***}$	

Independent institutional holdings			-0.10			-0.10
			(-0.99)			(-1.00)
Control Variables						
CEO stock holdings	-0.04	-0.01	-0.02	-0.03	0.00	-0.02
	(-0.47)	(-0.10)	(-0.19)	(-0.33)	(-0.06)	(-0.19)
Outside director stock holding	0.09	0.12	0.14	0.09	0.12	0.14
	$(1.70)^*$	$(2.27)^{**}$	$(2.77)^{***}$	$(1.73)^*$	$(2.31)^{**}$	$(2.78)^{***}$
Board size	0.08	0.11	0.11	0.08	0.11	0.11
	$(1.69)^*$	$(1.92)^*$	$(2.16)^{**}$	$(1.65)^*$	$(1.91)^*$	$(2.02)^{**}$
Busy board dummy	0.06	0.11	0.28	0.04	0.11	0.22
	(0.09)	(0.16)	(0.42)	(0.06)	(0.16)	(0.33)
GIM index	0.24	0.24	0.27	0.24	0.23	0.27
	$(2.23)^{**}$	$(2.27)^{**}$	$(2.48)^{**}$	$(2.27)^{**}$	$(2.19)^{**}$	$(2.52)^{**}$
% of outside directors appointed by current CEO	-0.84	-1.31	-1.60	-1.02	-1.33	-1.56
	(-0.92)	(-1.48)	$(-1.82)^*$	(-1.15)	(-1.52)	$(-1.76)^*$
Percent of outside directors	-3.97	-4.29	-4.85	-4.03	-4.36	-4.84
	$(-2.16)^{**}$	$(-2.33)^{**}$	$(-2.61)^{***}$	$(-2.20)^{**}$	$(-2.38)^{**}$	$(-2.60)^{***}$
Intercept from Fama-French 4-factor regressions	0.04	0.03	0.04	0.06	0.02	0.04
	(0.28)	(0.20)	(0.29)	(0.43)	(0.12)	(0.31)
Prior year EBITDA/Assets	2.92	3.73	2.56	2.61	3.81	2.58
	(1.17)	(1.47)	(0.97)	(1.06)	(1.51)	(0.98)
Industry dummy	Yes	Yes	Yes	Yes	Yes	Yes
Calendar year dummy	Yes	Yes	Yes	Yes	Yes	Yes
OLS R^2	0.113	0.100	0.099	0.111	0.100	0.100
N	1,853	1,853	1,853	1,853	1,853	1,853