

The Regulation of Corporate Governance

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Abstract:

This paper investigates the market reaction to recent legislative and regulatory actions pertaining to corporate governance. The managerial power view of governance suggests that “excess pay,” the existing proxy process, and various governance provisions (e.g., staggered boards and CEO-chairman duality) are associated with managerial rent extraction. This perspective predicts that broad government actions that reduce “excess pay,” increase proxy access, and ban such governance provisions are value enhancing. In contrast, another view of governance suggests that observed governance choices are the result of value-maximizing contracts between shareholders and management. This perspective predicts that broad government actions that regulate such choices are value destroying. Consistent with the latter view, we find that the abnormal returns to recent events relating to corporate governance regulations are (i) on average negative, (ii) decreasing in CEO pay and the number of large blockholders, but (iii) increasing in the number of institutional investors with small ownership stakes.

JEL Classification: G1; G3; K2 ; L5;

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1. Introduction

Securities and Exchange Commission (SEC), State of Delaware, and various Senators and Congressmen have recently proposed substantial regulations that would limit executive pay, limit the firm's control of the proxy process (i.e. proxy access), and ban specific corporate governance provisions (e.g., staggered boards and CEO-chairman duality). Given the nature of these proposed changes, it is not surprising that organizations such as the U.S. Chamber of Commerce, Business Roundtable, and other similar organizations have reacted in a negative manner, whereas CalPERS, CalSTRS, and other activist shareholders have praised the proposals. Employing standard event study methodologies, this paper examines the stock market's reaction to the announcement of these and other recent actions pertaining to the regulation of corporate governance.¹

There is an ongoing debate in the literature on whether existing governance practices are characterized by rent extraction or shareholder wealth maximization. In an attempt to provide insight on this debate, a vast literature correlates measures of corporate governance with various measures of shareholder value.² However, given the endogenous nature of corporate governance, it is not surprising that many of the results linking governance and shareholder value are mixed.³ Because governance choices are endogenous decisions made by managers and shareholders, the value maximizing governance choices for one firm may be very different from the value maximizing governance choices of another firm. As a result, in equilibrium, the relation between governance choices and shareholder value will be ambiguous.

¹ Throughout the paper, we refer to executive pay, proxy access, and specific governance provisions as “governance choices” or “governance practices” and regulation relating to these practices as “governance regulation”.

² See among others Morck, Shleifer, and Vishny (1988), La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998), Gompers, Ishii, and Metrick (2003), Fich and Shivdasani (2006), Coles, Naveen, and Naveen (2008), and Bebchuk, Cohen, and Ferrell (2009).

³ See among others Bhagat and Jefferis (2005), Core, Guay and Rusticus (2006), Larcker, Richardson, and Tuna (2007), Bhagat, Bolton, and Romano (2008), and Johnson, Moorman, and Sorescu (2009).

Recent corporate governance regulations represent an exogenous shock to equilibrium governance practices. Thus, the market's reaction to recent corporate governance regulation provides a novel setting to examine the relation between governance and shareholder value that is less subject to the endogeneity, or "within equilibrium" critique, of existing research.⁴ If existing governance practices are, on average, characterized by rent extraction, we expect regulation of these practices to increase shareholder value (i.e. result in more efficient contracts). In contrast, if existing governance practices are, on average, value-maximizing, we expect regulation of these practices to decrease shareholder value (i.e. result in less efficient contracts).

As discussed by Schwert (1981), Binder (1985), and others, the stock market's reaction to a proposed regulation is a function of (i) the change in the probability that the regulation will be adopted and (ii) the dollar value of the expected impact of the regulation on shareholder wealth. Accordingly, we expect that the reaction to corporate governance regulations will be most pronounced for those firms affected by the regulation. In particular, we expect those firms whose existing governance practices are inconsistent with the regulation (e.g., firms with highly paid executives and firms with staggered boards) to have a more pronounced reaction than those firms whose governance practices are consistent with regulation. Thus, examining the stock market's reaction to events relating to corporate governance regulation can provide insight on the relation between governance practices and shareholder value.

⁴ So long as the regulatory shift is not the result of actions on the part of every individual firm, the regulatory shift can be treated as largely exogenous. For example, many argue that the Enron scandal was the impetus for new regulation. While the resulting regulation might be considered endogenous to Enron, the Enron scandal and ensuing regulations were beyond the control of most firms. Thus, the resulting regulation is largely exogenous. This type of design has been used to study the valuation consequences associated with the Sarbanes Oxley Act (Zhang, 2007), Williams Act (Schipper, Thompson, and Weil, 1987), 1934 enactment of the SEC (Benston, 1973), and other similar regulatory or legislative actions.

We examine the market reaction to eighteen key events related to economy-wide corporate governance regulation from March 2007 to June 2009.⁵ We group each of the eighteen events into two non-mutually exclusive categories: *Executive Pay Events* and *Proxy Access Events*. Eight of these events are *Executive Pay Events*, and relate to regulation that would explicitly limit executive compensation and/or require annual “say on pay” votes. Interestingly, all eight of these events are related to legislative actions and none of these events are related to the actions of regulators (e.g., the SEC). Thirteen events are *Proxy Access Events*, and relate to regulation that would give increased power to shareholders (or shareholder coalitions), with ownership of 1% or more, to nominate directors in contested elections and influence the proxy process. Five of these thirteen events are related to decreases in the likelihood of proxy access regulation. Additionally, three events are related to both executive pay and proxy access regulation, and these events also relate to legislation that bans specific governance practices such as staggered boards and CEO-chairman duality.

Our results are as follows:

Executive Pay Events. On average, we find an insignificant reaction to events relating to the regulation of executive compensation. However, we find a significant negative relation between abnormal returns on the days of these events and CEO compensation. The higher the CEO’s compensation relative to industry peers, the more negative the reaction. These results are consistent with a value-maximizing view of current pay practices, and are consistent with critics’ arguments that regulating executive pay will result in less efficient contracts and negatively affect shareholder wealth.

⁵ We exclude events and regulations specific to financial firms, related to the Troubled Asset Relief Program (TARP), and related to federal bailout monies. See Section 3 for more details.

Proxy Access Events. On average, we find that the market reacts negatively to proxy access regulation. Examining cross-sectional variation in the market's reaction, we find abnormal returns are increasingly negative for firms with a greater number of number of institutions holding more than 1% of shares outstanding. This is consistent with critics' claims that giving shareholders who hold 1% or more the ability to nominate their own slate of directors and/or list proxy proposals increases the power of large blockholders who may not act in the interest of other shareholders (e.g., certain activists, bidders with toeholds, or corporate raiders). Interestingly, we find the market reaction is *less* negative for firms with a greater number of institutions holding less than 1% of shares outstanding. This is consistent with the number of small institutional shareholders measuring the cost of forming a shareholder coalition. As the costs to forming a coalition increase, the less likely small institutional shareholders will attain the 1% ownership threshold necessary to attain proxy access, and the less the negative reaction to proxy access regulation. It is also consistent with small institutional investors being more likely to promote agendas consistent with shareholder value maximization than large institutional investors.

Specific Governance Practices. Prior literature argues that staggered boards and CEO-chairman duality allow managers to extract rents from shareholders (e.g., Bebchuk and Cohen, 2005). If this is the case, we expect firms with staggered boards and firms where the CEO is also chairman of the board to respond positively to regulation that would either (i) ban such practices or (ii) give shareholders a greater say in the proxy process. In contrast, we find no evidence of a relation between the market's reaction to these events and the use of staggered boards or CEO-chairman duality. However, we do find that the market's reaction to these events is related to CEO pay and institutional ownership. One explanation for these results is that the market fully

anticipated the portion of the regulation banning staggered boards and CEO-chairman duality but not the portion relating to CEO pay and proxy access. An alternative explanation is that staggered boards and CEO-chairman duality do not affect shareholder value incremental to CEO pay and proxy access. The latter is consistent with prior research which argues that the overall governance at the firm, and not specific governance provisions per se, is related to value.

The remainder of the paper proceeds as follows. Section 2 discusses the related prior literature and develops our hypotheses. Section 3 identifies and describes the regulatory and legislative events examined in this study. Section 4 discusses the sample, measurement of key variables, and our research design. Section 5 presents results. Section 6 discusses our sensitivity tests, and Section 7 concludes.

2. Literature Review and Hypothesis Development

In this section we develop our hypotheses in the context of prior research relating to executive compensation, proxy access, and staggered boards and CEO-chairman duality.

2.1 Executive Pay

A considerable empirical literature examines the determinants of CEO compensation and the impact on CEO compensation on shareholder value (see Murphy (1999) for a review). Some of these studies suggest that existing compensation practices amount to rent extraction. For example, Core, Holthausen, and Larcker (1999) find that the portion of CEO pay unrelated to economic determinants is related to weak corporate governance and inferior future operating and stock performance. Congress, activist investors, and the general public take a similar view, and have expressed considerable outrage regarding CEO compensation packages. One possible

reason for this outrage is that U.S. shareholders do not have a direct vote on executive pay, and although a few companies have voluntarily adopted non-binding “say on pay” measures, the vast majority has not.⁶

Ertimur, Ferri, and Muslu (2009) examine the impact of non-binding votes on CEO pay. They find the voluntary adoption of the non-binding proposals by the firm is very low unless the proposals received the majority of shareholder votes. More importantly, they find non-binding proposals are associated with a \$2.3 million reduction in CEO pay, but only when proxy proposals are initiated by institutional investors. Cai and Walkling (2009) examine shareholder returns to the passage of the *Say on Pay Bill of 2007* by the House (April 20, 2007). They find some evidence that share prices for firms with high excess compensation reacted in a positive manner to the regulatory announcement. If shareholders view existing pay practices as costly, we expect the market reaction to regulation limiting executive pay and requiring mandatory “say on pay” votes (i.e. *Executive Pay Events*) will be positive and increasing in the level of CEO compensation. Moreover, under this scenario, we expect the market reaction to regulation giving shareholders increased access to the proxy process (i.e. *Proxy Access Events*) will also be increasing in the level of CEO compensation.

Another view of existing pay practices is that they are value-maximizing for shareholders (see Core, Guay, and Larcker, 2003 for a review). It is possible that the board of directors is effectively monitoring and compensating managers in a way that maximizes shareholder wealth. In this case, regulating executive compensation will lead to an efficiency loss. Similarly, increasing shareholder control of the proxy process will either: (i) not affect compensation,

⁶ This contrasts with the U.K., which passed legislation in 2002 that mandated annual non-binding votes on executive compensation. U.S. companies voluntarily adopting non-binding say on pay votes include: Aflac, H&R Block, Jackson Hewitt, Littlefield, RiskMetrics Group, and Zales in 2008; and Blockbuster, Hewlett-Packard, Ingersoll Rand, Intel, MBIA, Motorola, Par Pharmaceutical, Tech Data, and Verizon in 2009.

because investors recognize that existing contractual arrangements are value-maximizing or (ii) result in less efficient compensation, because self-interested large blockholders may use their increased proxy power to influence firm policies in a manner inconsistent with long-term value maximization. Thus, if shareholders view existing pay practices as value maximizing, we expect the market reaction to executive pay regulation will be decreasing in the level of CEO compensation, and the market reaction to regulation giving shareholders increased control over the proxy process (i.e. *Proxy Access Events*) will be unrelated or decreasing in the level of CEO compensation.

2.2 *Proxy Access*

If shareholders believe that a firm is managed in an inappropriate manner, they can sell their shares (“vote with their feet”), voice their concerns (“voting no” or withhold votes), or engage in a costly proxy contest to replace the board of directors. The term proxy access (popularly labeled as “shareholder democracy”) in the recent regulatory debate is related to the idea that shareholders may require the corporation to include in the proxy statement a director (or slate of directors) nominated by shareholders to run against incumbent board members. There are very few examples of firms voluntarily adopting this type of proxy access.⁷

Bebchuk (2005) argues that shareholders should be involved in selecting corporate governance and that proxy proposals are an important mechanism for disciplining managers.

The key assumption for this notion to be reasonable is that shareholders are knowledgeable about

⁷ In 2007, North Dakota passed a law that grants proxy access for shareholders of at least 5% of the company’s stock for at least two years. One example of a voluntary adopter of proxy access is RiskMetrics Group, Inc. This company has bylaws that, in addition to having certain procedural requirements, limit the proxy access to: (i) one candidate per nominator per meeting and (ii) nominators who have owned 4 percent or more of the company’s stock for at least two years. In addition, any nominator whose candidate did not receive at least 25 percent of the votes cast in the corresponding shareholders meeting may not nominate further candidates for four years from the date of the shareholders meeting in question.

the correct governance choices, and that the agenda of the large shareholders is consistent with long-term value maximization. Under this scenario, giving shareholders greater proxy access should produce an increase in shareholder value because governance choices made by self-interested managers will be removed. If existing governance practices are characterized by rent extraction and if large blockholders are expected to act in the interests of shareholder wealth maximization, regulation that gives shareholders (shareholder coalitions) with ownership stakes of 1% or more increased proxy access (i.e. *Proxy Access Events*) should result in more effective monitoring of management and the removal of any existing governance practices that are harmful to shareholders. Under this view of proxy access regulation, we expect the market's reaction to proxy access regulation to be positive, increasing in the number of institutional investors regardless of ownership stake, increasing in CEO compensation, and increasing in governance provisions commonly thought to be costly to shareholders (e.g., staggered boards and CEO-chairman duality).

However, there is considerable debate about the merits of increasing proxy access and the validity of the above assumptions. For example, SEC Commissioner Paredes (2009) notes that “As a practical matter, public company shareholders are not well-positioned to run the enterprises in which they invest.” If this notion is correct, shareholders may have the right intention, but not the knowledge about the firm that is critical for selecting appropriate board members or governance choices. Proxy access also creates the risk that shareholders will use the process to promote private agendas that impose costs on the corporation and other shareholders. Thus, if shareholders perceive that proxy access will create problems that cause the board to become ineffective, will transfer wealth from shareholders to special interests, and/or will give undue influence to blockholders or shareholder coalitions who may not act in the interest of

value creation, then we expect the market's reaction to proxy access regulation to be negative and decreasing in the number of large blockholders.

2.3 *Specific Governance Provisions*

Prior research has examined several individual governance provisions. Two of the most actively researched provisions are staggered boards and CEO-chairman duality. Additionally, two of the proposed regulations that we study (the *Shareholder Bill of Rights Act* and *Shareholder Empowerment Act*) contain provisions that would ban, among others, staggered boards and CEO-chairman duality.

The important feature of a staggered board is that this board structure makes hostile takeover attempts more difficult. Bebchuk, Coates, and Subramanian (2002) examine merger activity between 1996 and 2000 and find no instances of a corporate raider gaining control of a staggered board through a proxy contest. However, they also find that the staggered board structure does not increase management's bargaining power, as companies with staggered boards that ultimately accept a takeover bid receive a similar premium (54.4 percent) to those without staggered boards (49.6 percent). Although most of the discussion regarding staggered boards focuses on managerial entrenchment, it is conceivable that staggered boards enable executives to improve shareholder value.⁸ For example, a firm may have developed a valuable product, but cannot credibly reveal this information to the market because of proprietary costs (i.e., competitors can quickly mimic the product before gaining patent protection). If this firm happens to be the object of a takeover proposal, it will be in shareholder interests to provide managers with a device to defeat the change in control.

⁸ Interestingly, Jarrell and Poulsen (1987) find that institutional investors are less hostile to staggered boards relative to other takeover defenses.

Bebchuk and Cohen (2005) and Faleye (2007) correlate staggered boards with Tobin's Q and find a negative relation. Faleye (2007) also finds that the shareholder approval of a staggered board (de-staggering) produces an excess return of about -0.70% (1.00%) in the period surrounding the announcement and concludes that staggered boards "insulate top management from market discipline" (p. 528).⁹ Thus, if shareholders view staggered boards as value decreasing, then we expect the market's reaction to regulation that bans staggered boards or provides shareholders with greater proxy access will be more positive for firms with staggered boards.

The second individual governance provision is CEO-chairman duality. The chairman of the board presides over board meetings, sets the agenda for each session, and significantly influences the content of the meetings. The chairman is also responsible for determining which individuals serve on committees and for ensuring that all resolutions and policies adopted by the board are implemented. In contrast, the CEO is responsible for making investment, financing, and operating decisions for the corporation. Obviously, when the chairman and CEO roles are held by the same person (CEO-chairman duality), a significant amount of oversight and influence is consolidated in the hands of senior management. This outcome can occur either as a result of entrenchment (i.e. rent seeking behavior) or it may reflect the fact that duality results in more efficient decision making and enables the firm to execute strategic decisions in a timelier manner.

Consistent with the rent-seeking motivation, corporate governance rating agencies use duality as an input in their ratings models, and several activist shareholders blame duality as a factor contributing to long-term underperformance at target companies (e.g., Daines, Gow, and

⁹ Based on Rule 14a-8, shareholders can use non-binding resolutions to motivate the board of directors to de-stagger. However, Bebchuk (2005) found that few of the non-binding resolutions that were passed were actually put into place by the company.

Larcker, 2009).¹⁰ Rechner and Dalton (1991) find that operating performance of duality firms is significantly lower than that of non-duality firms. Dey, Engel, and Liu (2009), however, find no differences in operating or stock market performance between duality and non-duality firms.¹¹ If shareholders view CEO-chairman duality as value decreasing, then we expect the market's reaction to regulation that either bans CEO-chairman duality or provides shareholders with greater proxy access will be more positive for firms where the CEO is also chairman.

3. Legislative and Regulatory Changes Focused on Corporate Governance

We compile an initial list of recent events related to corporate governance regulation by searching the Library of Congress and the SEC for all files with various permutations of the words “executive compensation”, “executive pay”, and “corporate governance” over the time period from 2007 to 2009. Results were then supplemented with similar searches on Lexis-Nexis and Factiva and complemented with reports from the CCH Financial Crisis News Center. We narrow the list of potential events by eliminating (i) all events relating specifically to the financial industry (e.g., *Cap Executive Pay Act of 2009*), (ii) all events related to TARP or other federal bailout monies (e.g., *TARP Reform and Accountability Act of 2009*), (iii) all regulations dealing exclusively with taxability of compensation (e.g., *Ending Corporate Favors for Stock Options Act of 2007*), and (iv) all events not directly related to specific legislative bills or potential regulatory action (e.g., eliminating commentary in the popular press).

¹⁰ One of the key recommendations of the influential Cadbury Committee (1992) was the separation of the chairman and chief executive officer titles (non-duality), and the majority of companies listed on the London Stock Exchange complied with this standard.

¹¹ Grinstein and Valles (2008) examine the decision to move from a duality to a non-duality board structure. They find that for the majority cases, the split of the chairman and CEO roles was driven by succession issues (i.e., the outgoing chairman/CEO retained the title of chairman while his or her successor as CEO gained sufficient experience before assuming the chairmanship as well). For the rest, the outgoing chairman/CEO stepped down from both roles simultaneously, and the chairmanship was assumed by an independent director. At these companies, the appointment of an independent director was more likely to follow a period of poor operating performance.

For each regulation considered, we include both the date it is formally introduced and the day in which it first appears in the news.¹² In all but one case, Senator Schumer’s *Shareholder Right’s Bill of 2009*, these events are the same day. Additionally, for SEC deliberations, we include the day in which it first appears in the news that the SEC is considering new regulations, the day in which the proposed amendments are formalized, and the day on which the final ruling is made. This results in a series of eighteen key regulatory events that relate to a combination of legislative bills and SEC regulations on the topic of economy-wide regulation of executive pay (eight events), proxy access (thirteen events), and specific governance provisions (three events). The events are detailed in Table 1.

3.1 *Executive Pay*

Beginning in early 2007, a variety of legislative events concerning executive pay began to appear. On March 1, 2007, HR 1257 (the *Shareholder Vote on Executive Compensation Act*) was introduced into the House of Representatives by Congressman Frank (Event #1). This bill required an annual non-binding shareholder vote on compensation paid to executives.¹³ It was ultimately passed by the House of Representatives on April 20, 2007 and introduced into the Senate by then Senator Obama on the same day (Event #2).¹⁴ The committee on Oversight and Governmental Reform, chaired by Congressman Waxman, held hearings on executive compensation on March 7, 2007 (Event #3). The focus on these hearings was on the “dramatically rising” level of CEO compensation and claim that CEO pay has “all upside and no

¹² If an event occurs on a non-trading day (e.g., a Saturday *Wall Street Journal* article on forthcoming legislation), we use returns for the next trading day.

¹³ <http://thomas.loc.gov/cgi-bin/query/z?c110:H.R.1257.RFS:>

¹⁴ <http://thomas.loc.gov/cgi-bin/query/z?c110:S.1181.IS:>

downside.”¹⁵ Since Congressman Waxman is a powerful and vocal critical of CEO compensation, this event strongly suggested potential Congressional actions on executive pay and foreshadowed the passing of the *Shareholder Vote on Executive Compensation Act* in the House shortly thereafter. On April 15, 2008, Senator Reid, on behalf of then Senator Clinton introduced the *Corporate Executive Compensation Accountability and Transparency Act* into the Senate (Event #4).¹⁶ This bill required an annual non-binding shareholder vote on compensation paid to executives as well as increased compensation disclosure and independence of compensation consultants. On May 7, 2009, Senator Durbin introduced both the *Excessive Pay Capped Deduction Act of 2009* and the *Excessive Pay Shareholder Approval Act of 2009* (Event #5).¹⁷ The former denies a tax deduction for total compensation to any employee that exceeds 100 times the average compensation paid to all other employees, and the latter limits total compensation to 100 times the average compensation for all employees unless at least 60 percent of the shareholders have voted to approve such compensation.

Each of these five events is primarily focused on executive compensation and is associated with an increase in the probability of executive compensation regulation. Three additional events also contain provisions regarding regulation of executive pay, but as part of larger legislative initiatives to regulate governance. On April 25, 2009 the *Wall Street Journal* (Dvorak and Scannell, 2009) provided details on a forthcoming bill that Senator Schumer intended to introduce in the Senate (Event #6). Senator Schumer subsequently introduced the *Shareholder Bill of Rights Act of 2009* into the U.S. Senate on May 19, 2009 (Event #7).¹⁸ This bill required that all public companies (i) hold an annual advisory vote on executive

¹⁵ <http://oversight.house.gov/story.asp?ID=1762>

¹⁶ <http://thomas.loc.gov/cgi-bin/query/z?c110:S.2866.IS:>

¹⁷ <http://thomas.loc.gov/cgi-bin/query/z?c111:S.1007.RCS:> and <http://thomas.loc.gov/cgi-bin/query/z?c111:S.1006.IS:>

¹⁸ http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:s1074is.txt.pdf

compensation, (ii) provide shareholders with an opportunity to vote on director candidates nominated by shareholders holding 1% or more, (iii) have a board chairman that is independent (i.e. ban CEO-chairman duality), (iv) elect all board members annually (i.e. ban staggered boards), (v) require a majority (plurality) vote for directors in uncontested (contested) elections, and (vi) establish a “risk committee” composed entirely of independent directors. Finally, Congressman Peters introduced the *Shareholder Empowerment Act of 2009* into the U.S. House of Representatives on June 12, 2009 (Event #8). This bill mandated firms (i) hold an annual advisory vote on executive compensation, (ii) provide shareholders with an opportunity to vote on director candidates nominated by shareholders holding 1% or more, (iii) have a board chairman that is independent (i.e. bans CEO-chairman duality), (iv) require a majority (plurality) vote for directors in uncontested (contested) elections, (v) use independent compensation consultants, (vi) develop and disclose clawback provisions, and (vii) improve disclosure of performance targets.¹⁹

3.2 *Proxy Access*

During 2007, there were four primary events related to proxy access or amendments to Rule 14a-8(i)(8) which relates to the nomination and election of members to the board of directors. The SEC officially announced it was considering amendments to Rule 14a8 and announced a roundtable discussion regarding proxy access on April 24, 2007 (Event #9).²⁰ SEC Chairman Cox indicated that "This roundtable will explore the relationship between the federal proxy rules and state corporation law, and pose questions to the participants about whether this relationship can be improved." On July 27, 2007, the Commission published for comment the

¹⁹ <http://www.opencongress.org/bill/111-h2861/text>

²⁰ <http://www.sec.gov/news/press/2007/2007-71.htm>

proposed amendment to Rule 14a-8(i)(8) (Event #10).²¹ This document favored revisions to existing laws that would provide shareholders with an opportunity to place a proposal in a company's proxy materials for a vote at an annual or special meeting of shareholders. These three events increased the probability of proxy access. However, on November 28, 2007 (Event #11) and December 6, 2007 (Events #12) the SEC published final rulings on Rule 14a-8 and Rule 14a-8(i)(8) that effectively provided a clearer interpretation of existing rules that codified but did not alter the status quo of proxy access regulation.²² As the final ruling reinforced the status quo, these latter two events decreased the probability of proxy access regulations.²³

After Democratic victories in both the legislative and executive branches of government, proxy access (and other governance issues) became a central topic for regulatory and legislative reform. On March 10, 2009 (Event #13), in what is widely regarded as an attempt to pre-empt federal law, a bill was introduced into the Delaware House of Representatives to amend Title 8 of the Delaware code to allow corporations to *voluntarily* adopt bylaws permitting shareholder proxy access.²⁴ This bill was passed by the House of Representatives on March 18, 2009 (Event #14) and the Senate on April 8, 2009 (Event #15). Interestingly, proxy access was already voluntarily prior to the Delaware law. In this regard, the Delaware amendment merely codified existing case law. This action by Delaware appears to be an attempt to shape proxy access regulation at the federal level (e.g., Brauer and Nathan, 2009). For example, in a recent comment letter to the SEC regarding federal proxy access regulation, the Delaware State Bar Association explicitly references "recent changes" to Delaware law as a reason why federal

²¹ <http://www.sec.gov/rules/proposed/2007/34-56161.pdf>

²² <http://www.sec.gov/rules/final/2007/34-56914.pdf>

²³ It may be appropriate to slightly qualify this statement because SEC Chairman Christopher Cox stated that " ... I believe we can move forward and re-open this discussion in 2008 to consider how to strengthen the proxy rules to better vindicate the fundamental state law rights of shareholders to elect directors."
<http://www.sec.gov/news/press/2007/2007-246.htm>

²⁴ <http://legis.delaware.gov/LIS/lis145.nsf/vwLegislation/HB+19?Opendocument>

regulation of proxy access should not move forward.²⁵ Historically, the federal government has allowed the states to develop statutes controlling corporate governance. If a state such as Delaware (where a majority of publicly traded companies are incorporated) develops reasonable corporate governance statutes, the cost to the federal government of developing similar or stronger statutes (i.e. laws that would supersede state law) is higher. Thus, action taken by Delaware on a previously ambiguous statute may pre-empt or halt federal action on the same statute.²⁶ In this case, Delaware's action to codify the status quo appears to have been an attempt to pre-empt forthcoming federal laws that would make proxy access *mandatory*. Thus, we consider the three Delaware events as decreasing the probability of proxy access regulation.

On April 6, 2009, in a speech at the Council of Institutional Investors, *Wall Street Journal - MarketWatch* (Orol, 2009) reported that, SEC Chairwoman Mary Schapiro stated that the SEC intended to re-consider proxy access in the coming months (Event #16). Shortly thereafter, on May 20, 2009 the SEC voted to propose a comprehensive series of amendments to allow shareholders to nominate directors for election provided the shareholder(s) hold, at minimum, 1% ownership (Event #17).²⁷ On June 10, 2009, the SEC published a detailed draft of the proposed change (Event #18).²⁸ The SEC proposals on proxy access are similar to the legislative proposals of Senators Schumer and Peters, and would make proxy access *mandatory*, superseding Delaware's "voluntary law."

4. Empirical Tests

4.1 Sample Construction

²⁵ <http://www.sec.gov/comments/s7-10-09/s71009-65.pdf>

²⁶ Roe (2003) provides a detailed discussion of the complicated dynamics between Delaware State statutes and the response of the Federal Government.

²⁷ <http://www.sec.gov/news/press/2009/2009-116.htm>

²⁸ <http://www.sec.gov/rules/proposed/2009/33-9046.pdf>

Our tests require data on anti-takeover provisions, board structure, executive compensation, institutional ownership, daily stock returns, firm size and the book-to-market ratio. Our primary sample consists of 37,167 firm-days pooled over eighteen different event days and covering 2,618 individual firms. The sample is constructed as the intersection of four different data files.

FactSet. We collect data on anti-takeover provisions from FactSet Research System, Inc. The FactSet data file covers U.S. incorporated companies that are included in the major indices (e.g., Fortune 500, S&P 1500, etc.), that amended their poison pill since 2001, and that completed an initial public offering after 1999. It contains anti-takeover provisions for 4,715 firms from 2006 through 2008.

Equilar. We collect data on board structure, specifically CEO-chairman duality, and CEO compensation, from Equilar Inc. The Equilar file contains detailed information about the board of directors and executive compensation for 6,121 firms from 2006 through 2008.²⁹

Thomson. We collect data on institutional ownership from the Thomson-Reuters database of 13-F filings, otherwise known as CDA/Spectrum. The Spectrum data file contains information on quarterly institutional holdings for all institutional investors with \$100 million or more under management.

CRSP/Compustat. We collect data on daily stock returns between March 2007 and June 2009 from the CRSP Quarterly Update daily stock file. We exclude financial firms, (SIC codes between 6000 and 6999) because these firms are subject to additional executive pay and governance regulations related to the Troubled Assets Recovery Plan (TARP), and these bank-

²⁹ While the FactSet file covers a larger cross-section of firms than the commonly used IRRC dataset, it covers only a limited time period (using IRRC data reduces our sample by approximately 50%). Similarly, while the Equilar file covers a larger cross-section of firms than the ExecuComp dataset, which covers only the S&P 1500, it too covers only a limited time period. Since we are interested in generalizing our findings to the majority of publicly traded firms and consider only recent events, a limited time-series is not an issue for our study.

specific regulations often subsume the economy-wide regulations proposed in the events we study (e.g., limits to executive pay). Additionally, we require book value of equity (data item CEQQ) measured as of the end of the prior quarter from Compustat, and market value as of the end of the prior quarter from CRSP.

4.2 *Variable Measurement and Descriptive Statistics*

The events we examine relate to the regulation of executive compensation, the regulation of proxy access, and ban staggered boards and CEO-chairman duality. Accordingly, we conjecture that the market's reaction to these events varies cross-sectionally with the amount of "excess" CEO pay, institutional ownership, whether the firm has a staggered board, and whether the CEO is also chairman of the board. Testing these predictions requires measuring these constructs at the daily level.

Excess Pay. Several of the bills that we examine define "excess" CEO pay as the difference between the CEO's pay and 100 times the average pay of all employees at the firm (e.g., Excessive Pay Shareholder Approval Act of 2009). While data on the average pay of all employees at the firm is not readily available, the average pay of the firm's employees likely varies by industry (e.g., salaries in consumer sales versus research intensive industries) and year (e.g., bonuses in boom years versus recessions). Thus, we compute "excess" CEO pay, *ExcessComp*, as the total annual pay for the CEO measured in millions, less the median industry-year pay for all firms in the same two-digit SIC code. Since CEO compensation data are only available annually, each day *ExcessComp* is measured as of the prior year.³⁰

³⁰ Similar to prior research, total compensation is computed as the sum of salary, annual bonus, expected value of stock options granted (using FAS123R parameters used by the firm), expected value of long-term performance plan grants, expected value of restricted stock grants, and other compensation.

Institutional Ownership. Several of the regulations that we examine relate to increased shareholder access to the proxy process. Many of these regulations specify a minimum fractional ownership at which shareholders can nominate directors and have such directors included in proxy elections. For example, the amendments to Rule 14a-11 voted on by the SEC on May 20, 2009 specify a 1% minimum ownership for shareholders to nominate directors and have such directors included in the proxy elections. In addition, the amendment allows shareholders to form a coalition and pool their ownership interests to meet the 1% threshold.

We compute two measures of ownership. The first measure, *LargeInstit*, is the number of institutions with 1% or more ownership. Under Rule 14a-11, each of these blockholders would have the right to nominate directors to run against the existing board in the proxy elections. The second measure, *SmallInstit*, is the number of institutions holding less than 1% of shares outstanding. We include *SmallInstit* in our tests because these institutions hold a significant number of shares and are likely to be familiar enough with each other to form a coalition in order to exceed the 1% criterion. Since ownership data are updated quarterly, each day *LargeInstit* and *SmallInstit* are measured as of the end of the prior quarter.

Board Structure. Several of the events that we examine seek to ban specific board structures. For example, the *Shareholder Bill of Rights Act* and the *Shareholder Empowerment Act* would ban staggered boards and CEO-chairman duality. We measure CEO-chairman duality using an indicator variable, *IsChair*, that takes the value one if the CEO (or any other insider) is chairman of the board and zero otherwise.³¹ We measure staggered board using an indicator variable, *Staggered*, that takes the value one if the firm has a staggered board and zero otherwise. Since

³¹ Strictly speaking, as discussed in Section 3, the Shareholder Bill of Rights Act of 2009 prohibits all insiders, including the CEO, from serving as chairman.

data on these governance provisions are only available annually, each day *IsChair* and *Staggered* are measured as of the prior year.

Table 2 presents descriptive statistics for our sample. Table 2 shows that our sample has 2,618 firms and 37,167 firm-days compared to 4,963 non-financial firms and 75,478 firm-days with comparable data on CRSP/Compustat over our eighteen events. Panel A reports the industry distribution of firms in our sample relative to the industry distribution of non-financial firms on CRSP/Compustat. Panel A shows that our sample spans many sectors of the economy and has an industry distribution that is very similar to CRSP/Compustat. Panel B reports descriptive statistics for various firm characteristics across all firm-days in our sample. Panel B shows that mean (median) market capitalization for our sample is \$4.41 (\$0.65) billion, which is larger than the \$2.88 (\$0.32) billion for the CRSP/Compustat sample. This suggests our sample captures 80.74% of the market capitalization of all non-financial firms on the CRSP/Compustat file with data over the sample period.³²

Panel C reports descriptive statistics for the various governance variables for our sample. Panel C shows that mean (median) industry-year adjusted total pay is \$2.55 (\$0.55) million. The mean (median) number of institutions holding one percent or more is 16.62 (17.00), relative to 162.83 (104) institutions holding less than one percent. This suggests institutional ownership is not concentrated among large blockholders, but that on average there are a large number of small institutional investors. Additionally, Panel C reports that 53% of observations in our sample pertain to firms with staggered boards, and 64% pertain to firms where the CEO is also chairman of the board.

³² For an estimate of the percent of market capitalization relative to the CRSP/Compustat sample, we multiply the number of firms in our sample times the average market value and then scale by the number of firms in the CRSP/Compustat sample multiplied by the average market value of that sample.

4.3 *Research Design*

4.3.1 *Cross-Sectional Analysis*

Under the rent extraction (value-maximizing) view of current pay and governance practices, we expect regulations that apply across the board limits on executive pay, and limit the firm's control of the proxy process, to result in more (less) efficient contracts, and thus increase (decrease) shareholder wealth. Ultimately, however, whether the market perceives regulation designed to limit executive pay and limit the firm's control over the proxy process as value increasing or value decreasing is an empirical question. Regardless, the answer can inform us as to whether existing pay practices and proxy access is consistent or inconsistent with shareholder value maximization.

We first examine how investors respond to each of the regulatory and legislative events by examining average abnormal returns on the day of the event. For each event we compute abnormal returns relative to the CRSP value-weighted market index and tabulate average abnormal returns on the day of the event.³³ Positive (negative) abnormal returns on the day of the event suggest investors view the regulatory or legislative action as value increasing (decreasing). As with all event studies, these abnormal return tests are joint tests that (i) the market revised its priors about the probability of regulation (i.e. event was not fully anticipated) and (ii) the regulation in question, on average, affects shareholder wealth. To the extent that either of these conditions is not met, we expect to observe zero average abnormal returns.

We next test our predictions regarding cross-sectional variation in the market's reaction to the legislative and regulatory events. In particular we examine whether the market's reaction to each event is associated with the firm's existing pay practices, institutional ownership, and

³³ Throughout our analysis all returns exclude dividends and distributions. This is done to ensure that our results are attributable to the events in question rather than to other corporate events occurring at the firm. All inferences are unchanged if we include such items.

board structure. We test our predictions by estimating the following regression on the day of each event:

$$AbRet_i = \delta_0 + \delta_1 ExcessPay_i + \delta_2 LargeInstit_i + \delta_3 SmallInstit_i + \delta_4 Staggered_i + \delta_5 IsChair_i + \theta Controls + \varepsilon_i \quad (1)$$

where *AbRet* is the abnormal return for the firm *i* on the day of the event, *ExcessPay*, *LargeInstit*, *SmallInstit*, *Staggered* and *IsChair* are as previously defined, and *Controls* is a vector of control variables including *Size* and *BM*, where *Size* is the natural log of market value measured at the end of the prior quarter and *BM* is the ratio of book value to market value measured at the end of the prior quarter.³⁴

If existing pay and governance practices are characterized by rent extraction, we expect the market reaction to regulatory and legislative events that limit executive pay and give greater influence to shareholders who hold 1% or more to be increasing in the amount “excess” pay and increasing in the number of large blockholders. If existing pay and governance practices are value-maximizing, then we expect the market reaction to regulatory and legislative events that would limit executive pay and give greater influence to shareholders who hold 1% or more to be decreasing in the amount “excess” pay and decreasing in the number of with more than 1% ownership. Similarly, if CEO-chairman duality and staggered boards are associated with rent extraction then the market’s reaction to regulation that bans these provisions, or gives greater influence to large shareholders, should be higher for firms that have such provisions in place.

4.3.2 Pooled Analysis

Our initial tests examine the market reaction to each event and whether the reaction to each event varies cross-sectionally with several governance variables. While these tests provide

³⁴ We control for outliers by deleting observations with studentized residuals greater than three in absolute value.

insight on the shareholder wealth effects of individual legislative or regulatory events, we examine next the average effect of legislative and regulatory action pooling across the various events. We examine the average affect of events relating to executive pay (*Executive Pay Events*: events one through eight), events relating to proxy access (*Proxy Access Events*: events six through eighteen), events pertaining to actions taken only by the legislature (*Legislative Events*: events one through eight and thirteen through fifteen), and events pertaining to actions taken only by regulators (*Regulatory Events*: events nine through twelve and sixteen through eighteen). Because actions taken by regulatory bodies such as the SEC are not subject to direct legislative or executive vote, they are implementable in a more timely fashion, and are likely to be taken more seriously by the market (i.e. increased probability of action). Thus, testing the market's reaction separately for legislative and regulatory actions allows us to examine which actions the market views as being more highly associated with regulatory shifts. We compute the average effect for each group of events by averaging the coefficients from the respective event-specific regressions using the standard Fama and Macbeth (1973) methodology.³⁵

4.3.3 *Difference-in-Differences*

Our tests are premised on the notion that absent legislative and regulatory actions, daily stock returns are unrelated to our governance variables. That is, we are operating under the null hypothesis that, absent legislative or regulatory action, the coefficient on the governance variables is zero. However, an important alternative consideration is that the relation between these governance variables and daily returns is simply capturing some omitted risk, or other

³⁵ Because we are pooling across multiple events, we multiply regression coefficients by negative one for those events associated with a decrease in the probability of regulation (e.g., events eleven through fifteen). A caveat to our pooled tests is that the broad selection of events is likely to include some days with trivial market reactions. Averaging material events with what are essentially immaterial events will reduce the power of our pooled tests.

omitted determinant of the cross-section of returns that is correlated with governance (e.g., Gompers, Ishii, and Metrick, 2003; Core, Guay and Rusticus, 2006; Bebchuk, Cohen, and Ferrell, 2009; Johnson, Moorman, and Sorescu, 2009). If this is the case, we would expect governance variables to be related to daily returns even in the absence of legislative or regulatory actions.³⁶

To address this concern, we estimate the cross-sectional regression given by equation (1) for each day over the period that spans our events, March 2007 through June 2009. This yields a time-series of coefficients for 628 days, 610 of which are non-event days and 18 of which are event days. We then repeat our pooled analysis described above, but rather than test whether the average coefficient is different from zero, we test whether it is different from the average non-event day coefficient. This test is similar in spirit to Fama and Macbeth (1973). Like the Fama-Macbeth approach, we assess significance using time-series variation rather than cross-sectional variation, and in this way the test is robust to cross-sectional dependence. However, unlike the Fama-Macbeth approach, we test whether the coefficients on event days are different from the coefficients on non-event days, rather than whether they are different from zero. This test amounts to a difference-in-difference estimator. That is, we assess whether abnormal returns on a given day vary cross-sectionally with certain governance variables (i.e., the difference in returns between firms with and without staggered boards), and then assess whether this variation is significantly different between event and non-event days. Thus, we control for any temporally-constant relation between abnormal returns and the variables of interest (i.e. the sort of relation one would expect if coefficients were biased or the result of an omitted variable).

³⁶ This alternative predicts (i) a non-zero relation between the governance variables and daily returns across all of the events and (ii) that the sign of the relation between the governance variables and daily returns is the same across all of the events.

5. Results

5.1 Executive Pay Regulation

Panel A of Table 3 shows the abnormal returns to each of the eight events related to executive pay regulation. Five of the eight events have a statistically significant market reaction ($p < 0.10$, two-tail). Four of the five significant market reactions are negative. Specifically, the introduction of the *Shareholder Vote on Executive Compensation Act* is associated with an average abnormal return of -0.20% (t -statistic of -3.35), the introduction of the *Corporate Executive Compensation Accountability and Transparency Act* is associated with an abnormal return of -0.22% (t -statistic of -3.01), the *Wall Street Journal* article detailing the forthcoming *Shareholder Bill of Rights Act* is associated with an abnormal return of -0.21% (t -statistic of -1.75), and the introduction of the *Shareholder Empowerment Act* is associated with an abnormal return of -0.15% (t -statistic of -2.07).

Panel B of Table 3 presents the results from estimating equation (1) on each of the event days. Seven of the eight events have a negative coefficient on *ExcessPay* and three of these coefficients are statistically significant ($p < 0.10$, two-tail). Specifically, the statistically negative results occur for the hearings of the *Committee on Oversight and Governance Reform* (coef. -0.01 , t -statistic -1.75), the introduction of the *Corporate Executive Compensation Accountability and Transparency Act* (coef. -0.02 , t -statistic -2.54) and the introduction of the *Shareholder Empowerment Act* (coef. -0.03 , t -statistic -2.73). These results are inconsistent with the managerial power or rent extraction view of current pay practices.

Although these eight events are primarily focused on executive pay, the legislation may be a precursor to future actions focused on other corporate governance topics. However, we find no statistically significant results for *Staggered* or *IsChair* on these dates. Additionally, many of

these bills contain “say on pay” provisions which would mandate annual votes on shareholder compensation or votes in the event that executive pay crosses some predefined threshold.

However, we find mixed results for the relation between executive pay events and institutional ownership. Interestingly, the market reaction to the three events associated with both executive pay regulation *and* proxy access regulation is either negatively associated with the number of large blockholders (Event #6, t-statistic of -3.07 for *LargeInstit*), or negatively associated with the number of small institutional investors (Events #7 and #8, t-statistics of -2.83 and -2.69 for *SmallInstit*).

5.2 *Proxy Access Regulation*

Panel A of Table 4 shows the abnormal returns to each of the ten events related to proxy access regulation. Five of these events are related to increases in regulation and five to decreases. Of the five that are related to increases in regulation, four are negative, and one is statistically significant ($p < 0.05$, two-tail) and negative. Specifically, the announcement of the proposed amendment to Rule 14a8 and 14a8(i)(8) is associated with an average abnormal return of -0.17% (t-statistic of -2.31). Of the five that are related to decreases in mandatory proxy access regulation, all five are positive and four are highly significant ($p < 0.01$, two-tail).

Specifically, the SEC’s announcement that the final ruling on Amendments to Rule 14a8(i)(8) would maintain the status quo is associated with an average abnormal return of 0.75 (t-statistic of 9.62), and the pre-emptive Delaware law codifying the status quo is associated with an average abnormal return of 1.01% (t-statistic of 5.16) on introduction, 1.68% (t-statistic of 4.12) when it passes the Delaware House, and 1.30% (t-statistic of 12.19) when it passes the Senate.

Panel B of Table 4, presents the results from estimating equation (1) on each of the event days. Seven (four) of the ten events have a significant coefficient on *LargeInstit* (*SmallInstit*). In each case, the coefficients for *LargeInstit* are of the opposite sign as the change in the probability of regulation, and the coefficients for *SmallInstit* are of the same sign as the change in probability of regulation. The most pronounced results are observed for events #11 to #15, where either the SEC changed their views about proxy access or Delaware adopted the status quo on proxy access. Events #11 through #15 are associated with a decrease in the probability of regulation and have positive and highly significant coefficients on *LargeInstit* (t-stats of 3.37, 5.18, 2.51, 2.67, and 6.08, respectively) and events #11 through #13 also have negative and highly significant coefficients on *SmallInstit* (t-statistic of -5.85, -3.21, and -1.97, respectively). With regard to increased proxy access regulation, the announcement of the proposed amendment to Rule 14a8 and 14a8(i)(8) (Event #10), and announcement that the SEC is considering amendments to Rule 14a-11 (Event #16) have significant negative coefficients on *LargeInstit* (t-stats of -1.71 and -2.46 respectively).

5.3 Pooled Analysis

Table 5 presents results pooling across different categories of events.³⁷ There are four findings worth noting. First, the market reaction to all regulation events, regardless of whether it pertains to executive pay or proxy access, is on average negative and statistically significant (-0.30%, t-statistic of -2.29). Moreover, the reaction is decreasing in executive pay (t-statistic of -1.77 for *ExcessPay*), decreasing in the number of large blockholders (t-statistic of -2.99 for *LargeInstit*) and increasing in the number of small institutions (t-statistic of 1.84 for *SmallInstit*).

³⁷ Reported coefficients in Table 5 differ from the average coefficients over the respective events in Tables 3 and Table 4 only by rounding error.

However, we continue to find no relation between the market reaction and the presence of a staggered board or CEO-chairman duality (t-statistic of -0.82 and -0.94 , respectively). Second, on average we find an insignificant reaction to executive pay events (t-statistic of 0.01), but that the reaction is decreasing in “excess” CEO pay (t-statistic of -2.09 for *ExcessPay*) and unrelated to institutional ownership, staggered board, and CEO-chairman duality.³⁸ Third, on average we find negative abnormal returns of -0.39% to proxy access events (t-statistic of -2.28). Moreover, this reaction is decreasing in the number of large blockholders (t-statistic of -4.36 on *LargeInstit*) and increasing in the number of small institutional investors (t-statistic of 2.03 on *SmallInstit*). Consistent with the results above, the market reaction appears unrelated to the presence of a staggered board and CEO-chairman duality. Fourth, we find consistent results for events pertaining to actions taken by the legislature, largely in regard to executive pay, and events taken by the SEC, largely in regard to proxy access.

Finally, the difference-in-differences tests (Table 6) are consistent with results in Table 5. That is, we find that testing whether coefficients are different from zero (Table 5) or different from non-event coefficients (Table 6) does not affect inferences and in many cases yields stronger inferences.³⁹ Thus, the relations we document between event returns and governance are unlikely to be driven by correlated omitted risks or other determinants of expected returns.

6. Sensitivity Analyses

6.1 Alternative Governance Variables

³⁸ Across all eight executive pay events, the average stock market reaction is statistically insignificant. If all eight events are all equally relevant for assessing the impact on future compensation decisions by the firm, there is little change in shareholder value associated these legislative events. However, this test is somewhat crude because our broad selection of events is likely to include some days with trivial impact.

³⁹ The tests in Table 6 utilize the distribution of coefficients computed on non-event days which increases the sample size (18 event days versus 610 non-event days) and therefore increasing the power of our tests. In many cases the coefficients for the non-event days are trivially close to zero.

In our analysis we estimate cross-sectional variation in the market's reaction to each event as a function of "excess" CEO pay, institutional ownership, whether the firm has a staggered board, and whether the CEO is also chair. We selected these governance variables because they map directly to various provisions of the regulations we examine. However, this list is not exhaustive. For example, the *Shareholder Bill of Rights Act* also mandates firms establish a risk committee, the *Shareholder Empowerment Act* also requires firms develop and disclose clawback provisions, and the *Corporate Executive Compensation Accountability and Transparency Act* also requires compensation consultants are independent. Data on whether the firm follows such practices is either not publicly available or is very difficult to obtain. Therefore, we focus on the primary governance practices regulated by each bill, those that permit us to capture a broad cross-section of the economy, rather than exhaustively examining all aspects of the bill.

It is conceivable that there is cross-sectional variation in the market's reaction to governance regulations that is not directly related to the provisions in the regulation. For example, proxy access regulation that gives shareholders more say in nominating directors may have a greater effect on those firms with few independent directors, on those firms where managerial entrenchment is high, or those firms where "shareholder democracy" is low. In untabulated analyses, we re-estimate our cross-sectional regressions after including (1) the percent of independent directors and the percent of CEO ownership, (2) the G-index (Gompers, Ishii, and Metrick, 2003), or (3) E-index (Bebchuk, Cohen, and Ferrell, 2009) as additional independent variables. The first specification only marginally reduces our sample size as data on independent directors and CEO ownership are readily available from the data sources employed in this paper. We find no incremental relation between the market's reaction and either of these

variables. The second and third specification requires data on various anti-takeover provisions from IRRC and reduces our sample by approximately 50%. Regardless, we find no incremental relation between the market reaction and either of these indices.

Finally, we repeat our analysis including an indicator variable for whether the firm is incorporated in Delaware. If the Delaware law codifying the status quo was an attempt to preempt the forthcoming federal regulations requiring mandatory proxy access, we expect similar abnormal returns for both Delaware and non-Delaware firms for Events #13, #14, and #15. However, if the law did not have ramifications for federal law, we expect it to affect primarily Delaware firms. We find the Delaware variable is statistically insignificant ($p > 0.10$, two-tail) consistent with the former.

6.2 *Alternative Measurements of Key Variables*

In our primary analysis we compute abnormal returns relative to the CRSP value-weighted index, firm size, and the book-to-market ratio. A number of other methods have been proposed in the literature to compute abnormal returns and we assess the robustness of our results to several of these. We find our results are robust to using raw returns, using the equally-weighted CRSP index, and using the residuals from a Fama-French three factor model.

In our analysis we exclude financial firms and estimate abnormal returns as a function of “excess” pay and institutional ownership. In untabulated tests we find our results are robust to the inclusion of financial firms and using total pay rather than industry-year adjusted total pay.⁴⁰ However, our results are weaker when we consider only “activist institutions” as defined in

⁴⁰ We also consider more elaborate measures of excess compensation such as computing “excess” compensation relative to the firm’s market value or growth opportunities. However since both of these variables also affect our dependent variable (abnormal returns), we control for their effects on returns and pay by including *Size* and *BM* as additional independent variables in our regressions.

Cremer and Nair (2005). Because proxy access regulations apply to all shareholders holding 1% or more, they lower the cost of becoming an “activist” (i.e. waging proxy contests). Thus, proxy access may affect those firms with previously non-activist shareholders even more than firms with activist shareholders

6.3 Confounding Events

Many other events related to macro-economic news may be occurring simultaneously with the regulatory events we study. Thus, the returns we document may not be attributable to governance regulation, but to the coincident confounding macro-economic events. While this might explain why we find significant abnormal returns on any one day, in order to explain our cross-sectional results, it also must be the case that the response to the macro-economic news varies with the governance variables we examine. In an attempt to address this concern, we examine the “Business & Finance” section of the *Wall Street Journal* for the next trading day after each event.⁴¹ This section of the *Journal* reports the aggregate market activity for the previous trading day (in our case the event day) and contains a short commentary, often a single-sentence, speculating on the cause of that activity. For example on March 8, 2008, the day after Event #3, the section reads: “The Dow industrials fell 146.70 points, or 1.2%, to 11893.69 amid rising recession fears.” This can potentially inform us as to what pundits believe was driving stock returns on the day of each event. We report the respective text for each event in the Appendix. In general, the potential confounding events reported in Appendix do not appear to be driving our results.

⁴¹ For Event #6, which falls on a Saturday, we examine the *Wall Street Journal* two trading days later (i.e. one trading day after returns are measured).

7. Conclusion

There is an ongoing debate over whether existing governance practices are characterized by rent extraction or shareholder value maximization. Examining the market reaction to recent regulatory events provides an opportunity to study the effects of an exogenous shock to equilibrium governance practices on shareholder value. The managerial power view of governance suggests that many existing governance practices are the result of managerial rent extraction. This perspective predicts that the economy-wide regulation of governance practices will result in more efficient contracts and increase shareholder value. In contrast, another view of governance suggests that existing governance practices are the result of value-maximizing contracts between shareholders and management. This perspective predicts that regulation of corporate governance will result in less efficient contracts and will decrease shareholder value.

With regard to executive pay regulation, the evidence suggests that shareholders react negatively to regulation of executive compensation, and that the reaction is increasingly negative for firms with highly paid CEOs. This suggests that the market perceives that the regulation of executive compensation will ultimately result in less efficient contracts and potentially decreases the supply of high-quality executives to public firms.

With regard to proxy access regulation, the evidence suggests shareholders react negatively to regulation of proxy access, and that the reaction is decreasing in the number of large blockholders and increasing in the number of small institutional investors. This suggests that the market perceives that shareholders of firms with many large blockholders are harmed by proxy access and is consistent with critics' claims that large blockholders will use the privileges afforded them by proxy access regulation to manipulate the governance process to make themselves better off at the expense of other shareholders. Interestingly, the results also suggest

that shareholders of firms with many small institutional investors are harmed less, either because the market perceives proxy access as less likely to occur at such firms, or because smaller institutional investors are perceived as less likely to promote agendas that are deleterious to value. Because the costs and benefits of proxy access vary significantly across firms, our results suggests that shareholders may best be served by proxy access regulation which allows shareholders themselves (rather than the government) to determine the rules that govern proxy access on a company-by-company basis (e.g., Grundfest, 2009).

With regard to specific governance provisions, we find no relation between corporate governance regulation and staggered boards and CEO-chairman duality. Even on dates where legislation is introduced to ban staggered board and CEO-chairman duality, we find the market reaction is unrelated to these provisions (but is related to our other governance variables). These results suggest that staggered board or CEO-chairman duality by themselves are not deleterious to shareholder value. This is consistent with the notion that the firm can use similar, but unregulated, governance provisions to achieve a similar effect as those provisions being banned.

References

- Bebchuk, L., 2005. The case for increasing shareholder power. *Harvard Law Review* 118, 835-914.
- Bebchuk, L., Coates J., Subramanian, G., 2002. The powerful antitakeover force of staggered Boards: theory, evidence, and policy. *Stanford Law Review* 54, 887-951.
- Bebchuk, L., Cohen, A., 2005. The costs of entrenched boards. *Journal of Financial Economics* 78, 409-433.
- Bebchuk, L., Cohen, A., Ferrell, A., 2009. What matters in corporate governance. *Review of Financial Studies* 22, 783-827.
- Benston, G.J., 1973. Required disclosure and the stock market: an evaluation of the Securities Exchange Act of 1934 . *American Economic Review* 63, 132-155.
- Bhagat, S., Bolton, B.J., Romano, R., 2008. The promise and peril of corporate governance indices. *Columbia Law Review* 108, 1803-1882.
- Bhagat, S., Jefferis, R.H., 2005. *The econometrics of corporate governance studies*. MIT Press, Cambridge, MA.
- Binder, J.J., 1985. Measuring the effects of regulation with stock price data. *The RAND Journal of Economics* 16, 167-183.
- Brauer, R., Nathan, C., 2009. Delaware Law Changes to Facilitate Voluntary Adoption of Proxy Access and Reimbursement Policy for Proxy Contests. *Corporate Governance Commentary*. June 22, 2009.
- Cadbury, Sir Adrian (Chairman), 1992. *The report of the committee on the financial aspects of corporate governance*. London: Gee.
- Cai, J., Walkling, R.A., 2009. Shareholders' say on pay: does it create value? Unpublished working paper, Drexel University.
- Coles, J. L., Naveen, D. D., Naveen, L., 2008. Boards: does one size fit all? *Journal of Financial Economics* 87, 329-356.
- Core, J.E., Guay, W.R., Larcker, D.F., 2003. Executive equity compensation and incentives: a survey. *Economic Policy Review* 9, 1-25.
- Core, J.E., Guay, W.R., Rusticus, T.O., 2006. Does weak governance cause weak stock returns? An examination of firm operating performance and investors' expectations. *The Journal of Finance* 61, 655-687.
- Core, J.E., Holthausen, R.W., Larcker, D.F., 1999. Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics* 51, 371-406.
- Cremer, K.J., Nair, V.B., 2005. Governance mechanisms and equity prices. *Journal of Finance* 60, 2859-2894.
- Daines, R., Gow, I.D., Larcker, D.F., 2009. Rating the ratings: how good are commercial governance ratings? *Journal of Financial Economics*, forthcoming.
- Dey, A., Engel, E., Liu, X., 2009. Determinants and implications of board leadership structure. Working Paper. University of Chicago.
- Dvorak, P., Scannell, K., 2009. Investors, take note: new bill to target boards, 'say on pay'. *The Wall Street Journal*, April 25, 2009.
- Ertimur, Y., Ferri, F., Muslu, V., 2009. Shareholder activism and CEO pay. Unpublished working paper, Duke University.

- Faleye, O., 2007. Classified boards, firm value, and managerial entrenchment. *Journal of Financial Economics* 83, 2501-529.
- Fama, E., MacBeth, J., 1973. Risk, return, and equilibrium: empirical tests. *Journal of Political Economy* 81, 607-636.
- Fich, E.M., Shivdasani, A., 2006. Are busy boards effective monitors? *The Journal of Finance* 61, 689–724.
- Gompers, P.A., Ishii, J.L., Metrick, A., 2003. Corporate governance and equity prices. *Quarterly Journal of Economics* 118, 107–155.
- Grinstein, Y., Valles Arellano, Y., 2008. Separating the CEO from the chairman position: determinants and changes after the new corporate governance regulation. Unpublished working paper, Cornell University.
- Grundfest, J. A., 2010. The SEC's proposed proxy access rules: politics, economics, and the law, *The Business Lawyer*.
- Jarrell, G.A., Poulsen, A.B., 1987. Shark repellents and stock prices: The effects of antitakeover amendments since 1980. *Journal of Financial Economics* 19, 1127-1168.
- Johnson, S.A., Moorman, T.C., Sorescu, S., forthcoming. A reexamination of corporate governance and equity prices. *Review of Financial Studies*.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny R., 1998. Law and finance. *Journal of Political Economy* 106, 1113–1155.
- Larcker, D., Richardson, S., Tuna, I., 2007. Corporate governance, accounting outcomes, and organizational performance. *The Accounting Review* 82, 963–1008.
- Morck, R., Shleifer, A., Vishny, R. W., 1988. Management ownership and market valuation: an empirical analysis. *Journal of Financial Economics* 20, 293–315.
- Murphy, K.J., 1999. Executive compensation. In: Ashenfelter, O., Card, D. (Ed.), *Handbook of Labor Economics*. Vol. 3. Amsterdam: North-Holland.
- Orol, R.D., 2009. SEC to launch investor board nomination measure; regulations for short sellers, CEO pay and investor power coming, says SEC. *Wall Street Journal – MarketWatch*. April 6, 2009.
- Paredes, T., 2009. The proper limits of shareholder proxy access. Remarks at the Center of Capital Markets Competitiveness, U.S. Chamber of Commerce.
- Rechner, P.L., Dalton, D.R., 1991. CEO duality and organizational performance: a longitudinal analysis. *Strategic Management Journal* 12, 155-160.
- Roe, M.J., 2003. *Political determinants of corporate governance: political context, corporate impact*. Oxford University Press.
- Schwert, W. G., 1981. Using financial data to measure effects of regulation. *Journal of Law and Economics* 24, 121-158.
- Schipper, K., Thompson, R., Weil, R.L., 1987. Disentangling interrelated effects of regulatory changes on shareholder wealth: the case of motor carrier deregulation. *Journal of Law and Economics* 30, 67-100.
- Zhang, I.X., 2007. Economic consequences of the Sarbanes–Oxley Act of 2002. *Journal of Accounting and Economics* 44, 74-115.

Table 1. Description of Regulatory and Legislative Events

This table presents a brief description of the events examined in this study. Panel A presents events related to executive pay regulation and Panel B presents events related to proxy access regulation. Instances where events relate to both executive pay and proxy access are noted as such and appear in Panel A. We compile an initial list of recent events related to corporate governance regulation by searching the Library of Congress and the SEC for all files with various permutations of the words “executive compensation”, “executive pay”, and “corporate governance”. Results were then supplemented with similar searches on Lexis-Nexis and Factiva and complemented with reports from the CCH Financial Crisis News Center. We narrow the list of events by eliminating (i) all events relating specifically to the financial industry, (ii) all events related to TARP or other federal bailout monies, (iii) all regulations dealing exclusively with taxability of compensation, and (iv) all events not directly related to specific legislative bills or potential regulatory action. For each regulation considered, we include both the date it is formally introduced and the day in which it first appears in the news. For SEC deliberations, we include the day in which it first appears in the news that the SEC is considering new regulations, the day in which the proposed amendments are formalized, and the day on which the final ruling is made.

Panel A. Executive Pay Related Events

| Event Number | Legislative or Regulatory Event | Description | Date | Effect on Pr(Regulation) | Pay Regulation | Proxy Access Regulation |
|--------------|---|------------------------------------|-----------|--------------------------|----------------|-------------------------|
| #1 | Shareholder Vote on Executive Compensation Act (Rep. Frank) | Introduced / First Appears in News | 3/1/2007 | Increase | X | |
| #2 | Shareholder Vote on Executive Compensation Act (Rep. Frank) | Passes House | 4/20/2007 | Increase | X | |
| #3 | Committee on Oversight and Governance Reform (Rep. Waxman) | Hearing | 3/7/2008 | Increase | X | |
| #4 | Corporate Executive Compensation Accountability and Transparency Act (Sen. Reid and Sen. Clinton) | Introduced / First Appears in News | 4/15/2008 | Increase | X | |
| #5 | Excessive Pay Capped Deduction Act & Shareholder Approval Act (Sen. Durbin) | Introduced / First Appears in News | 5/7/2009 | Increase | X | |
| #6 | Shareholder Bill of Rights Act (Sen. Schumer) | Article in WSJ | 4/25/2009 | Increase | X | X |
| #7 | Shareholder Bill of Rights Act (Sen. Schumer) | Introduced | 5/19/2009 | Increase | X | X |
| #8 | Shareholder Empowerment Act (Rep. Peters) | Introduced / First Appears in News | 6/12/2009 | Increase | X | X |

Panel B. Proxy Access Related Events

| Event Number | Legislative or Regulatory Event | Description | Date | Effect on Pr(Regulation) | Pay Regulation | Proxy Access Regulation |
|--------------|---|---------------|------------|--------------------------|----------------|-------------------------|
| #9 | SEC Announces Roundtable on Proxy Access | SEC action | 4/24/2007 | Increase | | X |
| #10 | SEC Proposes Amendments to Rule 14a8 and 14a8(i)(8) | SEC action | 7/27/2007 | Increase | | X |
| #11 | SEC Issues Final Ruling on Amendments to Rule 14a8 | SEC action | 11/28/2007 | Decrease | | X |
| #12 | SEC Issues Final Ruling on Amendments to Rule 14a8(i)(8) | SEC action | 12/6/2007 | Decrease | | X |
| #13 | Delaware Law Amendment on Voluntary Proxy Access | Introduced | 3/10/2009 | Decrease | | X |
| #14 | Delaware Law Amendment on Voluntary Proxy Access | Passes House | 3/18/2009 | Decrease | | X |
| #15 | Delaware Law Amendment on Voluntary Proxy Access | Passes Senate | 4/8/2009 | Decrease | | X |
| #16 | SEC Considering Amendments to Rule 14a-11 | News Wire | 4/6/2009 | Increase | | X |
| #17 | SEC Votes on Proposed Amendments to Rule 14a-11 | SEC action | 5/20/2009 | Increase | | X |
| #18 | SEC publishes draft of proposed amendments to rule 14a-11 | SEC action | 6/10/2009 | Increase | | X |

Table 2. Descriptive Statistics

This table presents descriptive statistics for firms in our sample. Panel A reports the industry distribution of sample observations, classified by Fama and French (1997) industry groups and Panel B reports descriptive statistics for selected firm characteristics across all events in our sample. For comparison, Panels A and B also report the industry distribution of firms and descriptive statistics across all events for non-financial firms on the merged CRSP/Compustat file with comparable data on returns, market values, and book values. Panel C reports the distribution of the governance variables used in our analysis. *MV* is market value measured in millions, *BV* is book value of equity measured in millions, *Size* is the natural log of market value, *BM* is the ratio of book value to market value, *Staggered* is an indicator variable equal one if the firm’s bylaws and charter contain a staggered board provision and zero otherwise, *ExcessComp* is the total annual pay for the CEO measured in millions less the median industry-year pay for all firms in the same two-digit SIC code, *LargeInstit* is the number of institutions holding at least 1% of shares outstanding, *SmallInstit* is the number of institutions holding less than 1% of shares outstanding, and *IsChair* is an indicator variable equal one if the CEO or any other insider is also chairman of the board and zero otherwise.

Panel A. Industry Classification

| <i>Fama-French Industry Group</i> | <i>% of Sample 2,618 firms</i> | <i>% of CRSP/Compustat 4,963 firms</i> |
|---|------------------------------------|--|
| 1. Consumer Non-Durables | 5.61% | 5.62% |
| 2. Consumer Durables | 2.64% | 2.54% |
| 3. Manufacturing | 11.27% | 10.07% |
| 4. Energy | 5.23% | 5.76% |
| 5. Chemicals and Allied Products | 2.83% | 2.44% |
| 6. Computers & Business Equipment | 21.16% | 21.20% |
| 7. Telephone and Television Transmission | 4.13% | 4.65% |
| 8. Utilities | 3.82% | 3.47% |
| 9. Wholesale, Retail, Laundries, Repair Shops | 12.03% | 10.66% |
| 10. Healthcare, Medical Equipment, and Drugs | 13.98% | 13.68% |
| 11. Finance | 0.00% | 0.00% |
| 12. Other | 17.30% | 19.91% |

Panel B. Firm Characteristics

| <i>Variable</i> | <i>Sample (37,167 firm days)</i> | | | <i>CRSP/Compustat (75,478 firm days)</i> | | |
|-----------------|----------------------------------|---------------|------------|--|---------------|------------|
| | <i>Mean</i> | <i>Median</i> | <i>Std</i> | <i>Mean</i> | <i>Median</i> | <i>Std</i> |
| MV (\$ million) | 4414.16 | 648.20 | 18642.35 | 2883.91 | 317.43 | 14012.98 |
| BV (\$ million) | 1695.28 | 340.94 | 6658.76 | 1802.89 | 185.14 | 7755.01 |
| Size | 6.54 | 6.47 | 1.85 | 5.78 | 5.76 | 2.07 |
| BM | 0.83 | 0.52 | 5.20 | 2.07 | 0.58 | 14.72 |

Panel C. Distribution of Governance Variables

| <i>Variable</i> | <i>Mean</i> | <i>Std</i> | <i>25th</i> | <i>Median</i> | <i>75th</i> |
|-----------------|-------------|------------|-------------|---------------|-------------|
| ExcessComp | 2.55 | 6.46 | -0.52 | 0.55 | 3.33 |
| LargeInstit | 16.62 | 6.81 | 12.00 | 17.00 | 21.00 |
| SmallInstit | 162.83 | 190.18 | 58.00 | 104.00 | 195.00 |
| Staggered | 0.53 | 0.50 | 0.00 | 1.00 | 1.00 |
| IsChair | 0.64 | 0.48 | 0.00 | 1.00 | 1.00 |

Table 3. Market Reaction to Executive Pay Events

This table presents results from estimating the market reaction to various events related to the regulation of executive pay. Panel A presents average abnormal returns on the day of each event. Panel B presents results from a regression of abnormal returns on the day of the event on various governance and control variables. Events are as defined in Table 1. All variables are as defined in Table 2. Heteroskedastic-robust *t*-statistics appear in parentheses. ***, **, and * denote statistical significant at the 0.01, 0.05, and 0.10 levels (two-tail) respectively.

Panel A. Abnormal Returns

| Variable | Event #1 | Event #2 | Event #3 | Event #4 | Event #5 | Event #6 | Event #7 | Event #8 |
|-------------------------------|-----------------|----------|----------|-----------------|----------|---------------|----------------|----------------|
| $\Delta\text{Pr(Regulation)}$ | Increase | Increase | Increase | Increase | Increase | Increase | Increase | Increase |
| <i>Abnormal Return</i> | -0.20*** | 0.08 | -0.10 | -0.22*** | 0.19 | -0.21* | 0.61*** | -0.15** |
| t-statistic | (-3.35) | (1.49) | (-1.40) | (-3.01) | (0.59) | (-1.75) | (6.79) | (-2.07) |

Panel B. Cross-Sectional Variation in Abnormal Returns

| Variable | Event #1 | Event #2 | Event #3 | Event #4 | Event #5 | Event #6 | Event #7 | Event #8 |
|-------------------------------|------------------|----------------|----------------|------------------|-----------------|-----------------|------------------|------------------|
| $\Delta\text{Pr(Regulation)}$ | Increase | Increase | Increase | Increase | Increase | Increase | Increase | Increase |
| <i>Intercept</i> | -1.91*** | -0.81** | 0.52 | -1.84*** | 2.78*** | -0.27 | -0.66 | -1.73** |
| | (-5.64) | (-2.67) | (1.24) | (-4.57) | (3.11) | (-0.47) | (-1.56) | (-4.89) |
| <i>Size</i> | 0.25*** | 0.05 | -0.16** | 0.24*** | -0.34*** | 0.08 | 0.23*** | 0.33*** |
| | (4.77) | (1.13) | (-2.32) | (3.86) | (-2.38) | (0.76) | (3.15) | (5.28) |
| <i>BM</i> | 0.10*** | 0.03 | 0.05 | -0.01 | -0.05*** | -0.05 | 0.09*** | -0.04*** |
| | (3.46) | (1.25) | (1.57) | (-0.95) | (-4.36) | (-0.93) | (7.25) | (-6.68) |
| <i>ExcessPay</i> | -0.001 | -0.01 | -0.01* | -0.02** | -0.01 | -0.005 | 0.01 | -0.03*** |
| | (-0.10) | (-1.08) | (-1.75) | (-2.54) | (-0.46) | (-0.45) | (1.00) | (-2.73) |
| <i>LargeInstit</i> | 0.001 | 0.02*** | 0.02*** | 0.02* | -0.09*** | -0.04*** | -0.004 | -0.01 |
| | (0.15) | (3.78) | (2.72) | (1.77) | (-4.01) | (-3.07) | (-0.40) | (-1.42) |
| <i>SmallInstit</i> | -0.001*** | -0.0003 | 0.001* | -0.001*** | 0.004*** | 0.001 | -0.001*** | -0.001*** |
| | (-3.02) | (-0.76) | (1.94) | (-3.08) | (3.72) | (1.29) | (-2.83) | (-2.69) |
| <i>Staggered</i> | -0.001 | 0.12* | -0.15 | 0.02 | 0.17 | -0.22 | -0.12 | -0.07 |
| | (-0.01) | (1.75) | (-1.37) | (0.24) | (0.72) | (-1.30) | (-0.91) | (-0.66) |
| <i>IsChair</i> | 0.15 | 0.07 | 0.07 | -0.03 | -0.25 | 0.05 | -0.17 | 0.02 |
| | (1.64) | (0.86) | (0.60) | (-0.26) | (-0.96) | (0.29) | (-1.15) | (0.23) |
| <i>F</i> | 5.81 | 3.15 | 3.82 | 5.00 | 8.19 | 7.15 | 8.51 | 16.90 |
| <i>N</i> | 1,770 | 1,746 | 2,223 | 2,240 | 2,160 | 2,163 | 2,156 | 2,145 |

Table 4. Market Reaction to Proxy Access Events

This table presents results from estimating the market reaction to various events related to the regulation of proxy access. Panel A presents average abnormal returns on the day of each event. Panel B presents results from a regression of abnormal returns on the day of the event on various governance and control variables. Events are as defined in Table 1. All variables are as defined in Table 2. Heteroskedastic-robust *t*-statistics appear in parentheses. ***, **, and * denote statistical significant at the 0.01, 0.05, and 0.10 levels (two-tail) respectively.

Panel A. Abnormal Returns

| Variable | Event #9 | Event #10 | Event #11 | Event #12 | Event #13 | Event #14 | Event #15 | Event #16 | Event #17 | Event #18 |
|--------------------------------|----------|----------------|-----------|----------------|----------------|----------------|----------------|-----------|-----------|-----------|
| $\Delta Pr(\text{Regulation})$ | Increase | Increase | Decrease | Decrease | Decrease | Decrease | Decrease | Increase | Increase | Increase |
| <i>Abnormal Return</i> | 0.002 | -0.17** | 0.06 | 0.75*** | 1.01*** | 1.68*** | 1.30*** | -0.23 | -0.11 | -0.06 |
| <i>t</i> -statistic | (0.05) | (-2.31) | (0.78) | (9.62) | (5.16) | (4.12) | (12.19) | (-1.40) | (-1.27) | (-0.72) |

Panel B. Cross-Sectional Variation in Abnormal Returns

| Variable | Event #9 | Event #10 | Event #11 | Event #12 | Event #13 | Event #14 | Event #15 | Event #16 | Event #17 | Event #18 |
|--------------------------------|----------|----------------|------------------|------------------|-----------------|----------------|----------------|-----------------|-----------|-----------------|
| $\Delta Pr(\text{Regulation})$ | Increase | Increase | Decrease | Decrease | Decrease | Decrease | Decrease | Increase | Increase | Increase |
| <i>Intercept</i> | -0.34 | 0.62 | -2.57*** | 0.08 | 0.29 | 3.07*** | 1.40*** | 0.57 | -0.08 | -1.37*** |
| | (-1.03) | (1.57) | (-5.59) | (0.17) | (0.35) | (3.16) | (3.06) | (1.04) | (-0.21) | (-3.44) |
| <i>Size</i> | 0.03 | -0.08 | 0.34*** | -0.05 | -0.08 | -0.41** | -0.21** | -0.15* | -0.01 | 0.21*** |
| | (0.49) | (-1.33) | (4.50) | (-0.64) | (-0.54) | (-2.49) | (-2.54) | (-1.64) | (-0.12) | (3.25) |
| <i>BM</i> | -0.001 | 0.04 | -0.04 | 0.01 | 0.0004 | -0.04* | -0.005 | -0.01 | 0.004 | 0.02* |
| | (-0.06) | (0.85) | (-0.68) | (0.12) | (0.02) | (-1.86) | (-0.44) | (-0.51) | (0.50) | (1.91) |
| <i>ExcessPay</i> | 0.002 | 0.003 | -0.002 | -0.005 | 0.05*** | 0.07*** | -0.01 | 0.01 | -0.002 | -0.002 |
| | (0.44) | (0.44) | (-0.24) | (-0.53) | (2.70) | (3.41) | (-0.84) | (1.14) | (-0.17) | (-0.24) |
| <i>LargeInstit</i> | 0.001 | -0.01* | 0.03*** | 0.05*** | 0.06** | 0.06*** | 0.08*** | -0.03** | -0.02 | 0.0005 |
| | (0.12) | (-1.71) | (3.37) | (5.18) | (2.51) | (2.67) | (6.08) | (-2.46) | (-1.47) | (0.04) |
| <i>SmallInstit</i> | 0.00004 | 0.0004 | -0.003*** | -0.002*** | -0.002** | -0.002 | -0.0005 | 0.002*** | 0.0005 | -0.0004 |
| | (0.14) | (1.03) | (-5.85) | (-3.21) | (-1.97) | (-1.41) | (-0.91) | (3.39) | (0.99) | (-0.97) |
| <i>Staggered</i> | 0.06 | -0.20** | -0.05 | 0.005 | 0.18 | -0.08 | -0.13 | -0.10 | 0.12 | 0.005 |
| | (0.71) | (-1.92) | (-0.45) | (0.04) | (0.66) | (-0.29) | (-0.85) | (-0.63) | (1.01) | (0.04) |
| <i>IsChair</i> | 0.09 | 0.14 | 0.26* | 0.30** | 0.24 | -0.20 | 0.12 | 0.16 | -0.01 | -0.33** |
| | (0.97) | (1.23) | (1.95) | (2.17) | (0.81) | (-0.68) | (0.72) | (0.93) | (-0.10) | (-2.40) |
| F | 0.65 | 1.68 | 11.62 | 16.31 | 4.00 | 12.89 | 17.36 | 7.40 | 1.07 | 4.36 |
| N | 1,745 | 1,826 | 1,981 | 1,993 | 2,187 | 2,185 | 2,171 | 2,173 | 2,156 | 2147 |

Table 5. Pooled Analysis

This table presents results from estimating the market reaction pooling across *Executive Pay Events*, *Proxy Access Events*, *Legislative Events* and *Regulatory Events*. Panel A presents the time-series average of abnormal returns for each event group. Panel B presents the time-series average of the coefficients for each event group. *t*-statistics appear in parentheses are computed as in Fama and MacBeth (1973). Following Table 1, *Executive Pay Events* refer to events one through eight, *Proxy Access Events* refer to events six through eighteen, *Legislative Events* refer to events one through eight and thirteen through fifteen, and *Regulatory Events* refer to events nine through twelve, and sixteen through eighteen. Abnormal returns (coefficients) for events eleven through fifteen are multiplied by negative one. All variables are as defined in Table 2. ***, **, and * denote statistically significant at the 0.01, 0.05, and 0.10 levels (two-tail) respectively.

Panel A. Abnormal Returns

| Variable | All Events | Executive Pay Events | Proxy Access Events | Legislative Events | Regulatory Events |
|---------------------|----------------|----------------------|---------------------|--------------------|-------------------|
| <i>Ab. Return</i> | -0.30** | 0.001 | -0.39** | -0.36* | -0.20** |
| <i>t</i> -statistic | (-2.29) | (0.01) | (-2.28) | (-1.76) | (-2.04) |

Panel B. Cross-Sectional Variation in Abnormal Returns

| Variable | All Events | Executive Pay Events | Proxy Access Events | Legislative Events | Regulatory Events |
|--------------------|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|
| <i>Intercept</i> | -0.38 (-1.08) | -0.50 (-0.88) | -0.43 (-1.14) | -0.80* (-1.70) | 0.27 (0.59) |
| <i>Size</i> | 0.06 (1.19) | 0.09 (1.03) | 0.08 (1.42) | 0.13* (1.90) | -0.04 (-0.65) |
| <i>BM</i> | 0.01 (1.43) | 0.02 (0.70) | 0.01 (1.06) | 0.02 (0.99) | 0.01 (1.56) |
| <i>ExcessPay</i> | -0.01* (-1.77) | -0.01** (-2.09) | -0.01 (-1.24) | -0.02** (-2.23) | 0.003 (1.56) |
| <i>LargeInstit</i> | -0.02*** (-2.99) | -0.01 (-0.80) | -0.03*** (-4.36) | -0.03** (-2.07) | -0.02*** (-2.86) |
| <i>SmallInstit</i> | 0.001* (1.84) | 0.00003 (0.04) | 0.001** (2.03) | 0.0004 (0.84) | 0.001** (2.23) |
| <i>Staggered</i> | -0.02 (-0.53) | -0.03 (-0.62) | -0.04 (-1.02) | -0.02 (-0.47) | -0.01 (-0.22) |
| <i>IsChair</i> | -0.04 (-0.99) | -0.01 (-0.20) | -0.06 (-1.11) | -0.02 (-0.45) | -0.07 (-0.90) |
| <i>Event #s</i> | #1-18 | #1-8 | #6-18 | #1-8, #13-15 | #9-12, #16-18 |
| <i>N</i> | 36,956 | 16,509 | 26,859 | 23,026 | 13,867 |

Table 6. Non-Event Control Sample

This table presents results from estimating the difference in regressions coefficients between event days and non-event days. We estimate a single cross-sectional regression on each day from March 2007 through June 2009 resulting in a time-series of 628 coefficients. We then test whether the coefficients on event days are statistically different from the average coefficient on the non-event days. Following Table 1, *Executive Pay Events* refer to events one through eight, *Proxy Access Events* refer to events six through eighteen, *Legislative Events* refer to events one through eight and thirteen through fifteen, and *Regulatory Events* refer to events nine through twelve, and sixteen through eighteen. Abnormal returns (coefficients) for events eleven through fifteen are multiplied by negative one. All variables are as defined in Table 2. ***, **, and * denote statistically significant at the 0.01, 0.05, and 0.10 levels (two-tail) respectively.

| Variable | All Events | Executive Pay Events | Proxy Access Events | Legislative Events | Regulatory Events |
|----------------------------------|----------------------------|--------------------------|----------------------------|---------------------------|----------------------------|
| Difference in <i>Intercept</i> | 0.02 (0.07) | -0.09 (-0.17) | -0.03 (-0.07) | -0.39 (-0.86) | 0.67 (1.55) |
| Difference in <i>Size</i> | 0.01 (0.22) | 0.04 (0.45) | 0.03 (0.56) | 0.07 (1.19) | -0.09 (-1.48) |
| Difference in <i>BM</i> | 0.01 (1.40) | 0.01 (0.73) | 0.01 (1.04) | 0.02 (1.00) | 0.01 (1.55) |
| Difference in <i>ExcessPay</i> | -0.01 (-1.60) | -0.01* (-1.94) | -0.01 (-1.14) | -0.02** (-2.18) | 0.004 (1.27) |
| Difference in <i>LargeInstit</i> | -0.03*** (-3.51) | -0.01 (-1.15) | -0.03*** (-4.99) | -0.03** (-2.47) | -0.02*** (-3.57) |
| Difference in <i>SmallInstit</i> | 0.001** (2.34) | 0.0002 (0.33) | 0.001** (2.54) | 0.001 (1.22) | 0.001*** (2.77) |
| Difference in <i>Staggered</i> | -0.02 (-0.78) | -0.04 (-0.82) | -0.04 (-1.27) | -0.03 (-0.67) | -0.02 (-0.43) |
| Difference in <i>IsChair</i> | -0.04 (-1.06) | -0.01 (-0.26) | -0.06 (-1.19) | -0.02 (-0.52) | -0.08 (-0.99) |
| <i>Event #s</i> | #1-18 | #1-8 | #6-18 | #1-8, #13-15 | #9-12, #16-18 |
| <i>N</i> | 36,956 | 16,509 | 26,859 | 23,026 | 13,867 |

Appendix. Potential Confounding Events

This table presents the portion of the "Business & Finance" section of the *Wall Street Journal* that reports the aggregate market activity for the previous trading day and a short commentary speculating on the cause of that activity, for the trading day immediately following each event. In this way, the text pertains to events occurring on the event day.

Event #1: The Dow industrials slipped 34.29 points to 12234.34 as an overnight selloff in Asian shares spilled into U.S. markets.

Event #2: The Dow industrials posted their seventh-straight gain, jumping 153.35 points to a record 12961.98 in a rally led by Honeywell and Caterpillar.

Event #3: The Dow industrials fell 146.70 points, or 1.2%, to 11893.69 amid rising recession fears. Oil fell 32 cents to \$105.15 but rose 3.3% for the week.

Event #4: The Dow industrials rose 60.41 points to 12362.47, the biggest gain in two weeks.

Event #5: The DJIA fell 102.43 points, or 1.2%, to 8409.85. Treasury prices also fell.

Event #6: Drug stocks soared but other market sectors such as airlines dropped in reaction to the swine-flu scare. The Dow Jones industrials fell 51.29 points, or 0.64%, to 8025.00.

Event #7: Stocks finished little changed as a measure of investor sentiment suggested market volatility may be slowing. The Dow industrials slipped 29.23 points to 8474.85.

Event #8: Financial markets have been buoyed by the money being pumped out by governments around the world, and some investors have begun speaking of a "bailout bubble" being created in certain markets. The industrials rose 28.34 points to 8799.26.

Event #9: The Dow industrials closed up 34.54 points at 12953.94 after touching an intraday record, aided by a jump in IBM shares and a drop in oil to \$64.58.

Event #10: Stocks tumbled on concerns about tightening credit and declining home prices. The Dow industrials slid 208.10 points, or 1.5%, to 13265.47.

Event #11: The Fed hinted a rate cut may come next month amid mounting signs of a slowdown. Remarks by Vice Chairman Kohn that credit-market turmoil remains a threat sent the Dow industrials soaring 331.01 points, or 2.6%, to 13289.45, despite more weak economic data.

Event #12: The Dow industrials soared 174.93 points, or 1.3%, to 13619.89, as financial stocks led the way higher. Crude rose \$2.74 to \$90.23 a barrel. Bonds fell.

Event #13: Stocks had their biggest rally since November, with the Dow Jones Industrial Average gaining 379.44 points, or 5.8%, to 6926.49. Though the Dow has had other one-day surges during the bear market, in one day it was able to restore \$134.5 billion of its value.

Event #14: The Fed will buy up to \$300 billion in long-term Treasuries and billions more in mortgage-backed securities, as rates already are near zero. The markets' reaction was loud. The 10-year note's yield slid to 2.533%, its largest drop since the 1987 crash. The Dow rose 90.88 points, or 1.2%, to 7486.58.

Event #15: Stocks rose to break a two-day losing streak, with the Dow Jones Industrial Average up 47.55 points, or 0.6%, to 7837.11.

Event #16: Stocks fell for the first time in a week as concerns about banks and deals resurfaced. The Dow industrials fell 41.74 points, or 0.5%, to 7975.85.

Event #17: Stocks fell late in the day as Fed meeting minutes damped recent optimism. The Dow industrials fell 52.81 points, or 0.6%, to 8422.04.

Event #18: Stocks fell as Treasury yields and oil futures hit their highest levels in nearly eight months. The Dow industrials were down 123.11 points but recovered most of their losses to end 24.04 points lower at 8739.02.