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THE COSTS OF ENTRENCHED BOARDS

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ABSTRACT

This paper investigates empirically how the value of publicly traded firms is overall affected by arrangements protecting management from removal. A majority of U.S. public companies have staggered boards that substantially insulate the board from removal via a hostile takeover or a proxy contest. We find that staggered boards are associated with an economically significant reduction in firm value (as measured by Tobin's Q). We also find evidence consistent with staggered boards' bringing about, and not merely reflecting, a lower firm value. Finally, the correlation with reduced firm value is stronger for staggered boards established in the corporate charter (which shareholders cannot amend) than for staggered boards established in the company's bylaws (which can be amended by shareholders).

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1. Introduction

The desirability of protecting the boards of publicly traded companies from removal by shareholders has long been the subject of much debate. Does the threat of removal benefit shareholders by discouraging incumbents from shirking, engaging in empire-building, extracting private benefits, and rejecting attractive acquisition offers? Or does the threat of removal reduce shareholder value by distracting management, distorting its decisions by introducing a short-term bias, and weakening incumbents' bargaining position in negotiated sales? These questions are undoubtedly among the most important in corporate governance. The debate in the 1950s about proxy contests, the debates during the 1980s and 1990s about takeover defenses, and the current debate on shareholder access to the corporate ballot have all focused to a large extent on this issue.

The extent to which the boards of US public firms are insulated from removal critically depends on whether they have, as a majority of them do, a staggered board. A staggered board can prevent shareholders from replacing a majority of the board of directors without the passage of at least two annual elections. It thus makes it much more difficult to gain control of a company either in a stand-alone proxy contest or in a hostile takeover.

Staggered boards have been encountering growing resistance from institutional investors during the past decade (Bebchuk (2003), Klausner (2003)). Since the early 1990s, shareholders of existing public companies have been reluctant to approve charter amendments (that would establish a staggered board (IRRC (2002)). Furthermore, shareholders have increasingly been voting in favor of advisory resolutions that recommend dismantling existing staggered boards. Such resolutions regularly obtain support from a majority of the shareholders (Georgeson Shareholder (2002)).

But staggered boards also continue to have many defenders (e.g., Koppes, Ganske, and Haag (1999)). Boards commonly elect not to follow precatory shareholder resolutions against charter provisions establishing a staggered board. Defenders of

staggered boards stress that staggered boards provide boards with stability and insulation from short-term pressures that are necessary for them to operate well.

Participants in the long-standing debate over protecting boards from removal have identified many ways in which such protection can affect firm value. Such protection can affect the probability of an acquisition, the expected premium in the event of an acquisition, and, most importantly perhaps, the ex ante behavior of management. The overall desirability of such protection depends on the aggregate impact of all of these effects on expected shareholder value. Thus, to shed light on the desirability of defenses, one strategy that empirical work can pursue is to investigate separately each of these effects. An alternative strategy, which we pursue in this paper, is to study how firms' market value is overall affected by protection from removal.

We study the association between staggered boards and market value during the period 1995-2002. By 1995, the legal rules that give staggered boards their protective powers were firmly in place. Our data set is based on the companies followed by the Investor Responsibility Research Center (IRRC), which publishes data about the governance provisions of all the companies in the S&P 500, as well as many other companies of significance.

We find that, controlling for firm characteristics including other governance provisions, staggered boards are associated with a reduced firm value. The association between staggered boards and firm value is not only statistically significant but also economically meaningful.

As is often the case with respect to identified correlations between governance arrangements and firm value, simultaneity issues complicate the interpretation of our findings. One possible interpretation is that staggered boards lead to a reduction in firm value. But there are two other interpretations that do not involve such a causal link: First, the association might have been produced by the selection of staggered boards by firms that have a low value and seek to protect themselves from a takeover. Second, the association might have been produced by the selection of such arrangements by managements with characteristics that also lead to lower value; for example, self-

serving incumbents might both seek protection from removal and produce lower share value.[1]

We investigate below the question whether the association between staggered boards and firm value reflects at least partly a negative effect that such staggered boards have on firm value. In exploring this question, we use the fact that, since the beginning of the 1990s, shareholders of existing public companies have generally been unwilling to approve charter amendments that establish a staggered board in companies where one did not exist already. As a result, whether pre-1990 firms had a staggered board at the end of the studied period depended substantially on whether they already had one in 1990.

Focusing on firms that went public prior to 1990 (which constitute a majority of the firms in our database), we find a negative correlation between their market values during 1995-2002 and whether they had a staggered board in 1990. Furthermore, and importantly, such correlation remains (though with weaker magnitude) when we control for firm value in 1990. This correlation is consistent with staggered boards having a negative effect on firm value.

In addition to identifying the association between staggered boards and market values, our research provides an insight into the features that drive the correlation between low firm value and a broad index of management-favoring provisions followed by the IRRC. In a recent important study, Gompers, Ishii and Metrick (2003) constructed an index based on twenty-four management-favoring provisions followed by the IRRC. This study found a correlation between a larger number of such provisions and a lower firm value, but it did not identify which provisions were especially responsible for the identified correlation. We extend this work by finding, controlling for other governance provisions, that staggered boards have a strong effect on market value and that their effect is several times larger than the average effect of other provisions in the constructed index. Thus, staggered boards are an important driver of the identified correlation between firm value and a broad governance index.

[1] To be sure, these two interpretations hardly imply a favorable view of staggered boards. But to the extent that they account for the association between staggered boards and firm value, this association cannot serve as evidence that staggered boards harm shareholders.

Finally, we find some evidence that the extent to which staggered boards are associated with negative firm value depends on whether they are established in the corporate charter or in the company bylaws. While most staggered boards are established in the firm's charter, which shareholders cannot amend, about 10% of staggered boards are established in the firm's bylaws. Because shareholders may amend their company's bylaws, bylaws-based staggered boards do not provide boards with the same protection from removal by determined shareholders that is provided by charter-based staggered boards. Separating between charter-based staggered boards and bylaws-based staggered boards, we find evidence that the latter are not negatively correlated with firm value in the same way as the former.

Our analysis is organized as follows. Section 2 discusses the legal and institutional background, the questions we seek to examine, and the prior work on our subject. Section 3 describes our data, and Section 4 describes our results. Section 5 concludes.

2. Background, Motivation, and Prior Work

2.1 The Key Role of Staggered Boards in Entrenching Incumbents

There are two ways in which boards may be removed. One is a stand-alone proxy fight in which a rival team seeks to replace the current incumbents but continues to run the firm as a stand-alone entity. Alternatively, a board may be removed as a result of a hostile takeover in which an outside buyer purchases a controlling block. Either way, the ease with which directors can be removed greatly depends on whether the company has a staggered board.

U.S. companies can have either a unitary board or a staggered board. In firms with a unitary board, all directors stand for election each year. In firms with a staggered board, directors are grouped into classes, with one class of directors standing for election at each annual meeting of shareholders. Typically, a staggered board has three classes of directors, which in most states of incorporation is the largest number of classes permitted by state corporate law.

Staggered boards make winning control via a stand-alone proxy contest more difficult because they require a rival team to win two elections to gain control. Challengers considering running a stand-alone proxy contest already face considerable impediments (Bebchuk and Hart (2002)), and having to win two elections one-year apart makes the task more difficult. The need to win two such elections requires more resources and willingness to wait on the part of the challengers. Furthermore, it could also make shareholders more reluctant to vote for a dissident group the first time around, knowing that election of its slate would lead to a divided board for the next year and that the dissident group would not be able to gain control for another year, by which time some of the issues raised by the dissidents might be moot.

Staggered boards also have a major impact on the prospect of a hostile takeover because of the way in which the law of defensive tactics has developed. Prior to the development and adoption of the poison pill defense, staggered boards were considered a mild takeover defense because they did not impede the acquisition of a control block. The development and acceptance of the poison pill, however, transformed the market for control. As long as a poison pill is in place, it practically prevents a hostile bidder from purchasing a majority of the target's shares.[2]

In the late 1980's and early 1990's, court decisions in Delaware and pill endorsement statutes in other states provided incumbents with substantial freedom to maintain a pill indefinitely and thus block a hostile offer as long as they are in office. In Delaware, the 1990 *Time* decision by the Delaware Supreme Court signaled willingness to permit managers to "just say no," and the 1995 *Unitrin* decision by the Delaware Supreme Court substantially solidified managers power to do so indefinitely. Applying Delaware law, a 1995 decision in *Walace Computer* permitted incumbents

[2] Pills consist of stock warrants or rights that allow the holder to buy an acquirer's stock, the target's stock, or both, at a substantial discount from the market price. These rights only become exercisable in the event that an acquirer buys more than a certain percentage of the target's stock (typically 10 or 15%) without the target board's approval. These rights are explicitly not exercisable by the acquiring person, so the resulting dilution in his voting power and economic stake may make the acquisition of the target too expensive to pursue. The terms of poison pill rights make the acquisition of control, and suffering the resulting dilution, a losing proposition for the bidder as a practical matter.

protected by a staggered board to continue saying no even after the hostile bidder won an election contest over one-third of the board seats. In other states, pill endorsement statutes were adopted in the late 1980s and the early 1990s.

Once the latitude to maintain pills indefinitely was firmly in place, a hostile bidder's main hope of acquiring the target over the objection of incumbents lay in the possibility of replacing the incumbent directors. By placing an attractive offer on the table, a hostile bidder can attempt to induce shareholders to replace the board with a team of directors (usually nominated by the hostile bidder itself) that announce their willingness to accept the offer. Thus, the extent to which incumbents are now protected from a hostile takeover critically depends on how long and how difficult it would be to replace the incumbents, and thus on whether a staggered board exists.

In particular, by preventing a majority of directors from being replaced before the passage of two annual elections, staggered boards impede hostile bidders in two ways. First, the bidder cannot be assured of gaining control, no matter how attractive the bidder's offer is, without waiting a period that is at least a year and might exceed two years; waiting so long might be rather costly for bidders that seek the target for synergy reasons or to engage in long-range planning. Furthermore, making an irrevocable offer that would be open for such a long period is quite costly to the bidder, and without making such an offer shareholders would be reluctant to vote for the bidder in the first election (Bebchuk and Hart (2002)). Indeed, there is evidence that, at least since 1996 and probably also prior to it, no hostile bidder has ever persisted long enough to win two elections (Bebchuk, Coates, and Subramanian (2003)).

It should be noted that some staggered boards provide a weaker impediment to replacement of the whole board at the next annual meeting than others. A minority of staggered boards is not fully "effective" (Bebchuk, Coates, and Subramanian (2003)). In this minority of cases, shareholders that are sufficiently determined to replace the whole board may be able to do so for one of three reasons: (1) the staggered board is established in the firm's bylaws, which shareholders can typically amend, and not in the charter, which shareholders cannot amend without board initiative; (2) the firm's charter does not prevent shareholders from "packing" the board by increasing the

number of board seats and filling them; and (3) the firm's charter and the law of the firm's state of incorporation do not take away from the shareholders the power to remove directors "without cause." Because we have data on whether staggered boards are established in the bylaws or in the charter, we can separate from the set of companies with staggered boards a subset of firms whose staggered boards provide a less effective protection against removal by determined shareholders. This will enable us to test whether more and less effective staggered boards exhibit different correlations with lower firm value.

Finally, the above analysis of the significance of staggered boards is supported by recent evidence (Bebchuk, Coates, and Subramanian (2002, 2003)). This evidence indicates that effective staggered boards are indeed a key factor that determines the outcome of hostile bids. Such staggered boards are found to increase the odds of the target's remaining independent 12 months after a hostile bid from 31% to 64%, and it has similarly dramatic effects on the odds of a target's still remaining independent 30 months after receiving a hostile bid. Other defenses, such as pre-bid poison pills, supermajority voting provisions, and fair price provisions, have much less significance for the outcome of hostile bids.

2.2 The Question and the Research Strategy

The above discussion indicates that, on both theoretical and empirical grounds, the strength of directors' protection from removal critically depends on whether the firm has an effective staggered board. The question, however, is whether the protection from removal provided by effective staggered boards overall has a positive or a negative impact on firm value. The debate on the subject has been going on for the last twenty-five years, with participants identifying many ways in which protection from removal can affect value. [3]

[3] For a recent survey of the work on this subject, see Bebchuk (2002).

Simply put, the expected value of a given firm's shares at a given point in time is defined by:

$$EV = \left[\begin{array}{l}\text{The firm's}\\ \text{cash flow in}\\ \text{the current}\\ \text{period}\end{array}\right] + \left[\begin{array}{l}\text{The probability}\\ \text{that the firm will}\\ \text{remain}\\ \text{independent}\\ \text{in the next period}\end{array}\right] \times \left[\begin{array}{l}\text{The expected value}\\ \text{of the firm in the}\\ \text{next period in the}\\ \text{event that it}\\ \text{remains independent}\\ \text{in that period}\end{array}\right] + \left[\begin{array}{l}\text{The prbability}\\ \text{that the firm will}\\ \text{be acquired in}\\ \text{the next period}\end{array}\right] \times \left[\begin{array}{l}\text{The expected}\\ \text{permium in}\\ \text{the event that}\\ \text{the firm will}\\ \text{be acquired in}\\ \text{the next period}\end{array}\right]$$

Protecting incumbents from removal can affect each of the terms on the right hand side of the above formula. Among other things, such protection has the following effects:

(i) Management behavior and incentives: Most importantly, protection from removal can affect how incumbents run the firm, which in turn affects the current and future profitability of the firm (and thus affecting elements (1) and (3) above). On the one hand, protection might hurt shareholders by weakening the disciplinary threat of removal and thereby increase shirking, empire-building, and extraction of private benefits by incumbents (Manne (1965)). On the other hand, protection might benefit shareholders by inducing management to invest in long-term projects (Stein (1988), Bebchuk and Stole (1992)) and to avoid deadweight and inefficient actions that it might otherwise undertake to reduce the likelihood of a takeover bid (Arlen and Talley (2003)).

(ii) The Probability of an Acquisition: Such protection might hurt shareholders by enabling a self-serving management team to block a hostile acquisition in order to retain management's independence (Easterbrook and Fischel (1981)), and by discouraging potential acquirers from searching for companies and making offers for them (Grossman and Hart (1980)). However, protection from removal also might provide benefits to shareholders by enabling loyal boards to reject an offer that management's private information suggests is inadequate (Lipton (1979)) and by encouraging targets to search for beneficial opportunities to be acquired (Bebchuk (1982)).

(iii) Acquisition premia: Protection from removal might help shareholders by strengthening incumbents' bargaining power and enabling them to extract higher acquisition premia (Stulz (1988)). However, management might have significant bargaining power even without protection from removal (Bebchuk (2002), Subramanian (2003)) and, furthermore, incumbents might use whatever additional power comes with such protection to extract side payments for themselves rather than higher premia for shareholders (Bebchuk (2002), Hartzell, Ofek, and Yermack (2001)).

One approach for an empirical investigation of the overall desirability of protection from removal is to investigate each of the particular effects listed – e.g., the effect on premia in acquisitions, the effect on the incidence of hostile acquisitions and negotiated acquisitions, the effect on operating performance, the effect on empire-building, and so forth and so on -- and then to aggregate them. Some prior work has focused on some of the pieces needed for putting together the overall impact of protection from removal. The difficulty with this approach is that it cannot resolve whether the overall impact of protection from removal is positive or negative until we identity and measure each of the different effects that protection has.

An alternative strategy, which we use in this paper, is to focus on the effect that protection from removal has on market values. To the extent that the market correctly estimates the value of firms, the market-to-book ratio of firms should reflect EV, and thus reflect the aggregate effect of defenses on shareholder interests.

Our approach might be questioned on grounds that it seems to assume that the market accurately assesses the consequences that staggered boards would have on shareholders' interests. In response, it might be suggested that it is plausible to assume that, by the middle of the 1990s, the market had considerable experience with the effects of staggered boards. More importantly, however, our approach can be useful even if the market is not assumed to assess well the effects of staggered boards. Even without such accurate assessment, the market might be able to directly assess various aspects of management's current and expected performance, such as its strategy, the extent to which it has a tendency to engage in empire-building or extraction of private benefits, and so forth. To the extent that the market estimates these elements of

expected shareholder value correctly in forming the market price, the existence of association between firm value and staggered boards would be significant.

We shall therefore test below the hypothesis that staggered boards are associated with lower market value. We shall also test whether this effect is smaller or non-existent for staggered boards that are bylaws-based and thus provide relatively ineffective protection against removal.

2.3 Prior Empirical Work

Although significant reservations have been expressed with respect to the use of event studies in this area (see, e.g, Gompers, Ishii, and Metrick (2003)), a significant number of event studies was done to investigate the changes in stock prices that accompanied the passage of state antitakeover statutes (see, e.g., Karpoff and Malatesta (1989), and see Gartman (2000) for a survey of this body of work).[4] It is worth noting that most state anti-takeover statutes are not the key determinant of the level of protection from removal that management enjoys in any given company. All the impediments established by standard state antitakeover statutes can be overcome if a hostile bidder can get shareholders to replace the incumbent board. Thus, even when a firm's state of incorporation has all five standard antitakeover statutes, incumbents have relatively limited protection from removal if the corporate charter does not establish a staggered board. Recent evidence indeed indicates that a target's state of incorporation is not a key determinant of the outcome of hostile offers (Bebchuk, Coates, and Subramanian (2003)).[5]

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[4] In addition to the above event studies, there is also work that finds that the passage of state antitakeover statutes increased management's tendency to take actions favorable to it such as making executive compensation schemes less performance-sensitive (e.g., Bertrand and Mullainathan (1999, 2003)).

[5] More telling could be current work in progress by Robert Daines who is studying the effect of the 1991 passage of Massachusetts' antitakeover statute. In a talk on this project at the meeting of the American Law and Economics Association ("Do Staggered Boards Affect Firm Value? Takeover Defenses After the Poison Pill"), Daines presented preliminary findings suggesting that this statute had negative effects on the stock prices of Massachusetts firms. Such findings would nicely complement our results. Swartz (1998) presents some results on this subject that are somewhat difficult to interpret.

Another set of studies examines how the adoption of a poison pill affected stock prices (see, e.g., Ryngaert (1988)). The stock price reaction to the adoption of a pill, however, reflects not only the expected effect of the pill but also inferences that investors draw as to management's private information about the likelihood of a bid (Coates (2000)). Furthermore, and most importantly for our purposes, having a pill in place cannot be expected to affect substantially the extent to which incumbents are protected form removal (Coates (2000)). Virtually all firms can put a poison pill in place after a hostile bid has been launched – a "morning after pill" – without the need for a shareholder vote; thus, boards that do not have a pill at any given point in time do still enjoy the protection of a "shadow" or "off-the-shelf" pill. Furthermore, as explained, once a bid is launched, the extent to which a pill can protect against the bid depends on the extent to which the firm's charter protects the board from being voted out by shareholders.

Garvey and Hanka (1999), Johnson and Rao (1997), and Borokohovich, Brunarski, and Parrino (1997) study the effects that antitakeover charter provisions have on various aspects of corporate performance. However, they lump together effective staggered boards, which we predict to have significant effects, with other antitakeover arrangements, such as fair price arrangements, which theory predicts should have only mild or insignificant effects. Indeed, in the modern landscape of takeover contests, provisions like fair price arrangements are largely irrelevant. With incumbents permitted to maintain poison pills, hostile bidders cannot purchase a controlling block without first replacing incumbents with a board willing to accept the offer, and fair price arrangements generally do not apply to takeover bids approved by the board. The above studies also rely in part on data from the 1980's, i.e., prior to the legal developments that permitted incumbents to maintain pills indefinitely and thus gave effective staggered boards their anti-takeover potency.

Bebchuk, Coates, and Subramanian (2002, 2003) do study the effects of effective staggered boards using data from recent years. But these studies focus only on a subset of the effects that such defenses have on shareholder value. In particular, these studies find that effective staggered boards have a negative effect on shareholder

returns after a hostile bid is made (Bebchuk, Coates, and Subramanian (2002, 2003)). We supplement this work, whose findings are consistent with others, by investigating the overall impact that effective staggered boards have on shareholders.

Finally, in a recent study that our results complement, Gompers, Ishii, and Metrick (2003) identify substantial correlation between firm value during the 1990s and a broad-based index (G) of twenty four management-favoring provisions. Their index includes staggered boards as one of its twenty four elements. The study does not attempt to isolate the effects of any given provision, and it thus does not identify which arrangements are especially responsible for the association between the G index and lower firm value.

There are reasons to expect some of the provisions in the G index to matter much more than others, and to expect some of the provisions to be, at least partly, a product of the others. For example, business combination statutes, control-share acquisition laws, and fair price provisions – three elements of the G index – are protections introduced largely during the 1980s and made largely redundant by the subsequent development of the poison pill (Bebchuk, Coates, and Subramanian (2003)). In terms of endogeneity, some of the arrangements forming the G index (e.g., change-in-control provisions in compensation contracts) can be unilaterally installed by incumbent directors without shareholder approval. Whether incumbents adopt such provisions might depend on how insulated management is by other arrangements, such as the existence of charter-based staggered boards, that incumbents cannot adopt without shareholder approval.

Our study complements the Gompers-Ishii-Metrick study by looking inside the box of the governance index to identify the effect of the staggered board element of this index. We study the correlation between firm value and this provision controlling for all the other governance provisions in the governance index. Our hypothesis is that staggered boards, especially charter-based staggered boards, make a substantial contribution to the negative correlation between the broad governance index and low firm value that the Gompers-Ishii-Metrick study identified.

3. The Data

3.1 Sources

Our focus is on the correlation between firm value and staggered boards during the period 1995-2002. As explained earlier, and as discussed in detail by Subramanian (2004), the legal rules that made effective staggered boards so powerful were firmly in place by 1995.

The data set includes all the companies for which there was information in one of the volumes published by the Investor Responsibility Research Center (IRRC) during the period 1995-2002. The IRRC published volumes in 1995, 1998, 2000, and 2002. Each volume includes between 1,400 and 1,800 firms, with some changes in the list of included firms from volume to volume. In any given year of publication, the firms in the IRRC volume accounted for more than 90% of the total capitalization of the U.S. stock market.

The IRRC volumes provide data, now largely available at WRDS, about various corporate governance provisions for each included company, as well as the company's state of incorporation. The IRRC data that is electronically available at WRDS indicates whether each company has a staggered board but does not distinguish (following Gompers-Ishii-Metrick (2003)) between charter-based and bylaws-based staggered boards. However, the information whether a staggered board is established in the charter or in the bylaws is provided in the IRRC volumes themselves, and we had it hand-coded.

Because IRRC did not publish volumes in each year, we filled in for missing years by assuming that the governance provisions reported in any given year were in place also in the year preceding the volume's publication. In the case of 1996, for which there was no IRRC volume in the subsequent year, we assumed that the governance provisions were the same as reported in the IRRC volume published in 1995. We verified that using a different "filling" method does not change the results.

Data about firm financials was taken from Compustat. Data about the age of firms was taken from the dataset of Gompers-Ishii-Metric, who in turn estimated it based on the first date for which pricing information about a firm is available on CRSP.

We excluded firms with a dual class structure, where the holding of superior voting rights might be the key for entrenching incumbents. We also excluded real estate investment trusts (REITs), which have their own special governance structure and entrenching devices. Our dataset includes both financial and nonfinancial firms; running our regressions on a subset including only nonfinancial firms (as done by Daines (2001)) yields similar results throughout.

3.2. Summary Statistics

Table 1 provides summary statistics for the percentage of firms with staggered boards, charter-based staggered boards, and bylaws-based staggered boards in our data. Throughout the period 1995-2002, the percentage of firms in our dataset that have a staggered board was about 60%. Among the staggered boards, a small minority – between 9% and 12% -- were established in the firm's bylaws rather than in the firm's charter.

Table 1: Incidence of Staggered Board

Year	Staggered Board	Charter-based Staggered Board	Bylaws-based Staggered Board
1995	61.4%	54.0%	7.4%
1998	59.0%	53.5%	5.5%
2000	60.3%	54.5%	5.8%
2002	61.6%	54.9%	6.7%

Let us now provide some summary statistics about the incidence of staggered boards in different subsets of our data, focusing on firms in 2002 (the picture is similar for earlier years). Figure 1 and Figure 2 depict the presence of staggered boards in

different subsets of the data defined by market capitalization and firm age. As these two figures indicate, when we divide firms into different segments by market capitalization (Figure 1) and age (Figure 2), staggered boards have a substantial presence in each segment.[6]

Figure 1: Staggered Board Incidence and Market Capitalization

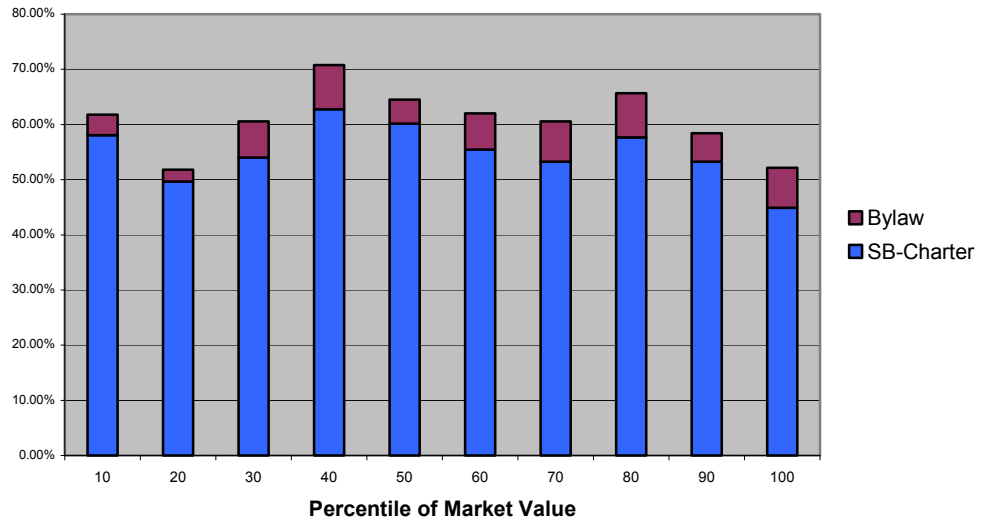
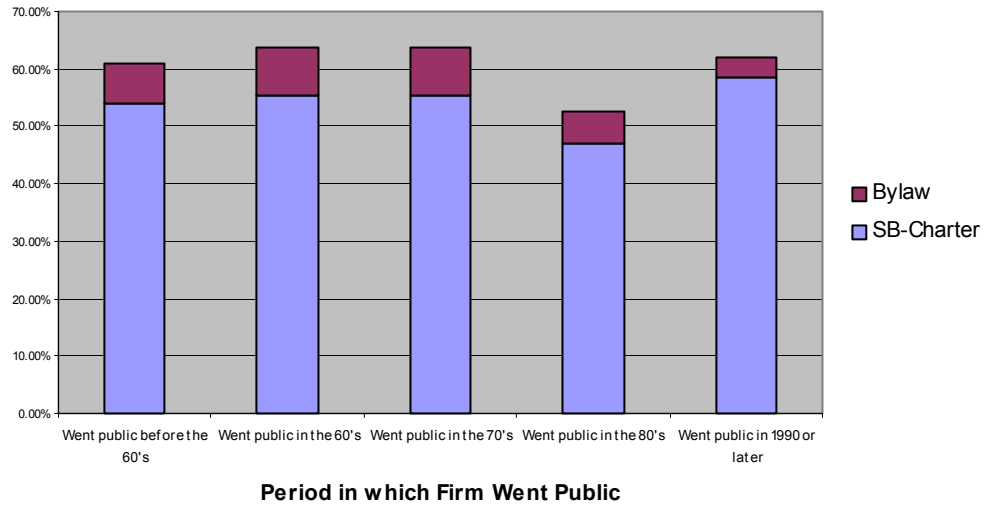


Figure 2: Staggered Board Incidence among Different Cohorts

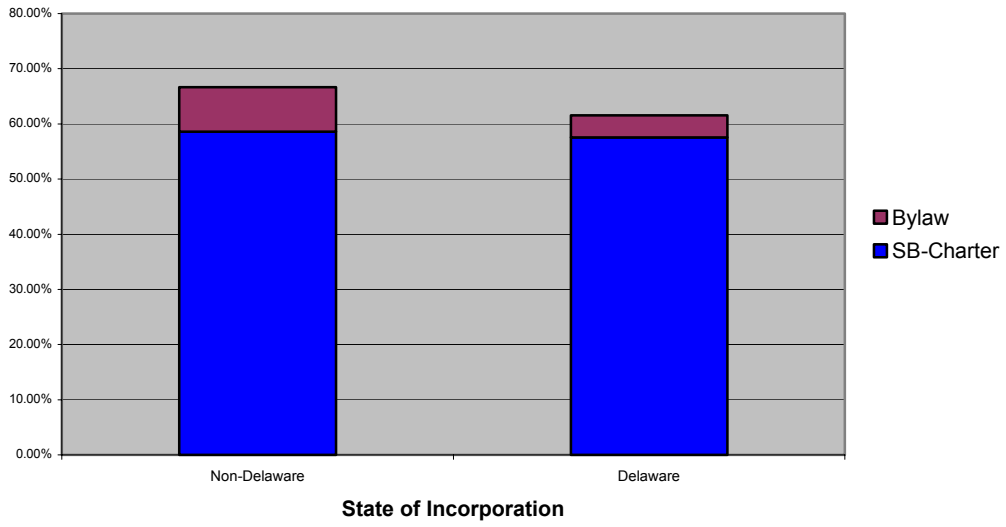


[6] When we divided firms into groups based on industry sectors, we found that staggered boards have a large presence in each industry sector. Gillan, Hartzell, and Starks (2003) report that the incidence of many governance provisions varies greatly among industries, but this variance appears to be lower for staggered boards than for many other provisions.

Figures 1 and 2 also indicate that staggered boards that are bylaws-based exist in each of the firm groups. However, the fraction of staggered boards that are bylaws-based tends to be smaller among firms with lower market capitalization and among firms that went public in the past one or two decades.

About 60% of the firms in our dataset are incorporated in Delaware. As Figure 3 indicates, the percentage of staggered boards is the same among both Delaware and non-Delaware firms. However, the fraction of staggered boards that are bylaws-based is somewhat smaller among Delaware firms than among non-Delaware firms.

Figure 3: Staggered Board Incidence among Delaware and Non-Delaware Companies



4. Results

4.1. The Association between Staggered Boards and Firm Value

In studying the association between staggered boards and firm value, we use Tobin's Q as the measure of firm value. In doing so we follow earlier work on the association between corporate arrangements and firm value (Demsetz and Lehn (1985), Morck, Shleifer and Vishny (1988), McConnell and Servaes (1990), Lang and Stulz (1994), Yermack (1996), Daines (2001), and LaPorta et al. (2001)).

We use the definition of Q used by Kaplan and Zingales (1997), Gompers, Ishii, and Metrick (2003) and others. According to this specification, Q is equal to the market value of assets divided by the book value of assets, where the market value of assets is computed as the book value of assets plus the market value of common stock less the sum of book value of common stock and balance sheet deferred taxes.[7] Our dependent variable is industry-adjusted Tobin's Q, which is a firm's Q minus the median Q in the firm's industry in the observation year. We defined a firm's industry by the firm's 2-digit primary SIC code. Using the Fama-French classification of industry groups, rather than SIC two-digit codes, yields similar results.

We ran four regressions. In all of the regressions, we included all the controls used by Gompers, Ishii, and Metrick: the assets of the firm (in logs), the age of the firm (in logs) (Shin and Stulz (2000)), whether the firm is incorporated in Delaware, dummies for 2-digit SIC codes, and year fixed effects. In some regressions we included additional controls as detailed below. In all the regressions (as well as in subsequent regressions) we used White (1980) robust standard errors to account for potential heteroskedasticity.

Our first regression included only the controls listed in the preceding paragraph, and their results are displayed in Table 2, column 1. As the table indicates, staggered boards are associated, at 99% confidence, with a lower firm value. This is the case for both the longer period and the more recent period.

[7] This measure, and simpler ones that drop deferred taxes, have been regularly used in light of the complexities involved in the more sophisticated measures of Q and the evidence of very high correlation between this proxy and more sophisticated measures (see, e.g, Chung and Pruitt (1994)).

Table 2: Staggered Boards and Firm Value

This table reports pooled OLS regressions of industry-adjusted Tobin's Q on staggered boards and various controls. Tobin's Q is the ratio of the market value of assets and the book value of assets, where the market value of assets is computed as book value of assets plus the market value of common stock less the sum of book value of common stock and balance sheet deferred taxes. Industry-adjusted Tobin's Q is equal to Tobin's Q minus the median Tobin's Q in the industry, where industry is defined by two-digit SIC code. The staggered board dummy is equal 1 if the firm has a staggered board provision and 0 otherwise. The other provisions index is equal to the G Index (Gompers-Ishii-Metrick (2003)) minus 1 if the company has a staggered board and equal to the G index otherwise. Insider Ownership I is equal to the fraction of shares held by insiders if this fraction is below 0.05 and 0.05 otherwise. Insider Ownership II is equal to 0 if the fraction of shares owned by insiders is below 0.05, equal to this fraction minus 0.05 if this fraction is between 0.05 and 0.25, and equal to 0.20 otherwise. Insider ownership III is equal to zero if this fraction is below 0.25 and to this fraction minus 0.25 otherwise. ROA is the ratio of net income to total assets. CAPEX/assets is the ratio of capital expenditures to assets. R&D / Sales is the ratio of research and development expenditures to total sales. Year dummies and a dummy indicating when R& D data is missing are included in all regressions, but their coefficients (as well as the constant) are omitted. OLS estimates are White (1980) robust. Standards errors appear in parentheses and levels. Levels of significance are indicated by *, **, and *** for 10%, 5%, and 1% respectively.

Variable	(1)	(2)	(3)	(4)
Staggered Board	-0.21***	-0.166***	-0.169***	-0.173***
	(0.034)	(0.036)	(0.035)	(0.044)
Index of Other Provisions		-0.024***		-0.013
		(0.006)		(0.01)
Log(Index of Other Provisions)			-0.179***	
			(0.058)	
Log(Assets)	0	0.003	0.003	-0.05***
	(0.009)	(0.009)	(0.009)	(0.014)
Log(Company Age)	-0.168***	-0.147***	-0.148***	-0.234***
	(0.023)	(0.023)	(0.023)	(0.032)
Delaware Incorporation	0.02	0.016	0.016	-0.013
	(0.031)	(0.031)	(0.031)	(0.04)
Insider Ownership I				-0.025*
				(0.015)
Insider Ownership II				0.029***
				(0.009)
Insider Ownership III				-0.03***
				(0.008)
Return on Assets				0.028
				(0.029)
CAPEX / Assets				0.963***
				(0.325)
R&D / Sales				0.01
				(0.008)

We next turn to controlling for corporate governance provisions other than staggered boards. Staggered boards are correlated with a high G index, an index that Gompers-Ishii-Metrick (2003) found to be is correlated with reduced firm value. Thus, the question arises whether the identified correlation between staggered boards and

lower firm value might be simply driven by other management-favoring provisions that companies with staggered boards have.[8]

To control for other governance provisions, we create an index of all the other 23 management-favoring provisions followed by IRRC. Essentially we divided the corporate governance index G that was constructed by Gompers, Ishii, and Metrick (2003) into two components – the staggered boards element and all the other provisions in the index. G is constructed by adding one point for each management-favoring provision (among the set of 24 possible management-favoring provisions) that a firm has. Having a staggered board adds one point to the index. We therefore defined for each firm a parameter labeled the Index of all Provisions (G*), which is equal to the firm's governance index G minus the contribution of the firm's staggered board if any – i.e., equal to G minus 1 if the firm has a staggered board and to G otherwise.

Column 2 displays the results of a regression in which the Index of Other Provisions is added as an independent variable. The Other Provisions Index is significant at a 99% confidence level, consistent with the possibility that staggered boards do not fully drive the correlation between higher G and lower firm value. Notwithstanding the inclusion of the Index of Other Provisions G*, the coefficient of staggered boards remains significant at a 99% confidence level.

We should note that staggered boards are correlated not only with G but also with the Index of Other Provisions G*. Staggered boards and G* have a stable positive correlation of 0.32-0.36 during the period 1995-2002. Because the correlation between staggered boards and G* introduces a problem of co-linearity, it might bias our results against finding significance for either one of these parameters. Thus, even if the introduction of G* had made the coefficients of staggered boards no longer significant, it would not have eliminated the possibility that staggered boards are in fact significant. We do not have to address this problem, however, because the coefficient of staggered

[8] In current work, Faleye (2004) finds that staggered boards are correlated with lower firm value, obtaining results consistent with those reported in columns 1 and 5 of Table 2, but he does not proceed to investigate whether staggered boards are significant controlling for other governance provisions.

boards remains negative and statistically significant despite the stacking of the deck against such a finding.

It should also be noted that the introduction of the Index G* reduces by about 20%-25% the magnitude of the coefficient of staggered boards. However, the coefficient of staggered boards remains large and, in particular, is seven times larger than the coefficient for an average one-point increase in G*. This result indicates that staggered boards play a relatively large role compared with the average role of other provisions included in the G index. It is worth noting that the distribution of G* is somewhat concentrated, with about 80% of the firms located within a range of 7 index points. This pattern is consistent with the possibility that staggered boards play a relatively large role in the correlation between G and lower firm value.

Column 3 of Table 2 displays the results of a regression in which *log*(G*) rather than G* is used as a control. As this column indicates, using this different functional form for G* produces similar results.[9]

We next ran a regression with additional controls to those used by Gompers, Ishii, and Metrick (2003) in their Q regressions. Specifically, we added controls for the level of insider ownership (allowing, as is standard, for insider ownership to have different effects below 5%, between 5% and 25%, and above 25%), the return on assets in the current and prior year, and the ratio of capital expenses to total assets, the ration of R&D expenditures to sales. The results are displayed in Column 4. They indicate that, with the addition of these controls, the coefficient of staggered boards retains its magnitude and 99% confidence.

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[9] In unreported regressions we used, instead of G* or *log*(G*), a dummy variable indicating whether the firm's level of G* exceeds the median level (i.e., whether the firm is in the top half of the firms in terms of G*). Staggered boards remain significant at 99% confidence. The coefficient of staggered boards did not significantly change and was substantially *higher* than the coefficient associated with being in the top half of firms in terms of G*. For the association with firm value, having a staggered board appears to be significantly more consequential than being in the top rather than the bottom half in terms of G*.

In other unreported regressions, we used as controls dummies based on dividing the firms in our dataset into smaller groups based on their levels of G*, including dividing these firms into separate groups for each possible level of G*. None of these specifications had a substantial effect on the magnitude and significance of the coefficient of charter-based staggered boards.

It is worth noting that the coefficient of staggered boards is not only statistically significant but also economically significant. During the period 1995-2002, and controlling for other governance provisions, having a staggered boards is associated with a Tobin's Q that is lower by 17 points.

As to the coefficients of the various controls we used, one that is worth noting is the coefficient of Delaware incorporation. In all of the regressions whose results are displayed in Table 2, the coefficient of Delaware incorporation is statistically insignificant. The correlation between Delaware incorporations and firm value has already attracted some attention because of its potential implications for the long-standing debate on regulatory competition among states. Daines (2001) finds positive association between firm value and Delaware incorporation during the period 1981-1996. However, Bebchuk and Cohen (2003) find no such correlation in 1999, and Subramanian (2004) finds that such association did not exist during the 1990s except for small firms during the period of 1991-1996. But none of the above three studies controls, as we do, for corporate governance provisions.

For a robustness check, we also ran annual regressions.[10] We ran for each year two regressions, both controlling for the Index of Other Provisions G*. The first regression does not include controls other than those used by Gompers, Ishii, and Metrick (2003). The second regressions uses all the additional controls we used in the regression reported in Column 4 of Table 2. The results of all the annual regressions are displayed in Table 3 below: The first column of Table 3 reports for each year the coefficient of staggered boards and the Other Provisions Index in regressions of the first type; the second column of Table 3 does the same for the second type of regression.

[10] A regression with fixed firm effects does not fit our context. Because firms hardly change their staggered boards status during the period of our study, either by adopting a staggered board or dropping it, there is little point in running a regressions that focuses on the variation over time within each given firm.

Table 3: Staggered Boards and Firm Value – Annual regressions

This table reports annual regressions of industry-adjusted Tobin's Q on staggered boards and various controls. The independent variable is industry-adjusted Tobin's Q defined in the same way as in table 2. The independent variables in the regression displayed in Column (2) are the same as in the regression reported in Column (4) of Table 2. The table reports only the coefficients of the staggered board dummy and the Other Provisions Index. Fama-Macbeth coefficients are calculated and reported in the last row. Levels of significance are indicated by *, **, and *** for 10%, 5%, and 1% respectively.

Year	(1) Staggered Board	(1) Other Provisions Index	(2) Staggered Board	(2) Other Provisions Index
1995	-0.121*	-0.014	-0.229**	-0.007
	(0.074)	(0.013)	(0.108)	(0.020)
1996	-0.192**	-0.0007	-0.142*	0.006
	(0.008)	(0.014)	(0.008)	(0.019)
1997	-0.171**	0.015	-0.90	0.004
	(0.084)	(0.016)	(0.086)	(0.018)
1998	-0.189*	-0.031*	-0.216**	0.004
	(0.106)	(0.017)	(0.119)	(0.026)
1999	-0.325**	-0.070**	-0.338*	-0.06
	(0.151)	(0.028)	(0.175)	(0.038)
2000	-0.110	-0.045**	-0.066	-0.034
	(0.111)	(0.021)	(0.108)	(0.024)
2001	-0.136*	-0.017	-0.079	0.004
	(0.079)	(0.014)	(-0.069)	(0.015)
2002	-0.045	-0.018	-0.089*	-0.015
	(0.061)	(0.012)	(0.053)	(0.012)
Fama-Macbeth Coefficients	-0.161***	-0.023***	-0.156***	-0.012***
	(0.0004)	(0.0000)	(0.0006)	(0.0000)

As Table 3 indicates, the coefficient of staggered boards is negative in each and every year in either type of regression. Furthermore, the coefficient of staggered boards is significant in 6 out of the 8 annual regressions in the first column, and in 5 out of the 8 annual regressions in column 2. When the annual regressions are put together using the Fama-Macbeth methodology, the coefficients of staggered boards are negative at the 99% confidence level in both regressions.

Interestingly, the Index of Other Provisions G* fares less well in the annual regressions. In the first type of regression, it is negative and significant in only three of the eight years. In the second type of regression, it is positive in half of the years, and it is not significant in any year.

4.2. Exploring Simultaneity

The identified correlation between staggered boards and lower firm value raises a question of simultaneity. How should we interpret the identified correlation? Do staggered boards bring about a lower firm value? Or is the correlation produced by the selection of staggered boards by firms with lower firm value -- either because boards of low-value firms feel more vulnerable to a takeover or because low-quality management tends both to produce low value and to seek antitakeover protection?

To explore this question we use the fact that charter-based staggered boards, which are the ones that are most used and most effective in protecting the board from removal, cannot be adopted by incumbents without shareholder approval. Amending a firm's charter requires a vote of shareholder approval. Furthermore, during the 1990s, shareholders were generally unwilling to approve charter provisions establishing a staggered board. Recognizing shareholders' unwillingness to approve such provisions, management of existing companies without such provisions generally did not attempt to get such provisions adopted. During 1991-2002, the annual percentage of firms in which management brought a proposal to adopt a charter-based staggered board was less than 0.5%; in 2000, among the 4000 firms whose voting is followed by the IRRC, only ten had a vote on a proposal to stagger the board. In six of these firms, management had over 35% of the shares, and of the remaining four attempts, only one was successful ((Klausner (2003)).

Thus, if a firm did not have a charter-based staggered board in 1990, the year in which the first IRRC volume was published, its management was generally unable to adopt such a staggered board later on. A firm's not having a charter-based board at any given time T during our period of study thus does not reflect a time-T decision by management not to have such a protective arrangement; it might simply reflect the fact that the company did not have such an arrangement in the beginning of the 1990s.

Note that, whereas shareholders were generally unwilling to permit existing firms to adopt charter-based staggered boards during the 1990s, shareholders did not have the power to cause the dismantling of charter-based staggered boards in firms that had them when the decade started. While the shareholders of many firms with a

charter-based staggered board passed and continue to pass shareholder resolutions in favor of de-staggering the board, such resolutions are precatory, and management commonly ignores them. Thus, for firms that went public prior to 1990, whether they had a charter-based staggered board at the end of our period of study largely depended on the firms' "initial condition," i.e., on whether they had a charter-based staggered board in 1990.

We therefore ran regressions similar to those in Table 2 limiting ourselves to firms that went public prior to 1990 and for which we had governance information the 1990 IRRC volume. We ran four regressions using different controls, and we display the results of these regressions in Table 4 below. The first regression (Column 1) controlled for other governance provisions during the year of observation, and the second regression (Column 2) controlled for other governance provisions that were in place in 1990. In both regressions we controlled for the full set of firm characteristics we used earlier. In both regressions, the coefficient of staggered boards is negative, large, and statistically significant at 99% confidence level. As before, the coefficient of staggered boards is seven times larger than the coefficient of the other provisions index.

It might be argued that, although the existence of a staggered board in 1990 could not have resulted from a low value in the late 1990s, both the 1990 staggered board and the low value later on might be a product of some other early parameter of the company. On this view, having a feature X in the 1980s -- say, a "self-serving" management -- could have led both to a firm's having a charter-based staggered board in 1990 and also to the firm's having a low firm value both in 1990 and continuing into the late 1990s. In assessing the plausibility of this explanation, note that public companies and their management change a fair amount over time.

Whatever managerial team ran a company in the 1980s is commonly no longer in charge in the late 1990s or the beginning of this decade. In any event, to explore this possibility, we ran two additional regressions in which we also control for industry-adjusted Q in 1990. The results of these regressions, one using the index of other provisions at the time in which the industry-adjusted Tobin's Q is measured and the

other using the index of other provisions in 1990, are displayed in Columns 3 and 4 of Table 3.

Table 4: 1990 Staggered Boards and Firm Value 1996-2002

This table reports pooled OLS regressions of industry-adjusted Tobin's Q during the period 1995-2002 on whether the firm had a staggered board in 1990 and various controls. The independent variable is industry-adjusted Tobin's Q as defined in the regressions of Tables 2. The dummy staggered board 90 is equal to 1 if the firm had a staggered board provision in 1990 and to 0 otherwise. The Index of Other Provisions is equal to the G Index in 1990 minus 1 if the company had a staggered boarding 1990 and equal to the G index in 1990 otherwise. Tobin's Q 90 is the industry-adjusted Tobin's Q in 1990. All other independent variables are defined in the same way as in the regressions of Table 2. As before, the coefficients on the constant, the year dummies, and the dummy indicating when R&D data is missing, are omitted. Estimates are White (1980) robust. Standard errors appear in parentheses, and levels of significance are indicated by *, **, and *** for 10%, 5%, and 1% respectively.

Variable	(1)	(2)	(3)	(4)
Staggered Board 90	-0.068**	-0.059*	-0.066**	-0.06*
	(0.034)	(0.034)	(0.032)	(0.033)
Other Provisions Index	-0.012*		-0.009	
	(0.008)		(0.007)	
Other Provisions Index 90		-0.015**		-0.011
		(0.007)		(0.007)
Tobin's Q 90			0.398***	0.397***
			(0.043)	(0.043)
Log(Assets)	0.075***	0.077***	0.073***	0.074***
	(0.011)	(0.011)	(0.01)	(0.01)
Log(company Age)	-0.101***	-0.093***	-0.052	-0.047
	(0.036)	(0.036)	(0.035)	(0.035)
Delaware Incorporation	-0.03	-0.025	-0.02	-0.017
	(0.031)	(0.031)	(0.03)	(0.03)
Insider Ownership I	-0.008	-0.009	-0.011	-0.012
	(0.012)	(0.012)	(0.011)	(0.011)
Insider Ownership II	0.013*	0.013	0.012	0.011
	(0.008)	(0.008)	(0.007)	(0.007)
Insider Ownership III	-0.008	-0.008	-0.013**	-0.013**
	(0.006)	(0.006)	(0.006)	(0.006)
Return on Assets	7.992***	7.994***	6.599***	6.603***
	(0.35)	(0.351)	(0.347)	(0.347)
CAPEX / Assets	-0.107	-0.117	0.543*	0.536*
	(0.32)	(0.32)	(0.286)	(0.286)
R&D / Sales	5.341***	5.341***	4.149***	4.152***
	(0.748)	(0.751)	(0.739)	(0.742)

The results indicate that (industry-adjusted) Q during 1995-2002 is indeed positively correlated (at the 99% confidence level) with (industry-adjusted) Q in 1990.

However, even after controlling for 1990 Q, having a staggered board in 1990 remains correlated with the firm's value during the period 1995-2002 with a coefficient that remains large and significant at the 99% confidence level.

The above regressions indicate that the association between the staggered boards of pre-1990 firms and low firm value during 1995-2002 cannot be fully accounted for by the initial selection of staggered boards by firms that had low value already in 1990. Rather, the results are consistent with the considered association being at least partly produced by the staggered board that companies adopted during the 1980s or earlier for whatever reason. Of course, dealing with simultaneity is a notoriously difficult task, and it would be worth continuing to investigate what caused some firms but not others to have staggered boards in 1990. But the results thus far are consistent with staggered boards bringing about, and not merely reflecting, low firm value.

Based on the results reported in Table 4, we estimate that having a staggered reduces Tobin's Q by 0.06-0.066. For the pre-1990 companies for which the regressions of Table 4 are run, average Q was 1.56 in 2002 and 1.88 during the period 1995-2006. Thus, our estimates indicate that having a staggered board reduces Tobin's Q by 3%-4% on average.

4.4 Charter-Based vs. Bylaw-Based Staggered Boards

Lastly, we turn to examine whether charter-based staggered boards and bylaws-based staggered boards might have different effects. To this end, we re-ran all the 3 regressions displayed in Table 2 that controlled for the other provisions index, replacing the dummy variable for a staggered board with separate dummy variables for a charter-based staggered board and a bylaws-based staggered board. The results are displayed in Table 5.

Table 5: Charter-based Staggered Boards vs. Bylaws-based Staggered Boards

This table reports pooled OLS regressions of industry-adjusted Tobin's Q on charter-based staggered boards and bylaws-based staggered boards and various controls. The regressions are the same as those reported in Columns (2), (3), and (4) of Table 2 except that the independent variable staggered board is replaced by two independent variables: (i) Charter-based staggered board, which is equal to 1 if the firm has a staggered board provision in its charter and 0 otherwise, and (ii) Bylaws-based staggered boards, which is equal to 1 if the firm has a staggered board provision in its bylaws (but not in its charter) and 0 otherwise. As before, the coefficients on the constant, the year dummies, and the dummy indicating when R&D data is missing are omitted. Estimates are White (1980) robust. Standard errors appear in parentheses, and levels of significance are indicated by *, **, and *** for 10%, 5%, and 1% respectively.

Variable	(1)	(2)	(3)
Charter-Based Staggered Board	-0.170***	-0.172***	-0.181***
	(0.036)	(0.036)	(0.044)
Bylaws-Based Staggered Board	-0.086	-0.087	-0.069
	(0.054)	(0.054)	(0.074)
Other Provisions	-0.025***		-0.013
	(0.006)		(0.010)
Log(Other Provisions)		-0.183***	
		(0.057)	
Log(Assets)	0.003	0.003	-0.050
	(0.009)	(0.009)	(0.014)
Log(Company Age)	-0.148***	-0.149***	-0.236***
	(0.023)	(0.023)	(0.031)
Delaware Incorporation	0.019	0.019	-0.010
	(0.032)	(0.032)	(0.041)
Insider Ownership I			-0.026*
			(0.015)
Insider Ownership II			0.029***
			(0.009)
Insider Ownership III			-0.029***
			(0.008)
Return on Assets			0.028
			(0.029)
CAPEX / Assets			0.928***
			(0.326)
R&D / Sales			0.010
			(0.008)

As Table 5 indicates, in all the regressions, the coefficient of charter-based staggered boards is negative and significant at 99% confidence. As to bylaws-based staggered boards, their coefficient is negative but not statistically significant in all the regressions. We also did F test that enabled us to reject (at the 99% confidence level)

the hypothesis that the estimated coefficients of charter-based staggered boards and bylaw-based staggered boards are the same.

It should be noted that our data enables us to identify all the staggered boards that are relatively ineffective against removal by determined shareholders. Our data enables us to identify those staggered boards whose effectiveness is reduced by their being established in the bylaws rather than in the charter. But it does not identify those charter-based staggered boards whose effectiveness is reduced because shareholders can pack the board or remove the board without cause. Thus, the coefficients of charter-based staggered boards we obtain in the above regressions might under-estimate the correlation between a fully effective staggered board and lower firm value. In future work, it would be interesting to separate charter-based staggered boards that are fully effective from those where shareholders can pack the board or remove it without cause.

5. Concluding Remarks

This paper has investigated empirically whether substantial protection from removal – such as the protection now provided by staggered boards in a majority of U.S. public companies – enhances or reduces the value of firms. This question has been long debated, and defenders and opponents of management insulation have identified many ways in which management insulation could affect value, some positive and some negative. Putting this long-standing question to an empirical test, we find that staggered boards are associated with a lower firm value. The reduction in firm value associated with staggered boards is economically meaningful.

The paper has also explored the question of simultaneity presented by the identified correlation. We find that, even after controlling for firm value in 1990, having a staggered board in 1990 is associated with a significantly lower value during the period 1995-2002. This finding is consistent with staggered boards brining about a lower firm value and not merely being selected by low-value firms.

We find evidence consistent with the possibility that bylaws-based staggered boards do not exhibit the same negative correlation with firm value as charter-based

staggered boards do. In the normal case in which shareholders do not desire to replace the board, bylaws-based staggered boards provide the same commitment to continuity and stability in board composition that supporters of staggered boards applaud. However, bylaws-based staggered boards do not provide the same insulation from removal by determined shareholders as charter-based staggered boards, and such insulation might be associated with lower firm value.

Our analysis also helps to understand what drives the negative correlation between firm value and a governance index based on twenty-four provisions that prior work has identified. Our evidence indicates that staggered boards significantly contribute to this negative correlation. We investigate in subsequent work (Bebchuk, Cohen, and Ferrell, 2004)) whether there are any provisions other than staggered boards that play an important role in producing this negative correlation.

Another index of corporate governance that has recently received attention is that put together by the Institutional Shareholder Services (ISS). In a recent study commissioned by the Institutional Shareholder Services (ISS), Brown and Caylor (2004) report positive correlation between this index and several measures of firm value and performance. The study also reports that the sub-part of the ISS index that seems to be most important is the one based on board composition and not the one based on takeover defenses. Interestingly, however, the ISS incorporates the presence of staggered boards into the board composition part of its index. Our findings suggest that it would be worth testing whether staggered boards play an important role in the formation of whatever correlation exists between the ISS index and firm value.

By way of limitation, our analysis does not identify the effects of levels of protection from removal more moderate than those arising from staggered boards. Of the firms that do not have effective staggered boards, some have (1) arrangements under which shareholders can remove the board immediately, and others have (2) arrangements under which shareholders can remove the board only at the next annual meeting. We do not identify which of these two groups (1) and (2) has higher market value, focusing only on the consequences of having the considerable level of protection

provided by effective staggered boards. Comparing groups (1) and (2) in terms of market value is a worthwhile topic for further research.

Our analysis also leaves for future work some questions about staggered boards. Among other things, it would be desirable to investigate how staggered boards affect various corporate decisions, as well as why firms going public often staggered boards in their IPO charters (Bebchuk (2003), Klausner (2003)). Such additional work is called for by our findings that staggered boards are a key feature of current corporate governance. Staggered boards deserve much attention from future work.

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