

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 document significantly positive abnormal returns around the House passage of Say-on-Pay for firms with high abnormal CEO compensation, low pay-for-performance, and receptivity to shareholder pressure. However, shareholder sponsored proposals appear to target larger firms rather than those with excessive CEO pay or poor governance or performance. The market reacts negatively to these proposal announcements, especially if union-sponsored. Also, the market reacts positively when these proposals are defeated. Our findings suggest that say-on-pay creates value for companies with inefficient compensation but destroys value for others.

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Since passing Sarbanes-Oxley (hereafter SOX), regulators and activist shareholders continue to consider additional measures that would give shareholders more influence in the boardroom. These measures usurp powers traditionally residing with managers and the directors. Initiatives relating to shareholder access to the proxy, the procedures by which directors are elected, and the desirability of broker votes have been debated. Few, if any, issues linking management and shareholders are as contentious as executive compensation. Indeed, excessive executive pay has been an issue throughout the past three decades and long before the SOX-related scandals. The latest such initiative is say-on-pay, i.e. allowing shareholder to have an annual advisory vote on executive compensation.

In the 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. However, most public companies are owned by thousands of shareholders and it can be very costly, if not impossible, for the shareholders to directly write the managerial compensation contract. In most U.S. public companies, shareholders do not have a say, or vote, on how management is compensated. Instead, shareholders delegate this right to their representatives – the board of directors.

Fama (1980) argues that a competitive managerial and director labor market induces the directors to act in the best interest of the shareholders. Similarly, the opponents of say-on-pay assert that the current pay practices of most companies are efficient; allowing shareholder votes on executive compensation will distract the board and management and reduce the authority of the board. They point out that if say-on-pay were beneficial boards could freely adopt it today, without the requirement for legislation. Some opponents also argue that the 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)).

However, Shivdasani and Yermack (1999), Bebchuk (2003), and Cai, Garner, and Walkling (2007, 2008), among others, argue that under the current director election system, it is often the managers, instead of the shareholders, who decide the composition of the board of directors. Given this connection,

a board may have the incentive to design a compensation contract in the interest of the managers instead of 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 directors' incentives and actions are imperfectly aligned with shareholders.¹

During the 2006-2007 proxy seasons, activist shareholders (mostly labor unions) submitted 59 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, Senator Barack Obama introduced a companion bill (S.1181) in the Senate. The Bill is current on hold at the Senate Banking committee. With Barack Obama elected President and Democrats controlling both houses of the Congress, however, the Say-on-Pay Bill may soon become law. Recently, the government required all financial firms receiving federal bailout money to give shareholders a say-on-pay and limit executive's salary to \$500,000. Indeed, one article describing this refers to limits on pay as "name and shame" part of the legislation.² Another article refers to President Obama as "shamer in chief" with regard to executive compensation.³ 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 or not allowing shareholder votes on executive compensation creates wealth.

¹ 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.

² Weisman, J and Lublino, J., 2009. Obama Lays Out Limits on Executive Pay, Wall Street Journal, February 5.

³ 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.

Specifically, we perform three experiments to examine this issue. First, we examine the market reaction to the passage of the House Bill on April 20, 2007. The passage of the Bill was not 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."⁴ 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. Further, the 55 Republican votes helped the House Say-on-Pay Bill to reach the two-thirds majority that is required to override a presidential veto.⁵ 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.

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 shareholders' vote on executive compensation in particular, and access to the proxy in general, add value to a company. Arguments can be made supporting and denouncing the legislation. Proponents argue that the bill further aligns owner-manager interests. Opponents worry the bill will restrict the board and management and inhibit their ability to design optimal compensation packages. Since the votes would be non-binding, it could also be argued that the bill would not have any impact in the market. Abnormal returns surrounding advisory proposals sponsored by shareholders, for example, are generally insignificant in the literature (see, for example, Karpoff, Malatesta, and Walkling (1996) and Gillan and Starks (2000)).

We focus on the day the bill passed the House and examine the stock price reaction of 1,270 of

⁴ Geewax, M., 2007. House Approves Shareholder Advisory Vote On CEO Pay, Cox News Service, April 21.

⁵ The Bush White House opposed the bill arguing that Congress should not dictate the process by which executive compensation is approved.

the largest corporations in the United States. Analyzing the impact around this particular day 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 react positively to the Say-on-Pay Bill. Further, 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 and arguably are likely to implement such improvements under shareholder pressure. Conversely, firms with the weakest governance may not respond to advisory shareholder votes at all. Consistent with this conjecture, we find more positive market reaction for a subset of firms that have previously responded to shareholder dissatisfaction expressed in director elections. In addition, abnormal returns are higher for firms with a higher fraction of mutual fund shareholders that often vote against management (hereafter "vote-no" mutual funds). These findings suggest that allowing shareholders to have a vote on setting executive compensation may benefit firms with inefficient compensation design and weak governance.

Second, we examine shareholder-sponsored say-on-pay proposals targeting individual companies. The evidence indicates that these proposals destroy value in the companies targeted. Using a sample of 49 firms receiving say-on-pay shareholder proposals during 2006-2007, we find that the companies targeted are not the ones likely to benefit from say-on-pay. On average, the CEOs of these firms are not overpaid. Moreover, these firms have better performance and governance than typical firms. These firms appear to be targeted primarily because of their large size. In addition, most of these proposals are sponsored by labor unions with very little stock holdings. The stock prices of these firms react negatively when the proposals are announced and when the House passed the Say-on-Pay Bill. Further, the reaction is even more negative when the sponsoring shareholder is a labor union. Finally, when shareholders vote down these proposals, the stock prices of these firms react positively, and the reaction is higher when more shareholders vote against the proposals.

Finally, we examine the votes of management proposals for approval of incentive compensation (mostly equity-based compensation plans). Using a sample of 1,404 management-sponsored compensation proposals voted on at 1,010 shareholder meetings during the 2003 – 2005 period, we find that shareholder support for such proposals is lower when abnormal CEO compensation is higher and “vote-no” mutual fund stock holdings are higher.

Taken together, our evidence suggests that the Say-on-Pay Bill may not benefit all firms. One size does not fit all in applying the legislation. 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. These 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 over 15 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.⁶

The current post-SOX climate is no exception. Shareholders complain about the levels and form

⁶ Indeed, a quick survey of the New York Times found the following historical headlines. The stories of these headlines are 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”;

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. 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.

Apart from legislative pursuits, shareholders in some companies have taken the initiative into their own hands. According to Deane (2007), shareholders in the U.S. have filed 261 pay related proposals (including but not limited to the say-on-pay proposals) during the first five months of 2007. This doubles the 131 proposals from a similar period in 2006. Among the 59 say-on-pay proposals voted on in 2006-2007, six received majority shareholder support. Several proposals have been implemented by the board: 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.⁷ 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 required shareholder vote on executive compensation. Interestingly, the 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.

In May 2003, the compensation package of GlaxoSmithKline (GSK), a British company, was

⁷ About a dozen companies participated in a work group for say-on-pay in February 2007. However, none of these firms adopted a say-on-pay policy before the passage of the House Bill on April 20, 2007.

rejected by advisory 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. This anecdotal evidence suggests that even the non-binding shareholder votes can have a real effect. Consistent with the anecdotal evidence, Ferri and Maber (2007) find that there is improved sensitivity between CEO compensation and firm performance after the British legislation in 2002, particularly for firms with overpaid CEOs and firms receiving higher dissenting shareholder votes.

Although we are not aware of existing empirical literature on the Say-on-Pay legislation in U.S., 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.⁸ Activism focusing exclusively on executive compensation proposals also finds little impact [Johnson and Shackell (1997)]. More recently, Cai, Garner, and Walkling (2008) examine the determinants and efficacy of shareholder votes in director elections during 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 evidence 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

⁸ 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 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.⁹ This worry could be warranted; on average the sponsoring shareholder of company specific say-on-pay proposals in our sample holds less than 0.01% of the firm's outstanding shares. Opponents also worry that companies would not understand the reason for a low vote. The legislation will also create compliance costs which may not be offset by benefits.¹⁰ The Interference hypothesis suggests:

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

In his qualitative analysis, Deane (2007) discusses laws relating to say-on-pay in five countries where a similar measure exists: Australia, Norway, Sweden, The Netherlands, and The United Kingdom. In spite of the concerns that the votes will interfere, Davis (2007) reports increased accountability and communication between the board and shareholder when votes are implemented internationally.

C. The Alignment Hypothesis

The supporting anecdotal evidence in Deane suggests the alignment hypothesis: say-on-pay will better align owner-manager interests and improve governance and performance. 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 democracy and hold [executives] properly accountable for their performance, then they should be more willing to let them get on with the job.”¹¹

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. Moreover, 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

⁹ Cai, Garner, and Walkling (2007) find that almost all proposals for majority voting are initiated by unions.

¹⁰ Bushee and Leuz (2005) find that the SEC “eligibility rule” of 1999 results in significant cost for firms trading on OTC bulletin board. However, Greenstone, Oyer, Vissing-Jorgensen (2006) find the 1964 Amendment that extends mandatory disclosure requirement to large OTC firms adds value to the affected firms.

¹¹ Source- *The Economist*, June 2, 2007.

approval vote on executive compensation, management may be more willing to start dialogues with shareholders and listen to their concerns. Further, a high shareholder disapproval vote may be used as evidence in litigation that a firm does not adequately represent the shareholders. The litigation threat may force the directors to listen to shareholders and implement more efficient executive compensation packages.

However, the firms that are most likely to benefit from a shareholder vote on executive compensation are those with overpaid managers. To protect their own interest, these managers are unlikely to voluntarily allow a shareholder vote on their pay. Thus, the Say-on-Pay legislation mandating a shareholder advisory vote may add value, in particular to the firms with overpaid managers.¹² The Alignment hypothesis suggests:

H₂: Say-on-Pay legislation and proposals will increase firm value.

D. The Neutral effect Hypothesis

Historically there has been little market impact surrounding the announcement of or voting on shareholder proposals. This may be because the votes are symbolic or because management generally does not adopt these proposals even when they receive majority votes. Research documenting the impact of shareholder proposals includes the activism literature previously cited as well as work by Thomas and Martin (1999) and Thomas and Cotter (2007). 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 2003-04 period.

Apart from the impact of the Say-on-Pay Bill, it remains an open question whether it will ever become law. Although it has passed the House, it may never get through the Senate. Even if it did pass the Senate President Bush said (at that time) he would not sign it. Thus, the market may not view the House passage of the Bill as a significant increase in the probability of its eventual passage. The neutral

¹² Lo (2003) shows that the 1992 revision of executive compensation disclosure rules adds value to the firms that lobby against the rule change.

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. We investigate the relation between the market reaction and various compensation and governance characteristics. Second, we examine the firms that receive a (company specific) shareholder proposal requesting say-on-pay. For these firms, we examine the market reaction to the announcement of and voting on these shareholder 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. Shareholder approval is required for these equity-based compensation plans since 2003 (SEC Release No. 34-48108). This sample consists of 1,404 compensation proposals voted on at 1,010 shareholder meetings during the 2003 – 2005 period.

To identify the legislative events of 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 last event: when the House of Representatives passes the Say-on-Pay Bill.¹³ To avoid bias, we exclude the days surrounding the earlier events from the non-event estimation windows. However, to the extent that these

¹³ In sensitivity tests, we also include the House committee passage of the Say-on-Pay Bill on March 28, 2007 as an event. Our main results are qualitatively similar.

early actions signal ultimate passage of the bill, we bias against our finding significant results on that date.

We test the hypotheses concerning say-on-pay by examining the market impact on firms classified by the likelihood they would be affected by the bill. After ranking firms by abnormal CEO compensation and governance variables, we analyze the three day announcement return around passage of the bill in the House. Since all firms share this event window, the abnormal returns 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 the 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.¹⁴

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. Specifically, we estimate the following regression

$$R_{p,t} - R_{f,t} = \alpha + \beta_1(R_{m,t} - R_{f,t}) + \beta_2SMB_t + \beta_3HML_t + \beta_4UMD_t + \beta_5D_Event_t + e_t \quad (1)$$

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 excluding the confounding event windows in Table I. The coefficient β_5 is the estimated average daily abnormal return during the Say-on-Pay Bill event window and its t-statistic provides the statistical significance of the abnormal return. Obviously, our ability to find significant results in this period is

¹⁴ 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), and Litvak (2007), Zhang (2007), among others.

hindered by anticipation of the bill as well as uncertainty about the possibility it will become law. These issues are unavoidable in our analysis and we note that they bias our results towards the neutral effect hypotheses.

The sample consists of 1,270 firms that have data available from ExecuComp, CRSP, and the Directors and Governance databases from IRRC. 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. Stock option and restricted stock compensation averages another \$3.3 million. Average total compensation is \$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 as our benchmark. Dependent variables of the compensation regressions are the natural log of the three measures of CEO compensation: salary and bonus, equity-based compensation and total compensation (including option grants). We use measures of size (the natural log of market value of equity), the three year stock return, industry classification (two-digit SIC codes), leverage, and calendar year dummies as the common independent variables in all three regressions.¹⁵ For the salary and bonus regression, we further include the return on assets as an independent variable since bonus is often linked to accounting performance. For the equity-based compensation regression, we also include the book-to-market ratio as an independent variable to proxy for growth firms.¹⁶ Both return on assets and book-to-market are included in the total compensation

¹⁵ 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.

¹⁶ 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.

regression.¹⁷

In sensitivity tests, we find similar results using the log of total assets to measure firm size and the Fama-French 48 industry classifications instead of the two-digit SIC codes. Our compensation regression includes 5,525 firms/year observations, or about 1,842 firms per year.¹⁸ Because of the other data requirements, our Say-on-Pay legislation sample consists of 1,270 firms.

Table II reveals that for our sample 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 average CEO gains \$1.6 million for a 1% increase in stock price. However, there is substantial cross-sectional variation in pay for performance, with a standard deviation 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 also examine the role of governance and mutual fund stock holdings. We note that the average governance 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. These 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. However, the level of "vote-no" mutual fund holdings gives some idea of the level of votes known to be

¹⁷ In sensitivity tests, we include all independent variables in all three regressions. We find similar results.

¹⁸ 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.

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.¹⁹ The mutual fund voting records during 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 half of them are classified as “vote-no” funds and the other half are “vote-yes” funds.²⁰ 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 the managers and reduce excess compensation.

We obtain the sample of shareholder proposals from ISS. ISS identifies 59 shareholder proposals (targeting 53 companies) during 2006-2007 that ask the board of directors to adopt an advisory shareholder vote on executive compensation. We find 49 out of the 53 firms with data available CRSP,

¹⁹ 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.

²⁰ A recent study by 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 over 2003-2006. 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.

IRRC, ExecuComp and Compustat. Among the 49 firms, six firms receive proposals in both 2006 and 2007 and 43 firms only receive proposals in 2007.

III. Empirical results

A. Market reaction to Say-on-Pay Bill

Table III presents the 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 to firms with most highly paid CEOs (a significantly positive 0.56% over the three-day event window) and negatively to 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%, and is statistically significant at the 5% level. This return difference is unlikely to be driven by the level of expected returns since the annualized difference across the quartiles is 71%. 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 has positive abnormal returns, where the individual stock abnormal return is calculated in the same fashion as the portfolio abnormal return using the Fama-French four-factor model. Table III shows that this statistic follows a similar pattern as the portfolio CAR.²¹

Investors also seem to trade on the House passage of the Say-on-Pay Bill. Among a subset of

²¹ 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.

firms in the highest abnormal volume quartile, the zero investment portfolio that buys the firms with highest abnormal CEO pay and sells the firms with the lowest abnormal CEO pay earns an abnormal return of 1.05%, which is statistically significant at the 5% level.²²

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.²³ 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 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 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 vote of 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 as those of the abnormal cash compensation although the abnormal returns are statistically insignificant.

In addition, the 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

²² 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.

²³ We thank Laura Starks and the referee for this suggestion.

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. Consequently, any market reaction to the Say-on-Pay Bill should be related to the CEO's overall pay-for-performance from equity holdings rather than annual equity compensation. When we sort the firms by their CEO pay-for-performance, we find a significantly positive market reaction of 0.53% for the firms in the lowest quintile of pay-for-performance. This portfolio also has the highest percent of firms with positive abnormal stock returns. This result suggests that the shareholder votes allowed by the Say-on-Pay Bill may lead to more efficient compensation design for these companies and increase firm value.

These results are consistent with the alignment hypothesis. The market reaction suggests that the legislation could help reduce the compensation of the over-paid CEOs and improve compensation design for firms with lowest CEO pay for performance, thus benefiting their shareholders. However, we 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, the implied valuation creation for these firms averages $0.54\% \times \$10 \text{ billion} \div 50\% = \108 million . The magnitude of this amount is unlikely to be explained by the present value of possible reduction of the abnormal CEO pay along, since the average annual overpay of the CEOs in this group is \$1.8 million. 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 are likely to 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 the subsequent sections we examine several firm level characteristics that can influence the impact of the bill. First, we look at levels of corporate governance. We note that the relation between the market's reaction to the Say-on-Pay Bill and governance 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 adding firm value. However, if firm governance is so bad as to suggest entrenchment, the managers may choose not to listen to shareholder discontent. Since the shareholder vote proposed in the Say-on-Pay Bill is advisory, 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.²⁴ Next, we estimate the 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 Panel A that firms in the third quartile of this measure have

²⁴ 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 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.

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, poorest governance quartile of the fraction of outside directors appointed by CEO. However, as we have noted, firms with the very poorest governance, in this case with over 90% of outside director appointed by CEO, may not be responsive to an advisory vote.

Fich and Shivdasani (2006) find that busy boards are less effective in monitoring the managers. They use a dummy variable to measure whether the 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 percent of a firm's outside directors who hold three or more board seats.²⁵ Panel B shows that as the outside directors of a board becomes busier (moving from the lowest to the third quartile), the market reaction 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. However, for the firms with the highest percentage of busy directors, the abnormal portfolio return is an insignificant 0.24%. The third quartile also has the highest percent of firms with positive abnormal stock returns.

Yermack (1996) finds that firms with larger boards have lower market valuation. Thus, our next measure of board governance is the number of directors serving on a board. Panel 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. However, the abnormal portfolio return equals an insignificant 0.08% for firms with the largest boards. The third quartile also has the highest percent of firms with positive abnormal individual stock returns.

²⁵ 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.

Stock ownership by outside directors affects their incentive to monitor the managers. In Panel 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 average abnormal portfolio return of 0.44% over the three-day event period. This figure is statistically significant at the 10% level. However, the percent of firms with positive abnormal stock returns shows a more monotonic pattern.

Panel E reports the market reaction to the Say-on-Pay Bill and the Governance index of Gompers, Ishii, and Metrick (2003). 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. However, the percent of firms with positive abnormal stock returns shows a more monotonic pattern.

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

Overall, these results are consistent with the following interpretation. For a firm to benefit from improved practices there must be a need for the improvement and 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. However, entrenched managers at firms with the very weakest governance are likely to ignore an advisory shareholder vote. Consistent with this interpretation, we later show that firms 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 “vote-no” mutual fund holdings increases the probability that a vote on executive compensation will receive fewer supporting votes, which may promote reforms of executive compensation at these firms. Specifically, 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.²⁶

Table V presents results across the four portfolios of “vote-no” fund holdings. Since previous research (Ertimur, Ferri, and Stubben, 2007) have shown 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 holding 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 cumulative abnormal return (CAR) for each firm during the Say-on-Pay Bill event window. Similar to the portfolios in previous tests, we estimate the

²⁶ The classification of the mutual fund families is available from the authors upon request.

CAR for each firm as three times β_5 from the four-factor model in equation (1).²⁷ This coefficient captures the average (one-day) abnormal return over the three days of the event period. Since the abnormal stock returns may be cross-sectionally correlated, which can bias the OLS t-statistics, 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 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, governance, “vote-no” mutual fund holdings, institutional holdings, and the existence of a previous shareholder proposal for say-on-pay. 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. Regression (1) shows that the abnormal CEO compensation has a significant positive effect on the market reaction to the Say-on-Pay Bill even after controlling for firm characteristics. The OLS t-statistic is significant at the 1% level and the bootstrap p -value is 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 have more positive market reaction. Firms with low pay-for-performance and those that

²⁷ 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.

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 (2) we interact a dummy variable of below median pay for performance with abnormal cash compensation. We find that the interaction term is statistically significant at the 1% level using OLS t-statistics and at the 5% level with the bootstrap p-value. The coefficient of 0.66 suggests that among the firms with low pay for performance, 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.

Since the univariate tests in Table IV suggest that the market reaction to Say-on-Pay Bill is non-linear in governance, we include both linear and the square terms of the governance variables in the Regressions (3) and (4). To recognize the combined effect of the four board variables, we construct a board index that equals the sum of the quartile rankings of percent of outside directors appointed by current CEO, percent of busy outside directors, board size, and the outside director stock holdings. The value of this board index ranges from 4 to 16. Regressions (3) and (4) include the linear and square terms of the Entrenchment index and board index, respectively.²⁸ In both regressions, the coefficients of the linear term of governance variables 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.

Regression (5) 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 both the OLS t-statistics and the bootstrap p-value. The coefficient of 2.68 suggests that a one standard deviation increase in “vote-no”

²⁸ In a sensitivity test, we replace the Entrenchment index with the Governance index in Model (3). 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).

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 (6) reveals that the abnormal returns increase with the level of institutional holdings but decline with the concentration of institutional holdings, although both coefficients are statistically insignificant. Hartzell and Starks (2003) and Almazan, Hartzell, and Starks (2005) find that 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 legislation is associated with increased firm value for firms where it would provide benefits. Specifically, the benefit would occur in firms with excessive CEO pay and who are 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 governance. Consequently, they are unlikely to benefit from the proposals. Consistent with this, we find that in all six 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 0.10 and 0.20.

E. Responsiveness 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 (2008) 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 (2008), 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 and their CEO experienced 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 put more pressure on the responsive firms to reduce abnormal compensation and lead to higher firm value. Results from Table VII reveals 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. However, the positive abnormal compensation of the responsive firms suggests 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. Panel B of Table VII shows that after controlling for various firm characteristics and industry affiliation, the responsive firms still have a higher abnormal return surrounding the House passage of the Say-on-Pay Bill. Both the OLS 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 that the responsive firms are more likely than non-responsive firms to have their governance ranking in the third

quartile of the sample for five out of the six governance variables (unreported).

F. What 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 the joint test 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. However, according to the interference hypothesis, the sponsoring shareholders may have an agenda inconsistent with wealth maximization. In fact, the average sponsoring shareholder in our sample holds less than 0.01% of the company's outstanding shares. Thus, if the proposals affect shareholder wealth the loss or gain to these shareholders is not great.

To tests these hypotheses, we estimate a logistic regression where the dependent variable equals one if a company receives a say-on-pay shareholder proposal during 2006-2007 and zero otherwise. The independent variables include firm characteristics related to size, performance and governance. Table VIII shows that larger firms and firms with lower book-to-market ratios are significantly more likely to receive proposals. In unreported tests, we only include firm size and book-to-market ratio as independent variables; the regression R^2 equals 0.313, 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 growth firms. In addition, excessive pay does not seem to be a concern for these shareholders: the level of abnormal pay is not significantly related to the existence of a shareholder-sponsored say-on-pay proposal. 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 to obtain the abnormal compensation, the probability of being targeted is no longer associated with compensation.

Table VIII also shows that the targeted firms tend to have good performance (higher prior stock returns) and better governance (lower Governance and Entrenchment Index). To control for the non-linearity of governance documented in Table IV, we include dummy variables for firms being in the third quartile of the six governance variables in regressions (3) and (4). The governance variables include the Governance and Entrenchment Indices, along with outside director ownership, board size, the percentage of outside directors appointed by the CEO and the percentage of busy outside directors. Only one out of the ten coefficients for these dummy variables (the Entrenchment Index) is statistically significant at the 10% level. Finally, the probability of receiving a company specific shareholder say-on-pay proposal is insignificantly related to the “vote-no” mutual fund holdings. This result is consistent with the fact that the “vote-no” mutual funds generally are not the shareholders sponsoring the say-on-pay proposals. As we discussed earlier, most of the sponsoring shareholders of say-on-pay proposals are labor unions (32 out of 59 proposals), individuals (8 proposals), and religious groups (7 proposals).

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 market performance is superior and they do not appear to suffer from abnormal CEO pay. There is little evidence that their governance is less shareholder-friendly. The primary factor driving the decision to target these firms appears to be size and growth. 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. For firms receiving multiple proposals, we use the first announcement date. Panel A of Table IX shows that the on average these firms suffer a negative abnormal return of -0.71% when the say-on-pay proposals are announced, which is statistically significant at the 10% level.

We next examine the cross-sectional variation of the market reaction to say-on-pay proposals by

estimating regressions of the abnormal returns in Panel A. Panel B reports that when the say-on-pay proposal is submitted by a labor union, the market reaction is significantly more negative (-1.8% using multivariate regression coefficient), and the results hold in both univariate and multivariate tests. On the other hand, the significantly positive coefficient of the CEO's abnormal cash compensation suggests that the market values proposals submitted to firms with overpaid executives. Overall these results are consistent with the interference hypothesis: the passage of the proposals for these firms would decrease wealth.

Interestingly, this last result appears opposite of the finding for "vote-no" mutual funds. That is, higher levels of "vote-no" mutual fund holdings are significantly positively related to the market reaction to the Say-on-Pay Bill for firms with overpaid CEOs. However, as we discussed earlier, the "vote-no" mutual funds generally are not the shareholders sponsoring say-on-pay proposals to individual companies and their stock holdings (average of 13%) are much more substantial than those sponsoring company-specific say-on-pay proposals (average of 0.01%). This large difference in their stock holdings may manifest into their different objectives regarding firm value. This result is also consistent with the market discerning the value of proposals to specific firms. This is consistent with the interference hypothesis.

Since the House passage of the Say-on-Pay Bill increases the probability of implementing say-on-pay for all companies, we next examine whether the companies that have received a shareholder proposal react differently to passage of the Bill. We find that 36 out of the 49 companies received a say-on-pay proposal before April 20, 2007. Panel C shows that the abnormal return surrounding the Bill passage is 0.94% lower for these 36 companies compared to the rest of the sample, and the difference is statistically significant at the 5% level. This result further confirms that the companies receiving individual say-on-pay shareholder proposal are unlikely to benefit from shareholder vote on executive pay.

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

Panel A of Table X 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. Panel B further shows that when these proposals are voted down by the shareholders, the average abnormal return is a positive 0.8%, which is statistically significant at the 5% level.

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. Panel C shows that the market reaction is negatively related to the votes for say-on-pay proposal and the coefficients are statistically significant at the 5% level for all three measures of votes. This result supports the interference hypothesis. However, when a proposal is defeated the market reaction is also negatively related to the 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. However, to the extent that a firm's CEO is overpaid, the negative effect is reduced.

1. 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. To estimate how shareholders are likely to vote if the Say-on-Pay Bill is signed into law, we examine the votes on management proposals for approval of incentive compensation plans. We focus on these management proposals 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 consists of 1,404 compensation proposals voted on at 1,010 shareholder meetings during the 2003 – 2005 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 “for” votes divided by a base of votes as reported by ISS.²⁹ ISS reports the base of votes in three ways 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 votes are also significantly lower when “vote-no” mutual fund holdings are higher. These results lend support to our conjecture that if the Say-on-Pay Bill is signed into law, firms with high abnormal CEO compensation are likely to receive lower approval votes from the shareholders. These firms may implement more efficient executive compensation thus increasing firm value.

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 would allow shareholders to vote on executive compensation, or say-on-pay. 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 and directives best left to the management and boards of specific firms.

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 react in a significant, positive manner to the Say-on-Pay Bill. Mandatory Say-on-Pay legislation seems to create value for these firms. These findings are surprising given that several factors bias against us finding significant results. First, while the measure passed the House, it has yet to reach the floor of the Senate. Senator Barack Obama

²⁹ 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.

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 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.

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 firms to make these improvements. The legislation is unlikely to affect the 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 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 the firms that are more willing to improve compensation practice under the pressure of shareholder votes.

However, say-on-pay does not 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 the company specific proposals are announced and when the Bill passed the House. When these company specific proposals are voted down the market reaction is positive. We also find that the firms targeted by proposals do not overpay their CEOs after controlling for size, performance, and other firm characteristics. In addition, the targeted firms have better performance and corporate governance. It appears that they are targeted because their high CEO compensation resulted from large firm size and high growth. Further, we find an even more negative market reaction when these shareholder proposals are sponsored by labor unions. 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 practice.

Appendix

Definition of Variables

The abnormal CEO compensation variables are the residuals from compensation regressions using all ExecuComp companies with available data during 2004-2006 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 equals the change of 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 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 **Governance index** is from IRRC following the methodology of Gompers, Ishii, and Metrick (2003).

The **Entrenchment 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** if she 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 2003-2006 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.

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 the 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 Sequence	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.	<ol style="list-style-type: none"> 1) Other Democratic economic agenda mentioned. 2) On 1/23/2007, the WSJ reports that 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 House	<ol style="list-style-type: none"> 1) On 02/27/2007, stock market in Shanghai declines 9%. The Dow industrials dropped 3.3%. 2) On 03/01/2007, 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 about shareholders’ say on pay.	<ol style="list-style-type: none"> 1) On 03/08/2007, the WSJ Reports that 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.	<ol style="list-style-type: none"> 1) On 03/20/2007, the WSJ reports that the SEC is probing if any rules were broken in connection with revelations of problems related to sub-prime mortgages. 2) On 03/21/2007, the Fed dropped its stated bias to raise rates.
March 28, 2007	House Committee Passes the Say-on-Pay Bill (37- 29)	<ol style="list-style-type: none"> 1) On 3/28/2007, the WSJ reports that SEC will have more say in the process governing appointments to the FASB
April 17, 2007	House starts debate of the Say-on-Pay Bill	<ol style="list-style-type: none"> 1) On 4/16/2007 the WSJ reports that 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 2004-2006. The other variables are as of the most recent fiscal year end.

Variable	N	Mean	Median	Std Dev	Minimum	Maximum
<i>Compensation</i>						
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 (\$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
<i>Governance measures</i>						
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 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
<i>Shareholdings</i>						
“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
<i>Firm Characteristics</i>						
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 during the last three years. The details of the compensation regressions, calculation of the pay for performance 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 the 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.

Abnormal CEO salary and Bonus Ranking	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**	

Pay for performance Ranking	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 legislation 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 CAR are described in the Appendix. Percent positive is calculated as the number of stocks in a portfolio with positive abnormal returns, where the 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.

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

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

<i>Panel C: Market reaction to Say-on-Pay Bill by board size</i>					
	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

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

<i>Panel E: Market reaction to Say-on-Pay Bill by Governance Index</i>					
	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

<i>Panel F: Market reaction to Say-on-Pay Bill by Entrenchment Index</i>					
	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 that have data available from ExecuComp, the IRRC Directors and Governance databases, and CRSP. 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 the 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 that have data available from ExecuComp, the IRRC Directors and Governance databases, and CRSP. *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 Dummy equals one if a firm's average CEO pay for performance during the last three years is below 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 (based on two-digit SIC codes) in all regressions. The definitions of other independent variables are described in the Appendix. OLS *t*-statistics 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 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					
	(OLS t-statistics)					
	[Bootstrap p-value]					
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	0.48 (0.30) [0.348]	0.35 (0.22) [0.392]	0.20 (0.13) [0.449]	-1.69 (-0.91) [0.243]	0.06 (0.03) [0.496]	0.10 (0.06) [0.486]
Abnormal CEO Salary & Bonus	0.28 (2.93) ^{***} [0.031] ^{**}	0.10 (0.86) [0.213]	0.27 (2.80) ^{***} [0.035] ^{**}	0.26 (2.69) ^{***} [0.040] ^{**}	0.27 (2.83) ^{***} [0.035] ^{**}	0.27 (2.78) ^{***} [0.035] ^{**}
Abnormal CEO Salary & Bonus * Low Pay-for- performance Dummy		0.66 (3.06) ^{***} [0.027] ^{**}				
Entrenchment index			0.38 (2.01) ^{**} [0.028] ^{**}			
Square of (Entrenchment Index)			-0.10 (-1.88) [*] [0.053] [*]			
Board index				0.47 (2.39) ^{**} [0.050] ^{**}		
Square of (Board index)				-0.02 (-2.12) ^{**} [0.065] [*]		
Stock holdings by “vote- no” mutual funds					2.68 (1.99) ^{**} [0.046] ^{**}	

(Table VI continued)

Stock holdings by "vote-yes" mutual funds					-1.06 (-0.76) [0.293]	
Institutional holdings						0.62 (1.12) [0.224]
Herfindahl Index of Institutional Holdings						-1.11 (-0.44) [0.376]
Dummy for receiving a shareholder proposal prior to the Bill.	-0.58 (-1.25) [0.162]	-0.55 (-1.19) [0.172]	-0.54 (-1.18) [0.174]	-0.51 (-1.11) [0.187]	-0.60 (-1.30) [0.127]	-0.58 (-1.27) [0.133]
Beta	-0.17 (-0.91) [0.359]	-0.20 (-1.05) [0.341]	-0.17 (-0.85) [0.361]	-0.15 (-0.80) [0.361]	-0.22 (-1.15) [0.322]	-0.26 (-1.26) [0.288]
Log Assets	-0.02 (-0.32) [0.495]	-0.04 (-0.63) [0.432]	-0.01 (-0.09) [0.465]	-0.06 (-0.83) [0.384]	0.02 (0.30) [0.396]	0.00 (-0.05) [0.456]
Book-to-Market	-0.73 (-3.65) ^{***} [0.097] [*]	-0.73 (-3.62) ^{***} [0.097] [*]	-0.73 (-3.63) ^{***} [0.097] [*]	-0.73 (-3.65) ^{***} [0.097] [*]	-0.79 (-3.86) ^{***} [0.083] [*]	-0.74 (-3.55) ^{***} [0.102]
Leverage	0.17 (0.48) [0.405]	0.21 (0.62) [0.369]	0.15 (0.45) [0.411]	0.11 (0.33) [0.444]	0.14 (0.41) [0.428]	0.12 (0.31) [0.437]
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
N	1,269	1,269	1,269	1,269	1,269	1,090
OLS Adjusted R ²	0.126	0.133	0.129	0.131	0.129	0.141

Table VII

Do companies responsive to shareholder votes react differently to Say-on-Pay Bill?

Using data from Table V in Cai, Garner, and Walkling (2008), we identify 91 firms in our sample as responsive to shareholder votes on compensation committee. The directors serving on the compensation committee of these firms received more withhold votes than the median compensation committee and their CEO's abnormal compensation decreased in the following year. We also identify 40 firms as not responsive. The directors serving on the compensation committee of these firms received more withhold votes than the median compensation committee but their CEO's abnormal compensation did not decrease in the following year. In panel A, we report the portfolio CAR of the responsive and non-responsive firms. The estimation of the portfolio CAR and abnormal compensation are described in the Appendix. Percent positive is calculated as the number of stocks in a portfolio with positive abnormal returns, where the individual stock abnormal return is calculated in the same fashion as the portfolio abnormal return. In Panel B, we estimate for each firm the CAR as three times the average daily abnormal return since three are three days in the event window. The estimation of the daily abnormal return is described in the Appendix. 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. Statistical significance in Panel A is determined by the t-test for differences in means, and by the Wilcoxon test for differences in medians. In Panel B, OLS *t-statistics* 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 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.

<i>Panel A: Univariate tests</i>		Firms responsive to shareholder vote on comp committee (1)	Firms NOT responsive to shareholder vote on comp committee (2)	Difference (1) – (2)
	N	91	40	
CAR (%)	Mean	0.687	-0.393	1.080
	t-stat	1.87*	-0.70	1.98**
	% Positive	49.5	50	
Abnormal CEO compensation (\$million)				
Salary & Bonus	Mean	0.625	1.800	-1.175**
	Median	0.315	0.598	-0.283*
Equity-based	Mean	4.416	7.656	-3.240*
	Median	1.774	3.962	-2.188***
Total Comp	Mean	3.577	7.343	-3.766**
	Median	1.144	4.422	-3.278***

<i>Panel B: Multivariate regressions</i>		Dependent variable = CAR over April 19- April 23 2007 (OLS t-statistics) [Bootstrap p-value]
Independent variables and statistics		
Intercept		4.98 (1.22) [0.042]**
Dummy for responsive to shareholder vote on compensation committee		1.36 (2.03)** [0.023]**
Beta		-2.02 (-2.25)** [0.028]**
Log Assets		-0.26 (-1.03) [0.175]
Book-to-Market		0.28 (0.20) [0.404]
Leverage		-1.20 (-0.91) [0.216]
Industry Dummies	Yes	
N		131
Adjusted OLS R^2		0.299

Table VIII

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

We identify from ISS 59 (company specific) shareholder-sponsored proposals targeting 53 companies that request the board of directors to adopt an advisory shareholder vote on executive compensation during 2006-2007. Among the 53 firms, we are able to match 49 of them to our sample. Since only 6 firms receive shareholder say-on-pay proposals in 2006 and all of them receive the proposals again in 2007, we do not use a panel data sample over the two years. (Results are robust to excluding the 6 firms that also receive say on pay proposals in 2006.) Instead we use the 1,270 firms of our sample, and estimate what firm characteristics are associated with receiving a say-on-pay proposal. Thus, in the following logistic regressions there are 1,270 observations among which the dependent variable equals one in 49 cases and zero in 1,221 cases. 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.

Independent variables and statistics	Dependent variable = Say-on-pay proposal dummy			
	(1)	(2)	(3)	(4)
Intercept	-11.04 (-6.86)***	-10.04 (-6.00)***	-11.61 (-7.78)***	-11.39 (-7.80)***
Log assets	0.84 (6.44)***	0.82 (6.32)***	0.92 (7.89)***	0.89 (7.82)***
B/M	-0.87 (-2.67)***	-0.73 (-2.22)**	-1.02 (-3.21)***	-0.79 (-2.51)**
Industry adjusted ROA	0.04 (1.09)		0.05 (1.45)	
Industry adjusted prior year stock return		0.01 (2.41)**		0.01 (2.63)***
Abnormal CEO cash compensation	-0.14 (-0.99)		-0.12 (-0.82)	
Abnormal CEO equity compensation	0.02 (0.29)		0.02 (0.21)	
Abnormal CEO total compensation		0.26 (1.00)		0.22 (0.82)
Pay for performance (\$million)	-8.49 (-0.81)	-3.83 (-0.44)	-5.82 (-0.59)	-1.27 (-0.16)
Entrenchment index	-0.32 (-2.02)**			
Governance index		-0.13 (-1.83)*		
Outside director stock holdings	-20.34 (-0.91)	-21.40 (-0.94)		
Board size	-0.01 (-0.17)	-0.01 (-0.19)		

(Table VIII continued)

Percent of outside directors appointed by CEO	0.79 (1.54)	0.70 (1.38)		
Percent of busy outside directors	1.17 (1.55)	1.24 (1.63)		
<i>Dummy variables for in the 3rd quartile of:</i>				
Entrenchment index			-0.82 (-1.68) [*]	
Governance index				-0.53 (-1.17)
Outside director stock ownership			0.34 (0.85)	0.36 (0.91)
Board size			0.10 (0.27)	0.10 (0.25)
Percent of outside directors appointed by CEO			-0.13 (-0.33)	-0.15 (-0.39)
Percent of busy outside directors			-0.55 (-1.32)	-0.59 (-1.40)
“Vote-no” mutual fund holdings	1.10 (0.25)	-1.76 (-0.39)	1.00 (0.24)	-1.65 (-0.38)
“Vote-yes” mutual fund holdings	2.95 (0.87)	4.10 (1.19)	4.16 (1.24)	5.29 (1.57)
N (Dependent variable = 1)	49	49	49	49
N	1,270	1,270	1,270	1,270
R ²	0.352	0.357	0.338	0.343

Table IX

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

The sample of 49 firms receiving shareholder sponsored say-on-pay proposals is described in Table VIII. Among the 49 firms, 36 of them have the relevant proxy statements filed with SEC or mailed to shareholders by April 20, 2007. In Panels A and B, we examine the market reaction to the announcement of these shareholder proposals, where we define the announcement date as the earlier of the SEC filing date or the proxy mailing date. Thus the sample consists of all 49 firms. For the 6 firms receiving multiple proposals, we use the first proposal date. We compare in Panel C the market reaction of these 36 firms to the Say-on-Pay Bill to the rest of our sample. 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	N	Mean	t-stat	Median	% positive
CAR (%)	49	-0.71	-1.71*	-0.18	44.9%

Panel B: Multivariate regressions

Independent variable and statistics	Dependent variable = Announcement CAR of shareholder- sponsored say-on-pay proposals (%)	
	(1)	(2)
Intercept	-0.027 (-0.05)	0.413 (0.59)
Dummy for labor union proponent	-1.40 (-1.71)*	-1.80 (-2.06)**
Abnormal CEO cash compensation		0.41 (1.66)*
Dummy for proponent disclose share holdings		-0.04 (-0.04)
Dummy for proponent disclose share holdings *Proponent share holdings		-0.34 (-1.64)
N	49	49
Adjusted R ²	0.039	0.082

Panel C: Market reaction to the Say-on-Pay Bill

		Portfolio of Firms that received a say-on-pay shareholder proposal by 4/20/2007 (1)	Portfolio of Firms that did NOT receive a say- on-pay shareholder proposal by 4/20/2007 (2)	Difference (1) – (2)
	N	36	1234	
CAR (%)	Mean	-0.66	0.27	-0.94
	t-stat	-1.59	1.49	-2.22**

Table X

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

The sample of 49 firms receiving shareholder sponsored say-on-pay proposals is described in Table VIII. For the 6 firms receiving multiple proposals, we use the first proposal voting outcome. 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. T-statistics are reported in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% level, respectively.

<i>Panel A: Distribution of Votes for say-on-pay shareholder proposals</i>					
	N	Mean	Minimum	Median	Maximum
For / (For + Against) (%)	49	41.4	18.4	41.3	69.6
For / (For + Against + Abstain) (%)	49	38.9	17.6	38.9	66.6
For / Outstanding shares (%)	49	28.9	14.7	29.2	54.6

<i>Panel B: Market reaction to the voting outcome of say-on-pay shareholder proposals</i>					
	N	Mean	t-stat	Median	% positive
Voting day CAR (%)	49	0.80	2.30**	0.14	51.0%

<i>Panel C: Multivariate regressions</i>			
Independent variable and statistics	Dependent variable = Voting day CAR (%)		
	(1)	(2)	(3)
Intercept	5.61 (2.07)**	6.17 (2.22)**	6.20 (2.40)**
For / (For + Against)	-0.087 (-2.00)**		
For / (For + Against + Abstain)		-0.101 (-2.15)**	
For / Outstanding shares			-0.138 (-2.36)**
Defeat Dummy	-1.40 (-1.04)	-1.65 (-1.20)	-1.61 (-1.22)
Defeat Dummy * Abnormal CEO	-0.42	-0.42	-0.37
Cash compensation	(-2.04)**	(-2.03)**	(-1.84)*
N	49	49	49
Adjusted R ²	0.087	0.098	0.115

Table XI

Determinants of votes for compensation proposals

The sample includes 1,404 management-sponsored compensation proposals seeking shareholder approval at 1,010 shareholder meetings during 2003-2005. 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 2002-2005 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 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)
Intercept	81.70 (30.71) ***	81.97 (30.67) ***	81.95 (30.82) ***
Abnormal log CEO total compensation	-1.03 (-2.26) **		
Abnormal log CEO salary and bonus		0.05 (0.12)	
Abnormal log CEO equity-based compensation			-0.29 (-2.11) **
“Vote-no” fund holdings	-0.26 (-5.20) ***	-0.26 (-5.22) ***	-0.26 (-5.18) ***
GIM index	0.17 (1.08)	0.16 (1.01)	0.16 (1.01)
Busy board dummy	1.46 (1.39)	1.33 (1.27)	1.41 (1.35)
% of outside directors appointed by CEO	1.58 (1.26)	1.24 (0.99)	1.18 (0.95)
Board Size	0.36 (2.08) **	0.36 (2.08) **	0.37 (2.12) **
CEO stock holdings	0.10 (1.21)	0.14 (1.70) *	0.10 (1.25)
Outside director stock holdings	9.40 (0.88)	10.26 (0.96)	10.97 (1.03)
Intercept from Fama-French 4-factor regressions	-0.05 (-0.21)	-0.07 (-0.27)	-0.06 (-0.23)
Prior year EBITDA/Assets	-0.65 (-0.19)	-0.97 (-0.29)	-0.92 (-0.27)
N	1,010	1,010	1,010
Adjusted R ²	0.054	0.049	0.053