Board Declassification and Bargaining Power*

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Abstract:

We examine the relations between recent board declassifications, takeover activity and takeover gains over the period 2003-2011. We report that firms that declassified their boards in the previous five years are more likely to be the target of a takeover than other firms. We also report that these firms receive lower takeover offers and realize lower abnormal returns around the announcement of the transaction. Additionally, the takeover bids received by these firms are more likely to result in a successful takeover. These results are consistent with the interpretation that firms that declassified their boards have lost some bargaining power.

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1. Introduction

A classified (staggered) board is a corporate governance provision requiring that the board members are placed into different classes (usually three) and serve overlapping terms. In contrast to a board that is not classified, directors serving on a classified board do not stand for elections annually. Each year, only one class of directors is elected for the number of years equal to the number of classes that comprise the board.

There is widespread agreement that classified boards are one of the most effective antitakeover devices. Because only one class of directors can be replaced each year, an outsider who gains or wants to gain control of a firm has to wait up to two years to gain control of the board unless incumbent board members decide to resign voluntarily. This delay in assuming full control of the target's board can be prohibitively costly to the acquirer. Additionally, a classified board can effectively prevent any hostile bidder from acquiring a large block of the target's equity because of the board's power to adopt and maintain a poison pill.¹

Recent empirical research seems to be in agreement that classified boards are effective in deterring takeovers. Bates, Becher, and Lemmon (2008), Kadyrzhanova and Rhodes-Kropf (2011), and Sokolyk (2011) show that classified boards decrease the likelihood that a firm obtains a takeover bid in any given year. The research on the impact of classified boards on other outcomes of takeover activity, however, seems mixed. Bebchuk, Coates, and Subramanian (2002) find that among target firms in hostile transactions, firms with classified boards remain independent more often and do not receive higher takeover premiums. They conclude that

¹ A poison pill is a special right attached to a share of common stock to buy additional shares of the target or the acquirer or both at a bargain price when an outside acquirer accumulates a certain percentage (for example 15 or 20 percent) of the target firm's shares. These rights cannot be exercised by the acquirer.

classified boards are detrimental to shareholders because they help protect inefficient managers in their positions and do not provide any bargaining benefit. In contrast, Bates, Becher, and Lemmon (2008) find that target board classification does not change the likelihood that a firm, once targeted, is ultimately acquired. Additionally, they report that while the gains to target shareholders are similar for firms with and without a classified board, the gains to acquiring shareholders are lower when the target firm has a classified board. They conclude that classified boards do not facilitate managerial entrenchment. Rather, they help extract a higher proportion of total bid surplus for target firm shareholders. Finally, Kadyrzhanova and Rhodes-Kropf (2011) show that takeover premiums are higher for target firms with classified boards but only in concentrated industries. They reason that in concentrated industries, where targets are relatively scarce, classified boards provide a bargaining benefit to target firm shareholders.

Despite some evidence on the bargaining benefit of classified boards, the view that classified boards detract from shareholder wealth has found a great deal of support in practice. For example, the leading governance advisory firms Institutional Shareholder Services (ISS) and Glass Lewis & Co. have adopted blanket guidelines that advise shareholders to always vote for proposals to repeal classified boards and against proposals to adopt classified boards.² Similar policies are adopted by large mutual funds and pension funds including Fidelity and TIAA-CREF.³ A more recent manifestation of this "one-size-fits-all" approach to classified boards comes from the Shareholder Rights Project (SRP), a clinical corporate governance advisory program housed at the Harvard Law School. SRP focuses on assisting institutional investors in submitting to Fortune 500 and S&P 500 firms shareholder proposals to declassify their boards. In

² For example, see page 17 of the 2014 U.S. Proxy Voting Guidelines Summary from March 12, 2014 downloadable at http://issgovernance.com/files/ISSUSSummaryGuidelines2014March12.pdf.

³ See, for example, page 16 of the TIAA-CREF Policy Statement on Corporate Governance downloadable at http://www1.tiaa-cref.org/ucm/groups/content/@ap ucm p tcp/documents/document/tiaa01010204.pdf.

the proposal template that SRP shows on its website, SRP cites the results in Bebchuk, Coates, and Subramanian (2002), Bebchuk and Cohen (2005), Faleye (2007), and Masulis, Wang, and Xie (2007) as evidence that classified boards are value destroying and should be eliminated.⁴

By all accounts, shareholder activists, including SRP, have been successful in their push for declassifying corporate boards. While about 60% of the companies in our data had a classified board from 1990 to 2003, the proportion of firms with classified boards steadily and significantly declined afterwards to about 46% in 2011 (see Table 1). This trend is even more pronounced in S&P 500 companies. According to the Shark Repellent database, there were around 300 firms with a classified board in the index from 1998 to 2002. After that, the number of companies with a classified board steadily declined to 126 in 2011 and only 60 in 2013.

In this paper, we take advantage of the observed numerous declassifications in the recent decade and revisit the question whether classified boards provide bargaining power. We do so by identifying firms that declassified their boards and comparing takeover activity and outcomes shortly after declassification to takeover activity and outcomes in the rest of our sample. Our sample period is 2003-2011. We report the following results. Within the five years following board declassification, the firms that declassify their boards are significantly more likely to receive a takeover offer than the firms that maintain classified boards or the firms that never had a classified board or have had a declassified board for longer than five years. We estimate that after controlling for other potential determinants of a takeover, the likelihood of receiving a takeover bid in any given year is 2.3% larger, which is substantial given that observed bid

⁴ Bebchuk and Cohen (2005) and Faleye (2007) provide evidence of a negative relation between a staggered board and firm value in the 1990s. Additionally, Faleye (2007) finds that firms with classified boards have a lower sensitivity of forced CEO turnover to firm performance. Masulis, Wang, and Xie (2007) find that firms with classified boards make worse acquisitions.

frequency is 4.1% in the rest of the sample. We also find that the takeover bids received by declassifying firms are significantly more likely to result in a successful acquisition. However, the firms that declassify their boards realize significantly lower abnormal returns around the announcement of the takeover and significantly lower bid premiums relative to the stock price four weeks prior to the takeover announcement. These effects are also substantial. For example, the bid premiums are about 9% lower for the firms that declassify their boards, which is about a 30% reduction compared to the premiums received by other target firms. We find that both the higher takeover likelihood effect and lower takeover premium effect are also present, and significantly so, in the subsample of S&P 500 firms, a subsample with high declassification activity.

To evaluate whether target managers of declassifying firms trade lower premiums for extracting private benefits during change-in-control transactions, we identify post-transaction employment outcomes for target CEOs following the completed transactions in our sample. We find that the CEOs of target firms that declassify their boards are not employed by the acquiring firm, either as a manager or as a director, more often than the CEOs of other target firms.

Collectively, the results suggest that shortly after declassifying, firms that declassify their boards have lower bargaining power than other firms in the sample. One interpretation of this result is that classified boards provide bargaining power and that declassifying weakens the bargaining position of target firms. An alternative interpretation, however, is that firms that choose to sell themselves, also simultaneously declassify. In that interpretation, declassifying is just a byproduct of the decision to sell and the higher observed frequency of bidding is not caused by the declassification. Although we cannot explain lower takeover premiums under this alternative, we do explore it further. Specifically, we examine how the decision to declassify

relates to the takeover activity in the firm's industry, shareholder push for declassifications, and to other observable firm characteristics. We show that the most significant observable determinant of the decision to declassify in our models is the receipt of a non-binding shareholder proposal demanding declassification in prior year and we also show that the decision to declassify or the receipt of a shareholder proposal demanding declassification are not related to the takeover activity in the firm's industry in the prior year. These results suggest that firms in our sample are more likely to declassify their boards because they are pressured to do so by shareholders rather than because they are putting themselves up for sale.

With this paper, we provide new evidence that is complementary to the findings in prior studies that suggest that classified boards deter takeovers (Bates, Becher, and Lemon, 2008; Sokolyk, 2011; Kadyrzhanova and Rhodes-Kropf, 2011) and those that suggest that classified boards enhance bargaining power (Bates, Becher, and Lemon, 2008; Kadyrzhanova and Rhodes-Kropf, 2011). These prior studies are conducted using data from the 1990s and early 2000s—the time period when changes in classified board status were infrequent. Consequently, these studies examine the relation between board classification and takeover probability and outcomes. In contrast, we examine how board declassifications in 2003-2011 relate to takeover probability and outcomes. Our results suggest that the recent wave of declassifications had a significant and economically meaningful impact on takeover activity for the declassifying firms and that an average firm that declassified its board has lost some bargaining power.

The rest of this paper is organized as follows. In section 2 we discuss the relevant literature and form empirical predictions. In section 3 we describe our data and provide summary statistics of our sample. In section 4 we describe our empirical analysis and report results. In section 5 we summarize the results and conclude.

2. Literature Review and Empirical Predictions

2.1. Literature Review

The debate on how antitakeover provisions affect shareholders has been ongoing for well over three decades. Despite the voluminous body of research, however, academics still seem to disagree on the net effects of these provisions, including classified boards, on shareholders (Straska and Waller, 2013).

Early event studies on the wealth impact of adopting antitakeover provisions combine classified boards with other types of antitakeover provisions in the sample. These studies provide mixed results, with some reporting an insignificant effect (DeAngelo and Rice, 1983) or a positive effect (Linn and McConnell, 1983; McWilliams, 1990), and some reporting a negative effect (Jarrell and Poulsen, 1987; Bhagat and Jefferis, 1991). More recent event study evidence appears somewhat more conclusive. Faleye (2007) reports a negative announcement effect for firms adopting a classified board and a positive announcement effect for firms repealing the provision. Guo, Kruse and Nohel (2008) report a positive announcement effect for firms repealing classified boards but only when the declassification is immediate. They also report that the firms that declassify gradually experience a negative announcement return.

Long-term studies on the wealth effects of maintaining classified boards unanimously report that in the cross-section, classified boards negatively correlate with firm value (Bebchuk and Cohen, 2005; Faleye, 2007). Additionally, Faleye (2007) reports that firms with classified boards exhibit lower sensitivity of forced CEO turnover to performance, lower sensitivity of observing a proxy contest to performance, and lower likelihood of implementing a shareholder proposal that passes; and Masulis, Wang, and Xie (2007) report that firms with classified boards make

acquisitions that result in lower announcement returns for their shareholders. Collectively, these long-term studies support the view that classified boards reduce shareholder wealth, presumably because they protect managers from the market for corporate control and thus enable managerial self-dealing and increase agency costs.

New time-series evidence from Cremers, Litov, and Sepe (2013), however, challenges the findings in Bebchuk and Cohen (2005) and Faleye (2007). Specifically, using a longer sample period and controlling for firm fixed effects, they report that changes in classified board status positively correlate with changes in firm value. They attribute the findings in the prior cross-sectional studies to reverse causation—firms with lower valuation tend to adopt and maintain classified boards as opposed to classified boards causing lower firm values. They also show that adopting classified boards seems to be more beneficial for firms in which they are more likely to promote long-term incentives. Unlike in Faleye (2007), they do not find any significant relation between a classified board and either voluntary or forced CEO turnover.

Recent studies on the impact of classified boards on takeovers seem to agree that these provisions are effective in deterring takeovers. Bates, Becher, and Lemmon (2008), Kadyrzhanova and Rhodes-Kropf (2011), and Sokolyk (2011) show that classified boards decrease the likelihood that a firm obtains a takeover bid in any given year. This evidence is consistent with the view that potential bidders see takeovers of firms with classified boards as more costly and thus refrain from making a bid.

The research on the impact of classified boards on other outcomes of takeover activity, however, seems mixed. Bebchuk, Coates, and Subramanian (2002) find that among firms that received hostile bids between 1996 and 2000, firms with classified boards remain independent more often. They do not find any difference in the premium for the firms with and without

classified boards but report that shareholders of firms with classified boards realize 8% - 10% lower returns. They conclude that classified boards are detrimental to shareholders because they help protect inefficient managers in their positions and do not provide any bargaining benefit in terms of higher premiums.

In contrast, using a more comprehensive sample of friendly and hostile bids that occurred between 1990 and 2002, Bates, Becher, and Lemmon (2008) find that target board classification does not change the likelihood that a firm, once targeted, is ultimately acquired. Additionally, they report that while the gains to target shareholders are similar for firms with and without a classified board, the gains to acquiring shareholders are lower when the target firm has a classified board. They conclude that classified boards do not facilitate managerial entrenchment. Rather, they suggest that the provisions help extract a higher proportion of total bid surplus for target firm shareholders. Finally, Kadyrzhanova and Rhodes-Kropf (2011) show that takeover premiums are higher for target firms with classified boards but only in concentrated industries. They also show that for firms in concentrated industries, firm value increases in classified boards. They reason that in concentrated industries, where targets are relatively scarce, classified boards provide a valuable bargaining benefit to target firm shareholders.

Collectively, the existing research seems to be in agreement that classified boards deter takeovers. Whether this benefits or harms shareholder, however, still seems unclear.

Notwithstanding this disagreement, the view adopted in practice seems to be that classified boards are harmful for shareholders, with governance advisory firms, institutional investors, and shareholder activists pushing for declassifications and arguing against new classifications. The end result has been a significant decline in the proportion of public firms with classified boards, especially among large visible firms that are also included in S&P 500.

2.2. Empirical Predictions

In this paper, we examine the relations between recent board declassifications and takeover activity and outcomes. Our main focus is the relation between board declassification and the likelihood of takeover bidding and the relation between board declassification and the distribution of gains from the takeover.

Given previous research findings, one should expect a higher frequency of bidding for firms that declassify their boards compared to firms that remain classified. However, because of the nature of declassifying firms, it is not clear how large or significant of an increase in takeover frequency to expect. As we document in this study, the declassifications are more common among large visible firms. However, these firms are also less likely to be the target of a takeover. We expect that if board classification was an effective antitakeover device for these types of firms, and if some of these firms were a potential takeover target but not targeted because of the classified board, we will see a higher frequency of bids for these firms shortly after they declassify their board as any potential bidder will see the takeovers of these firms as less costly.

With respect to the distribution of gains from the takeover, we expect that if a classified board serves as an effective bargaining device then bargaining power should weaken after declassifying. We therefore expect lower premiums for the target firms that declassify their boards or higher gains for acquiring firm shareholders or both, compared to the target firms that remain classified.

⁵ Target firm size is significantly negatively related to the likelihood of receiving a bid or to the likelihood of takeover in numerous studies including Bates, Becher, and Lemmon (2008), Sokolyk (2011), or Kadyrzhanova and Rhodes-Kropf (2011).

We note that, in forming our predictions, we make two assumptions. First, we assume that the declassifying firms do not substitute the loss of a classified board for an alternative antitakeover device or an alternative source of bargaining power. Given that the push from shareholders for declassifying is accompanied by the push for shareholder friendly governance structures in general, this assumption seems plausible. Second, we assume that firms do not self-select into declassifying. That is, we assume that an average firm that declassifies does not do so because it is on the market to sell itself to another firm. We address the plausibility of this assumption in section 4.4.

3. Data and Summary Statistics

3.1. Initial Panel with Classified Board Data

We obtain our initial sample from two Governance files provided by Risk Metrics. The two files cover the time periods 1990-2006 and 2007-2011 and provide data on firm coverage by antitakeover and other governance provisions, including whether a firm has a classified board. The data covering the earlier period, formerly provided by Investor Responsibility Research Center (IRRC), are available approximately every other year and cover about 1500 large firms (S&P 1500) in each edition in the years up to 1995, and approximately 2000 large and smaller firms thereafter. The data covering the later period are available annually and cover approximately 1500 firms each year. We combine the two files to create an unbalanced panel for the period 1990-2011. Since we are interested in examining how eliminating a classified board affects the likelihood of takeover bidding and takeover gains we require that each sample firm be included in at least two consecutive releases of the governance data so that we can calculate at least one change in the board classification status. We eliminate from the sample firm-year

observations with dual class voting shares (approximately 9% of the observations) since the superior voting rights make other antitakeover devices, including a classified board, unimportant.

To begin our analysis, we first summarize the data on the incidence of classified boards and board classification changes and present the results in Table 1. We note that before doing this summary, we manually checked board classification status over time for each firm for which we observed both (in some cases multiple) classifications and declassifications in the sample.⁶
While some firms did classify and declassify in the sample period, most instances of multiple classifications and a declassifications were a result of coding inconsistencies from prior to 2007 to after 2007.⁷

Consistent with Cremers, Litov, and Sepe (2013), we observe that from 1993 until 2004 about 60-62% of firms in our sample have classified boards. This proportion is fairly stable over time. After that, the proportion steadily declines. In 2011, only 46% of our sample firms have a classified board. The incidence of board classifications and declassifications is fairly small and similar from 1993 to 2002, with 84 firms classifying and 55 firms declassifying. After that, board declassifications significantly outweigh classifications, with 12 firms classifying and 255 declassifying from 2003 to 2011. Because we are interested in measuring how firm declassifications affect takeover outcomes, we restrict the time period of our study to begin in 2003. We do so to draw meaningful comparisons of the takeovers of the target firms that recently

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⁶ We do so by examining proxy statements.

⁷ We observe that prior to 2007, in most cases, a firm was considered declassified when the declassification process started, regardless of whether the declassification process was immediate or phased out. That is, the board was considered declassified when a management proposal to declassify passed at the annual meeting, or when the board amended the bylaws. After 2007, in most cases, a firm was considered declassified when all members of the board stand for election for the first time after the declassification process started.

declassified their boards to the takeovers of other target firms. We use the data before 2003 for historical (lagged) observations.

Before matching the governance data to other databases, we first fill in the annual data for the sample firms in the missing years in the period 1990-2006 by assuming that the classified board status is the same in the year ending prior to the year of the release of the data and remains constant until the year prior to the next release of the governance data. We next clean the data and collect additional information to eliminate the possibility of misclassifying a firm that may have recently declassified its board. Specifically, we collect the starting dates and the ending dates from proxy statements for all declassifications that we observe for the sample firms in 2003-2011 and five years prior to 2003. The starting date of the declassification process is defined as the shareholder meeting date when a binding management proposal to declassify the board passes at the meeting or when the board amends the bylaws to eliminate the classified board. The ending date of the declassification process is the date of the annual meeting when all board members stand for election for the first time since the declassification process started. In addition, we collect all binding management and shareholder proposals to eliminate the classified board from Fact Set's SharkRepellent database, screen for those that passed and match them to our sample firms. We thus identify additional starting dates for the declassification process for some sample firms even if the declassification starts or ends out of sample to make sure that we do not misclassify any sample firm. We collect ending dates of the declassification process for these firms from the proxy statements.

In our data, the declassification process lasts anywhere from zero to three years, with an average of 1.77 years. For our analysis, we code the firm as not having a classified board after the ending date of the declassification process and having a classified board before that time.

This is the convention in the Risk Metrics database starting in 2007. In unreported robustness tests we eliminate all firm year observations between the start of the declassification process and its end and obtain results similar to those reported here.

After cleaning the data on the classified board status, we match firm-year observations in the governance file to CRSP and Compustat to obtain identifying information, accounting data, and common stock data. We require that each observation has identifying information on both CRSP and Compustat and a non-missing value of total assets from Compustat. The final panel for the period 2003-2011 has 13,187 observations for 2,240 firms.

3.2. Takeover Sample

We obtain a sample of takeover attempts from the Securities Data Corporation (SDC) US

Mergers and Acquisitions database. We select domestic mergers and acquisitions with an
announcement date between 1/1/2001 and 12/31/2013 and a deal value greater than \$1 million.

We consider only the transactions coded by SDC as "mergers", "acquisitions", and "acquisitions of majority interest" and exclude from the sample spinoffs, where the acquirers are the firm's own shareholders or recapitalizations or bankruptcy acquisitions, where the acquirers are listed as creditors or preferred stockholders. We also eliminate from the sample transactions where the acquirer or its ultimate parent is the same as the target firm and transactions where the bidder toehold at announcement is greater than 50%.

We retain all announced transactions, whether completed or not. To distinguish between the economic effects of initial and follow-on bids, we group bids for the same target into auction sequences following Bates, Becher, and Lemon (2008). A bid is defined as an initial bid, if no other bid for the target firm is identified as announced in the 365 days prior to the announcement

date. The bids are part of an auction sequence if announced after the initial bid. If there are no follow on bids, the initial bid is a sole bid in the auction. We retain all initial bids announced after the beginning of 2003 and before the end of 2012. The follow on bids after 2012 are retained, provided that they are part of an auction sequence started before the end of 2012.

We match the initial bids to CRSP by historical CUSIP and by company name. We verify the matches by comparing company names in SDC and in CRSP. We then match the initial takeover attempts to the governance panel data file restricting the deal announcement date to be within one year of the fiscal year end date. The 2,240 firms in the panel sample are associated with 557 initial takeover attempts and 43 follow-on bids.

In Panel A of Table 2, we provide summary statistics of deal characteristics obtained from SDC for various subsamples of data. We divide the sample of takeover attempts based on the target board classification into three subsamples: i) target firms with classified boards, ii) target firms that declassified their boards within the last five years, and iii) other target firms, which consists of firms that either never had a classified board or that declassified more than five years ago. Our focus is on target firms that recently declassified, i.e., subsample ii. The statistical significance of the difference in means and medians between subsamples i and ii is defined by asterisks in column (1); and between subsamples ii and iii by asterisks in column (3).

Firms with classified boards receive 318 initial takeover bids during the sample period corresponding to 4.28% of the firm-year observations. Firms that recently declassified receive 44 bids, which is 5.65% of firm-year observations. The rest of the firms receive 195 bids, which is

⁸ To make sure that we do not misclassify any target firm, we verify by hand the board classification status of every target firm checking the proxy statements right before receiving a takeover offer.

⁹ We chose a period of five years to identify the declassification as recent to obtain a reasonable sample size. When we reduce the period to three years, the sample size of firms that recently declassified reduces by about a quarter. However, the main results remain similar even with this reduced sample size.

3.93% of the observations. It seems that firms that recently declassified are more likely to receive a takeover offer; the likelihood of bidding is significantly higher compared to firms that never had a classified board or declassified more than five years ago (p-value=0.026), and marginally higher compared to firms with a classified board (p-value=0.076).

Of the initial bids received by target companies that recently declassified their boards, 9.1% have some follow on bidding, 34.1% involve equity as a method of payment, 2.3% are characterized by SDC as hostile, 95.45% are successfully completed, 13.6% are structured as tender offers, the average (median) deal value is 9,191.7 (4,008.1) millions of dollars, and the average toehold at deal announcement is 0.00%. All but three of these deal characteristics of the initial takeover attempts for firms that recently declassified do not statistically differ from the characteristics of deals for firms with classified boards or for other firms. The three statistical differences we observe are in the proportion of completed deals, toehold, and deal size. The initial takeover attempts for firms that recently declassified are more likely to complete than the takeover attempts for firms with a classified board, i.e. firms in subsample i (95.45% vs. 81.76%, p-value=0.022) and for firms that never had a classified board or declassified more than five years ago, i.e. firms in subsample iii (95.45% vs. 78.46%, p-value<0.01); the toehold for firms that recently declassified is significantly smaller compared to the firms in subsample iii (0.0% vs. 1.81%, p-value 0.08); and the deal size for firms that recently declassified is significantly higher compared to subsample i (average 9,191.7 vs. 4,440.8, p-value<0.01) or subsample iii (average 9, 191.7 vs. 4,349.2, p-value<0.01). The takeover attempts of firms that recently declassified are about twice as large as other deals.

In Panel B of Table 2, we summarize target firm accounting, ownership, and board characteristics. All accounting data are from Compustat's Fundamentals Annual database

measured at the fiscal year end prior to the takeover offer announcement. The data on board ownership and board size and structure are obtained from the Directors database provided by Risk Metrics. The data on institutional ownership come from the Institutional (13f) Holdings database provided by Thomson Reuters. The S&P 500 data is from Compustat's Index Constituents database. All continuous variables other than board size and composition are winsorized in the whole panel sample at the 1st and 99th percentile.

As expected, given the differences in deal values, target firms that recently declassified are significantly larger than the target firms in subsample i or subsample iii. They are also significantly more likely to be included in the S&P 500 (43.18% vs. 19.81% in subsample i and 22.05% in subsample iii, both p-values<0.01). We report that they also have significantly higher leverage (average 0.28 vs. 0.19 in subsample iii, p-value =0.01). However, the valuation, as measured by market-to-book of assets is similar to the valuation of other firms.

Not surprisingly, the board ownership of target firms that recently declassified is significantly smaller than the ownership in subsample i (average 3.74% vs. 6.27%, p-value=0.074) or in subsample iii (average 3.74% vs. 6.88%, p-value=0.065). Institutional ownership fraction, concentration, and turnover¹⁰ (averages 76.63%, 0.051, and 0.233, respectively) are, however, similar to those of other firms. Firms that recently declassified also have a significantly larger fraction of outside board members on their boards (average 79.4%) than do other target firms, and their boards are significantly larger compared to the firms that never had a classified board or declassified more than five years ago (average 9.5 vs. 8.53, p-

¹⁰ We calculate the investor turnover of a firm as the weighted average of the total portfolio churn rates of its institutional investors over the previous four quarters, as defined by Gaspar, Massa, and Matos (2005).

value 0.016). Finally, the frequency with which target firms' CEOs also chair a board are not significantly different across subsamples.

We noted above that the tendency to declassify is more common among large visible firms. Of the 258 declassification end dates that we observe in our sample (i.e., the governance panel sample matched to Compustat with non-missing total assets), 133 are for S&P 500 constituents and 125 arefor non-S&P 500 firms. However, S&P 500 firm-year observations only comprise 30% of our sample. We also observe that while the proportion of firms with classified boards did not differ much for S&P500 and non-S&P500 firms in 2003 (61.5% vs. 63.7%) it did differ significantly in 2011 (36.5% vs. 52.7%). Thus, it is not surprising that the target firms that declassified their boards within the last five years are much larger than other target firms.

Since the target firms that recently declassified are much larger than other target firms, one would expect that they face a different likelihood of receiving a takeover offer, and receive a different takeover premium not only because they declassified but also because they are much larger. To address this issue, we control for size in all of our tests. Additionally, we perform all of our tests not only on the full sample of takeovers, but also on the subsample of takeovers where the target firm is an S&P 500 constituent. Based on the summary statistics in Panel C of Table 2, target firms that recently declassified and are in the S&P 500 are quite similar to target firms in subsample i and subsample iii that are also in the S&P 500. Thus, if we observe differences in the likelihood of takeover bidding and takeover gains for firms that recently declassified in comparison to other firms in the subsample of S&P 500 target firms, it is more likely that those differences are due to the recent board declassification and not due to size differences.

4. Empirical Results

4.1. Board Declassification and the Likelihood of Receiving a Takeover Bid

Based on univariate results in the previous section, there does seem to be a difference in the likelihood of receiving a takeover offer for firms that declassified within the last five years (subsample ii) and for firms with classified boards (subsample i) or other firms (subsample iii). However, because of the differences in the characteristics of these firms, one can only make meaningful inferences about takeover probabilities after controlling for size and other firm characteristics. To this end, we estimate a probit regression of the likelihood of receiving a takeover bid for a firm-year observation as a function of board classification and declassification status and other control variables similar to those used by Bates, Becher, and Lemmon (2008). Specifically, we include controls for firm size, market-to-book of assets, leverage, inclusion in the S&P500, and abnormal stock performance measured as the average monthly net-of-market stock return computed over the prior fiscal year. The regressions also control for industry fixed effects constructed using the 49 industry classifications of Fama and French (1997)¹¹ and calendar year fixed effects. The results are reported in Table 3.

In Panel A of Table 3, columns (1) and (2), we first estimate the likelihood of being a takeover target on the whole sample of firms. In column (3) we run the same test on the subsample of S&P 500 firms. Statistical significance is evaluated using robust standard errors adjusted for non-independence of observations (clusters) by firm. Marginal effects computed at

¹¹ Industry definitions are obtained on 10/5/2011 from an updated file on Kenneth French's website at http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/det_49_ind_port.html.

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the mean values for continuous independent variables, and computed for change from zero to one for indicator variables, are reported in brackets.

In contrast to prior studies that use a different time period, we find that having a classified board is not associated with the likelihood of receiving a takeover offer. However, the results in column (1) suggest that eliminating a classified board within the last five years is associated with a significantly higher likelihood of receiving a bid (coefficient p-value<0.01). Firms that recently declassified their boards are 2.3% more likely to be the target of a takeover in any given year, all else equal. Given that the sample average takeover probability, excluding the firms that recently declassified, is about 4.1%, the 2.3% increase is substantial.

In column (2), we include ownership characteristics as additional control variables.¹²
Specifically, we include board ownership, and institutional ownership fraction, concentration, and turnover, all of which can potentially impact the likelihood of receiving a takeover offer and the distribution of gains in a takeover (Gaspar, Massa, and Matos, 2005). Once the ownership variables are included, we do not see a significant relation between recent board declassification and takeover likelihood. This lack of relation might be due to missing observations. Of the 44 takeover targets that declassified in the last five years, we have all ownership variables for only 32. However, when we estimate the takeover likelihood only for the subsample of S&P 500 firms in column (3), we again see a significant and positive relation between recent board declassification and the likelihood of a takeover bid even with ownership variables included in the regression.¹³ We have ownership data for all but two takeover targets that are in the S&P 500. The marginal effect estimate in column (3) suggests that the likelihood of a takeover offer

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¹² Including board characteristics as additional control variables does not alter the results reported here.

¹³ The results without ownership variables in the model are very similar to those reported in Table 3 column (3).

for an S&P 500 firm that recently declassified increases by about 3.0%. This is a very large increase given that the probability of receiving a takeover offer is about 3.0% in an average year for an average S&P 500 firm excluding firms that recently declassified.¹⁴

In untabulated results we estimate the probit models separately on two other subsamples. In the first set of estimations, we include in the sample only firms with classified boards and firms that recently declassified. We find similar results to those reported in Table 3. In the second set of estimations, we include in the sample only firms that recently declassified and all other firms without a classified board and again find similar results. From these results it seems that the likelihood of receiving a takeover offer is significantly higher for firms that declassified their boards in the last five years compared to both the firms that have a classified board and firms that have had a declassified board for a period greater than five years or never had a classified board.

With respect to other control variables in our models, we find similar effects to those reported in prior studies (Bates, Becher, and Lemmon, 2008; Gaspar, Massa, and Matos, 2005). Larger firms, firms with higher market-to-book ratios, and firms with higher abnormal returns in the prior year are less likely to receive takeover bids, while firms with high leverage are more likely to receive a bid. Additionally, firms with a higher fraction of institutional owners and

¹⁴ We also estimate the probit regressions on the sub-sample of non-S&P 500 firms and find much weaker results, in most cases insignificant.

¹⁵ Specifically, in the re-estimation of the model in column (1), the coefficient on the indicator for recent board declassification is positive and significant (p-value<0.01) with a marginal effect of 0.024; and in the re-estimation of the model in column (3) with only S&P 500 firms included, the coefficient on the indicator for recent board declassification is positive and significant (p-value<0.01) with a marginal effect of 0.042.

¹⁶ Specifically, in the re-estimation of the model in column (1), the coefficient on the indicator for recent board declassification is positive and significant (p-value<0.01) with a marginal effect of 0.031; and in the re-estimation of the model in column (3), the coefficient on the indicator for recent board declassification is positive and significant (p-value=0.01) with a marginal effect of 0.039.

firms with more short-term investors (higher institutional investor turnover) are more likely to receive takeover bids.

4.2. Board Declassification and the Distribution of Gains in the Takeover

In this section, we first examine how recent board declassifications relate to takeover premiums for target firm shareholders. We then examine how the declassifications relate to acquirer gains.

We measure the takeover premium three ways. First, we calculate the premium as the offer price per share paid by the acquirer (from SDC) scaled by the target's stock price 28 days prior to the announcement of the takeover, minus 1. We call this the "Raw premium." Second, we follow Kadyrzhanova and Rhodes-Kropf (2011), Wang and Xie (2009), and others and calculate the premium as cumulative abnormal returns (CARs) over an 11-day event window surrounding the announcement of a takeover bid {-5, +5}. Daily abnormal returns are computed as the firm's return minus the return on the CRSP value weighted NYSE/AMEX/Nasdaq index. We call this the "CAR premium." Third, as in Bates, Becher, and Lemon (2008), we estimate the auction premium as CARs to target shareholders cumulated from 42 trading days prior to the initial bid and ending either one day after the withdrawal of the final bid or on the effective date of the acquisition. We call this the "Auction premium." As in Bates and Becher (2012), we eliminate from the sample transactions with raw premiums less than -20% (12 transactions). While large and positive pre-bid run-ups are common, negative premiums are typically associated with a precipitating event, such as a sudden unexpected business failure (Bates and Becher, 2012). 17

¹⁷ These transactions were also deleted in the tests examining the likelihood of receiving a takeover offer. If these transactions were not deleted, the results reported in Table 3 would be substantially unchanged. The regression results reported later in Table 5, Panel A, would become stronger, and those reported in Table 5, Panel B, weaker but only in some specifications when using the sub-sample that includes only S&P 500 firms.

In Table 4, we summarize average and median takeover premiums for various subsamples of target firms. In Panel A, we report the summaries for all target firms divided into three subsamples based on target firm board classification status as we did in Table 2. The average (median) raw premium is 31.1% (27.9%) and 31.3% (28.8%) for target firms that have classified boards (subsample i) and firms that have either never had a classified board or have been without one for a period greater than five years (subsample iii), respectively. In contrast, the average (median) raw premium is 22.2% (19.4%) for firms that recently declassified (subsample ii). This premium is significantly smaller compared to both subsample i and subsample iii. Comparing CAR premiums rather than Raw premiums yields similar results. While the average (median) CAR premiums are 20.8% (19.7%) and 23.8% (21.5%) in subsamples i and iii, respectively, the average (median) CAR premium is only 14.8% (12.2%) in subsample ii, which is significantly less than the premium in subsample i and the premium in subsample iii. When comparing Auction premiums, however, we do not see any significant differences between the three subsamples. These results suggest that for two out of three measures of takeover premium, we see significantly smaller premiums for target firms that recently declassified compared to the rest of the target firms.

In Panel B of Table 4, we repeat the analysis in Panel A but include only S&P 500 target firms. We find a pattern in the premiums similar to the pattern in Panel A. However, the differences in premiums are not statistically significant when comparing subsamples i and ii. The average and median Raw premium and CAR premium in subsample ii are significantly smaller than those in subsample iii, but we find no statically significant difference when comparing Auction premiums in subsamples ii and iii. Thus, we have only some indications that the

premiums for firms that recently declassified are reduced compared to the premiums observed for other target firms.

In Table 5, we report the results of ordinary least squares regressions of target firm premiums on board classification and declassification status and other control variables. The dependent variable in Panel A is the Raw premium, in Panel B the CAR premium and the Auction premium. Control variables in all regressions include target firm size, market-to-book of assets, leverage, an indicator for target firm inclusion in S&P500, and deal characteristics including bidder toehold and indicator variables for whether the deal compensation included equity (stock), whether the deal was hostile, whether the deal was completed, whether the deal involved a tender offer for the target firm's shares, and whether there was a competing bid in the auction. In some regression specifications we also include board ownership and institutional ownership characteristics. The regressions with CAR premium as a dependent variable also include target stock pre-bid run-up calculated as the cumulative daily abnormal return over the window {-46, -6} relative to deal announcement date. In regressions with Auction premium as the dependent variable, all but two deal and target firm characteristics coincide with the initial bid. The two characteristics are the indicator for hostile deal, which we replace with an indicator that equals one if any bid in the auction was hostile; and the indicator for completed deal, which we replace with an indicator that equals one if any bid in the auction was completed. Statistical significance is evaluated using robust standard errors. All regressions also include calendar year fixed effects.

The results in Panel A suggest that target firms that declassified their boards within the last five years receive significantly lower Raw premiums compared to other target firms in the sample after controlling for other observable determinants of premium. Regressions in columns (1) and (2) are estimated using all target firms, in columns (3) and (4) using only S&P 500 target

firms. Regressions in Columns (1) and (3) include basic target firm characteristics and deal characteristics, in columns (2) and (4) they also include ownership characteristics. The coefficient estimates of -0.093 (p-value<0.01) and -0.124 (p-value<0.01) in columns (1) and (2) indicate that the premium is 9.3% to 12.4% lower for firms that recently declassified their boards compared to other target firms in the sample, ceteris paribus. The coefficient estimates of -0.113 (p-value=0.03) and -0.120 (p-value=0.03) in columns (3) and (4) suggest lower premiums of similar magnitude also in the subsample that includes only S&P 500 firms.

In Panel B, we report results only for the regressions that include the basic set of controls but note that the regressions that include ownership variables produce very similar results. The dependent variable in columns (1) and (2) is the CAR premium, and in columns (3) and (4) it is the Auction premium. Regressions in columns (1) and (3) are estimated using all target firms, in columns (2) and (4) using only S&P 500 target firms. The coefficient estimates of -0.094 (p-value<0.1) and -0.100 (p-value<0.01) in columns (1) and (3) suggest that compared to other target firms, target firms that declassified their boards within the last five years realize 9.4% lower CAR premiums and 10.0% lower Auction premiums, on average, ceteris paribus. The coefficient estimates of -0.105 (p-value<0.1) and -0.125 (p-value=0.015) in columns (2) and (4) similarly suggest that among S&P 500 target firms, target firms that recently declassified their boards realize 10.5% lower CAR premium and 12.5% lower Auction premium.

In untabulated results we estimate the regressions separately on two other subsamples. In the first set of estimations, we include in the sample only firms with classified boards and firms that recently declassified. We find similar results to those reported in Table 5, albeit statistically

 $^{\rm 18}$ Including board characteristics in addition to these variables produces similar results.

weaker in some cases.¹⁹ In the second set of estimations, we include in the sample only firms that recently declassified and all other firms without a classified board. We find similar but again statistically weaker results compared to those reported in Table 5.²⁰ From these results it seems that the premiums realized by target firms that declassified their boards in the last five years are significantly lower in comparison to both the firms that have a classified board and firms that have either never had a classified board or declassified more than five years ago.

With respect to other control variables in our models, we find similar effects to those reported in prior studies (e.g., Bates, Becher, and Lemmon, 2008; Kadyrzhanova and Rhodes-Kropf, 2011). Premiums are lower when the consideration for the deal includes acquirer equity, but higher when the deal is completed and when it is structured as a tender offer. Larger target firms and firms with higher market-to-book ratios tend to realize lower premiums. CAR premiums are also lower when there is a large pre-bid run-up.

In untabulated results we also examine the relation between recent board declassification and acquirer abnormal announcement return. This analysis is limited to public acquirers. We do not find any meaningful differences between acquirer CARs in the takeovers of firms that declassified their boards in the last five years and the acquirer CARs in the takeovers of other firms. We also do not find any significant relations controlling for other observable determinants

¹⁹ Specifically, in the re-estimation of the models in Panel A, columns (1) and (3), the coefficients on the indicator for recent board declassification are -0.107 (p-value<0.01) and -0.137 (p-value<0.01). In the re-estimation of the models in Panel B, columns (1), (2), (3), and (4), the coefficients on the indicator for recent board declassification are -0.072 (p-value<0.01), -0.063 (p-value=0.07), -0.063 (p-value=0.09), and -0.085 (p-value=0.06), respectively.

²⁰ Specifically, in the re-estimation of the models in Panel A, columns (1) and (3), the coefficients on the indicator for recent board declassification are -0.094 (p-value<0.01) and -0.098 (p-value=0.105). In the re-estimation of the models in Panel B, columns (1), (2), (3), and (4), the coefficients on the indicator for recent board declassification are -0.092 (p-value<0.01), -0.082 (p-value=0.08), -0.105 (p-value<0.01), and -0.138 (p-value=0.03), respectively.

of acquirer CARs. Thus, we do not find that the acquirers of firms that recently declassified their boards are able to extract a larger portion of the overall gains.

4.3. Board Declassification, Deal Completion, and Negotiated Benefits for Target Managers

The results presented so far indicate that firms that declassified their boards within the last five years face a higher likelihood of being a takeover target and when targeted, these firms realize lower takeover premiums than other sample firms. Given that the takeover premiums are lower, one may ask whether managers of these target firms resist these takeovers. Looking back at Table 2, the answer appears to be no. The takeover attempts for targets that recently declassified their boards are no more likely to involve competing bids, and are no more likely to be hostile than the attempts for other target firms. Additionally, based on the univariate results in Table 2, the initial takeover attempts are significantly more likely to complete. In untabulated results, we confirm that both the initial deals and the auction sequences involving target firms that recently declassified their boards are significantly more likely to complete even after controlling for other observable determinants of deal and auction completion.²¹ Thus it seems that there is very little resistance to these deals on the part of target managers.

One explanation for the results presented so far is that firms that recently declassified their boards have weaker bargaining position compared to other firms in the sample, because of the loss of a powerful antitakeover device, i.e. a classified board. Another possible explanation, however, may be that managers of these firms gave up their firms for low premiums in exchange

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²¹ Specifically, we estimate logistic regressions of deal completion and auction completion on the same regressors as those used in Table 5 using the whole sample and S&P 500 firms only. The marginal effects of coefficient estimates on the board declassification indicator are always negative and almost always significant at the 99% confidence level (p-value<0.01).

for negotiated private benefits for themselves. Hartzel, Ofek, and Yermack (2004) report that target managers often receive private benefits negotiated directly with acquirers in completed takeovers, with the most frequent being post-takeover employment with the acquirer. To examine this possibility, we identify instances in which target CEOs are employed by acquirers following completed auctions for at least 6 months. We search for target CEO names in the acquirer proxy statements and 10-K filings one and two years after the transaction and also perform Factiva searches.

The post-takeover employment of target firm CEOs is summarized in Table 6. The number of observations is lower in this table compared to Table 2 because we include only completed auctions, the deals made by public acquirers and, since private firms do not file proxy statements or 10-K reports, only those deals made by private acquirers where we can locate post-takeover employment of the CEO. As evidenced from the table, CEOs of target firms that recently declassified become employees of the acquirer in about 34% of the cases, directors in about 31% of cases, and employees or directors in about 41% of cases. These frequencies are generally a little lower than the frequencies in other sub-samples; however, none of the differences is statistically significant at any conventional confidence level. These results do not suggest that target managers of firms that recently declassified their boards trade lower premiums for negotiated private benefits, as proxied by target CEO post-takeover employment in the acquiring firm.

4.4. Board Declassification Decision and Endogeneity Concerns

Collectively, the results presented thus far suggest that firms that recently declassified their boards face a higher likelihood of a takeover but receive a lower takeover premium than the

firms with a classified board or those that either never had one or declassified more than five years ago. One explanation for these results is that classified boards serve as an effective bargaining device and that removing classified boards weakens firms' bargaining power. An alternative explanation, however, is that firms with classified boards that sought to be taken over declassified their boards prior to the takeover, perhaps as a signal of their willingness to be taken over. Under this alternative, declassification is correlated with higher takeover likelihood but not because of the loss of bargaining power. How to explain lower premiums for the targets that recently declassified under this alternative, however, is not clear.

Nevertheless, to examine this alternative explanation, we would ideally want to find an instrument that is correlated with the decision to declassify the board and uncorrelated with the costs associated with launching a takeover attempt. We are not aware of a suitable instrument for this purpose. We do, however, provide an estimation of the logistic regression modelling the decision to declassify to shed light on the possibility that the firms seeking a takeover simultaneously declassified. The results are presented in Table 7, columns (1) and (2). The sample in these regressions includes only firms that have a classified board and those that decided to declassify their board. The dependent variable equals one for the firms that start the declassifying process and zero for firms with a classified board. The explanatory variables include accounting, ownership, board, and stock performance characteristics, as well as an indicator that equals one if the firm received a non-binding shareholder proposal to declassify the board, and a measure of takeover activity in the firm's industry.²² All explanatory variables are

²² We measure takeover activity as the sum of the value of all takeovers in the same industry in a given year (from SDC) divided by total assets in the industry in a given year (from Compustat). Industries are defined based on Fama-French 49 industry classifications. Alternatively, we measure takeover activity and the number of deals relative to the number of firms in the industry in any given year. The results are the same with the alternative measure.

calculated in the year (or at fiscal year-end) prior to the start of board declassification process. We collect the starting dates for the board declassification process from proxy statements and SharkRepellent, as previously described in section 3.1. We collect data on all submitted non-binding shareholder proposals from Risk Metrics. The data on takeover activity is from SDC. The regression in column (1) includes calendar year fixed effects, the regression in column (2) does not.

As evidenced from Table 7, the most significant determinant of the decision to declassify is the receipt of a non-binding shareholder proposal to declassify the board. Firms that receive a shareholder proposal in the previous year are 23-24% more likely to declassify their boards in any given year than the firms not receiving such a proposal. The other significant predictors of board declassification decision in both regressions are board ownership, board size, institutional ownership turnover, and S&P 500 indicator. Firms in S&P 500, firms with bigger boards, firms with higher institutional ownership turnover (more short-term investors), and firms with lower board ownership are more likely to decide to declassify their boards. The decision to declassify is unrelated to the takeover activity in the firm's industry.

Unfortunately, none of the significant predictors of the declassification decision are suitable instruments. Board size is the most logical candidate but the sign on the coefficient is not logical. Bates, Becher and Lemmon (2008) use board size as an instrument for board classification reasoning that "board classification reduces the transaction costs associated with nominating and electing a large slate of directors, while board size per se should not change the costs associated with a takeover attempt." Based on this reasoning, firms with large boards should be more likely to maintain classified boards and less likely to declassify. However, we find that firms with larger boards are more likely to declassify. The relation we observe most likely results from the

fact that larger firms that also tend to have larger boards are a more likely target of shareholder activists who demand declassification.

To examine these conjectures further, in untabulated results, we estimate a logistic regression modeling the likelihood of receiving a shareholder proposal to declassify as a function of the variables we used to explain the declassification decision. The sample includes only the firms with a classified board that did not start the declassification process. The dependent variable equals one for the firm that receives a shareholder proposal in that year and zero otherwise. The independent variables are measured in the prior year. As expected, we find that larger firms, firms in the S&P 500, and firms with larger boards are the most likely targets of shareholder activists in any given year. The estimate on the S&P 500 indicator is the most significant and suggests that firms in the S&P 500 are 10.8% more likely to receive a proposal to declassify in any given year. The coefficient on M&A activity in the firm's industry is insignificant.

None of the other significant predictors of declassification is a viable instrument candidate as they all can be related to the likelihood of receiving a takeover offer. Two pieces of evidence that we present here should, however, help alleviate the endogeneity concerns discussed above. We show that shareholder proposals are the most significant predictor of a firm's decision to declassify the board. If shareholders targeted the most likely takeover candidates, it is not clear why they would demand board declassification if board classification was not an effective antitakeover mechanism. Similarly, it is not clear why they would expend resources on putting together the non-binding shareholder proposal. Additionally, we do not find that either shareholder proposals or the declassification decision is related to the takeover activity in the firm's industry. Thus, it appears unlikely that those firms that sought to be taken over simultaneously declassified their boards. Rather, firms seemed to have declassified as a response

to the pressure from shareholder activists and, possibly, institutional investors with short horizons. It therefore appears unlikely that our results of higher takeover likelihood after declassification are simply a manifestation of the fact that the firms that sought to be taken over declassified their boards.

5. Summary and Conclusion

Board classification is thought to be one of the most effective, if not the most effective, antitakeover devices that was adopted by a majority of public firms in the 1990s. Between 1990 and 2002, the proportion of firms with a classified board was around 60% and fairly stable over time. However, since 2003 we have observed a large number of board declassifications. The end result is that in 2011, only about 46% of firms had a classified board. In this paper, we examine how the recent board declassifications affected takeover activity and takeover outcomes for a panel of firms between 2003 and 2011.

We report that firms that declassify their boards within the previous five years are significantly more likely to receive a takeover offer and significantly more likely to complete the takeover than other firms in the sample. These firms, however, realize significantly lower short-term and longer-term abnormal returns around the announcement of the takeover and receive significantly lower bid premiums. We also find that target firm managers in completed takeovers are unlikely to trade the lower premiums for their own benefit, as we find no evidence that the CEOs of firms that declassified their boards in the past five years are more likely to be employed by the acquirers than the CEOs of other firms. Our results hold using the whole sample of firms and various subsamples, including a subsample that includes only S&P 500 firms. Examining

this subsample is important as declassifications are more frequent in that subsample and, as a consequence, target firms that declassified their boards tend to be very large.

Collectively, our results are consistent with the view that classified boards are an effective antitakeover device and a source of bargaining power and that the firms that declassify their boards have less bargaining power than other firms. However, an alternative explanation for our results is that firms that are seeking to be taken over simultaneously declassify their boards. In that explanation, declassification happens simultaneously with increased takeover likelihood but does not cause it. Although we do not address this issue econometrically by using instrumental variables, we do shed light on this alternative explanation. Specifically, we document that the receipt of a non-binding shareholder proposal prior to the declassification decision is the most significant determinant of board declassification and that the decision to declassify is unrelated to takeover activity in the firm's industry. Thus, it appears that the firms tend to declassify in response to the pressure from shareholders rather than to signal that they are on the market to sell themselves.

In summary, the results of this study suggest that recent board declassifications have had an effect on takeover activity and outcomes. Our results, however, do not speak to the question of whether these declassifications also affected firm value. Considering only expected future cash flows from a potential takeover, increased takeover likelihood should translate into higher valuation, but the lower potential premium may well negate this effect. Increased takeover likelihood, however, need not alter only the expected cash flows from a potential takeover. A host of other effects are possible, including the reduction of investment in long-term value-enhancing projects if the higher takeover likelihood leads to short-termism, reduction in agency costs if the higher takeover likelihood disciplines managers, or an increase in the cost of capital

if the higher takeover likelihood increases systematic risk (Cremers, Nair, and John, 2009).

Which effects ultimately prevail in what types of firms is a question left open for future research.

References

- Bates, T. W., and D. A. Becher. "Bid Resistance by Takeover Targets: Managerial Bargaining of Bad Faith?" Working paper Arizona State University (2012).
- Bates, T. W.; D. A. Becher; and M. L. Lemmon. "Board Classification and Managerial Entrenchment: Evidence from the Market for Corporate Control." *Journal of Financial Economics*, 87 (2008), 656-677.
- Bebchuk, L.A., J. C. Coates, and G. Subramanian. "The Powerful Anti-takeover Force of Staggered Boards: Theory, Evidence, and Policy." *Stanford Law Review*, 54 (2002), 887–951.
- Bebchuk, L. A., and A. Cohen. "The Costs of Entrenched Boards." *Journal of Financial Economics*, 78 (2005), 409-433.
- Bhagat, S., and R. H. Jefferis. "Voting Power in the Proxy Process, The Case of Antitakeover Charter Amendments." *Journal of Financial Economics*, 30 (1991), 193-225.
- Bradley, M.; A. Desai; and E. Kim. "Synergistic Gains from Corporate Acquisitions and their Division between the Stockholders of Target and Acquiring Firms." *Journal of Financial Economics*, 21 (1988), 3-40.
- Cremers, K. J. M.; V. B. Nair; and K. John. "Takeovers and the Cross-Section of Returns." *Review of Financial Studies*, 22 (2009), 1409-1446.
- Cremers, K.J.M, L.B. Litov, and S.M. Sepe. "Staggered boards and firm value, revisited" Working Paper University of Notre Dame (2013).
- DeAngelo, H., and E. M. Rice. "Antitakeover Charter Amendments and Stockholder Wealth." *Journal of Financial Economics*, 11 (1983), 329-360.
- Faleye, O. "Classified Boards, Firm Value and Managerial Entrenchment." *Journal of Financial Economics*, 83 (2007), 501-527.

- Fama, E.F. and K.R. French. "Industry costs of equity." *Journal of Financial Economics* 43 (1997), 153-193.
- Gaspar, J-M, M. Massa, and P. Matos. "Shareholder Investment Horizons and the Market for Corporate Control." *Journal of Financial Economics*, 76 (2005) 135-165.
- Guo, R., T.A. Cruse, and T. Nohel. "Undoing the powerful anti-takeover force of staggered boards." *Journal of Corporate Finance* 14 (2013), 274-288.
- Guo, R., T.A. Cruse, and T. Nohel. "Activism and the Shift to Annual Director Elections." Working paper Loyola University (2013).
- Hartzel, J.C., E. Ofek, and D. Yermack. "What's in it for me? CEOs whose firms are acquired." *Review of Financial Studies*, 17 (2004), 37-61.
- Jarrell, G. A., and A. B. Poulsen. "Shark Repellents and Stock Prices: The Impact of Antitakeover Charter Amendments Since 1980." *Journal of Financial Economics*, 19 (1987), 127-168.
- Kadyrzhanova, D., and M. Rhodes-Kropf. "Concentrating on Governance." *Journal of Finance*, 66 (2011), 1649-1685.
- Linn, S. C., and J. J. McConnell. "An Empirical Investigation of the Impact of 'Antitakeover' Amendments on Common Stock Prices." *Journal of Financial Economics*, 11 (1983), 361-399.
- Masulis, R. W.; C. Wang; and F. Xie. "Corporate Governance and Acquirer Returns." *Journal of Finance*, 62 (2007), 1851-1889.
- McWilliams, V. B. "Managerial Share Ownership and the Stock Price Effects of Antitakeover Amendment Proposals." *Journal of Finance*, 45 (1990), 1627-1640.
- Sokolyk, T. "The Effects of Antitakeover Provisions on Acquisition Targets." *Journal of Corporate Finance*, 17 (2011), 612-627.

- Straska, M., and H.G. Waller. "Antitakeover Provisions and Shareholder Wealth: A Survey of the Literature." *Journal of Financial and Quantitative Analysis* forthcoming (2013).
- Wang, C., and F. Xie. "Corporate Governance Transfer and Synergistic Gains from Mergers and Acquisitions." *Review of Financial Studies*, 22 (2009), 829-858.

Table 1
Summary of board classifications and declassifications over time

The sample includes all firms in the Risk Metrics Governance database that are listed in at least two consecutive releases of the data and that do not have dual class common stock. Prior to 2007, the data was released only about every other year. Starting with 2007, the data is released every year. Board classifications (declassifications) are instances when the firm that did not have (had) a classified board in a prior release of the data has (does not have) a classified board in the current release of the data.

Year	Number of observations	Proportion with classified board	Number of board classifications	Number of board declassifications
1993	1,320	60.76%	25	8
1995	1,339	61.99%	10	8
1998	1,622	60.23%	17	17
2000	1,622	61.04%	23	15
2002	1,610	62.30%	9	7
2004	1,724	62.06%	7	20
2006	1,625	58.52%	1	57
2007	1,313	56.21%	1	32
2008	1,354	54.06%	0	27
2009	1,383	51.70%	0	24
2010	1,386	49.93%	2	32
2011	1,379	45.98%	1	63

Table 2

Summary of bid and target characteristics in takeover attempts announced between 2003 and 2012

The sample includes 557 initial takeover bids from SDC announced over the period 2003-2012. Target firms are screened to be covered by Risk Metrics in at least two consecutive releases of the data and to have a non-missing value of total assets from Compustat. Firms with dual class stock are excluded. Initial bids in an auction are the takeover bids that are not preceded by any other takeover bids for the same company in the prior 365 days. Follow-on bids in an auction are the bids that follow the initial bids. Panel A reports initial bid characteristics from SDC. Bid frequency is the number of firm-year observations with an observed initial bid divided by the number of firm-year observations in the panel from Risk Metrics merged to Compustat in the period 2003-2011. Deal value is as reported in SDC. Stock deal is a deal where the consideration includes equity. Hostile bid is a bid that is opposed by target management. Completed deal is a consummated takeover. Tender offer indicates that a deal is structured as a tender offer. Toehold is the bidding's firm equity ownership in the target firm at the announcement date. Panel B reports accounting and ownership characteristics. Accounting characteristics and institutional ownership characteristics are from Compustat and Thomson Financial from the end of the fiscal year immediately preceding the initial bid. Board ownership is from Risk Metrics from the annual meeting immediately preceding the fiscal year end date that is immediately preceding the initial bid. Size is the log of the book value of total assets. S&P 500 constituent indicates whether a firm is in the S&P 500. Market-to-book is the market value of assets (calculated as the sum of the book value of assets and market value of equity minus the book value of equity) divided by the book value of assets. Debt-to-assets is the sum of long-term and short-term debt divided by the book value of assets. Board ownership is the proportion of shares outstanding held by firm board members. Institutional ownership fraction is the proportion of shares outstanding held by institutional investors. Institutional ownership concentration is the Herfindahl-Hirschman index of institutional ownership. Institutional investor turnover is the weighted average of the total portfolio churn rates of the firm's institutional investors over the previous four quarters, as defined by Gaspar, Massa, and Matos (2005). Board size is the number of board members. Outsiders on the board is the proportion of board members that are classified as outsiders (independent). CEO duality is an indicator for cases when the firm's CEO is also a chair of the firm's board. The sample in Panel C consists only of the target firms that are also S&P 500 constituents. Reported statistics are averages with medians listed in parentheses. The symbols *,**, and *** in columns (1) and (3) indicate that the subsample i and iii means (medians) are significantly different from that of the subsample ii at the 10%, 5%, and 1% level, respectively.

Table 2 - continued

	Targets with classified boards (subsample i)	Targets that declassified within the last 5 years (subsample ii)	Other targets (subsample iii)
	Column (1)	Column (2)	Column (3)
Panel A: Initial bid characteristics	•	•	
Number of initial bids	318	44	195
Bid frequency	4.28%*	5.65%	3.93%**
Proportion of initial bids with follow on			
bids	7.86%	9.09%	11.79%
Deal Value (\$million)	4,440.8***	9,191.7	4,349.2***
Dear variae (priminori)	(1,967.9)**	(4,008.1)	(1,941.2)***
Proportion of stock deals	31.45%	34.09%	27.69%
Proportion of hostile bids	1.26%	2.27%	4.62%
Proportion of completed deals	81.76%**	95.45%	78.46%***
Proportion of tender offers	11.95%	13.64%	15.90%
Toehold at announcement	0.68%	0.00%	1.81%*
	(0.00%)	(0.00%)	(0.00%)**
	(* * * *)	(* * * *)	()
Panel B: Target characteristics			
Size (log total assets)	7.57*	8.02	7.37***
,	(7.46)*	(7.99)	(7.24)***
S&P 500 member	19.81%***	43.18%	22.05%***
Market-to-book (Tobin's Q)	1.62	1.54	1.68
, ,	(1.36)	(1.35)	(1.42)
Debt-to-assets	0.24	0.28	0.19**
	(0.23)	(0.27)	(0.15)**
Board ownership	6.27%*	3.74%	6.88%*
-	(3.29%)***	(1.52%)	(2.90%)**
Institutional ownership fraction	75.17%	76.63%	76.02%
_	(78.54%)	(81.72%)	(81.27%)
Institutional ownership concentration	0.053	0.051	0.052
	(0.045)	(0.046)	(0.045)
Institutional investor turnover	0.241	0.233	0.242
	(0.227)	(0.219)	(0.234)
Board size	9.22	9.50	8.53**
	(9)	(9)	(8)***
Outsiders on the board	73.2%**	79.4%	75.2%*
	(75.0%)***	(81.8%)	(77.8%)*
CEO duality	69.3%	70.6%	59.0%
Number of obs. for board ownership	269	34	172
Number of obs. for board characteristics	270	34	173
Number of obs. for institutional ownership	292	40	177

Table 2 - continued

	Targets with classified boards (subsample i)	Targets that declassified within the last 5 years (subsample ii)	Other targets (subsample iii)
	Column (1)	Column (2)	Column (3)
Panel C: Target characteristics for S&P 50	O taroet firms		
Number of target firms in S&P 500	63	19	43
Size (log total assets)	9.26	9.22	9.06
	(9.44)	(9.61)	(8.98)
Market-to-book (Tobin's Q)	1.61	1.67	1.55
· · · · · · · · · · · · · · · · · · ·	(1.31)	(1.40)	(1.37)
Debt-to-assets	0.25**	0.34	0.28
	(0.23)*	(0.32)	(0.25)
Board ownership	3.08%	1.47%	4.08%
•	(1.50%)*	(1.04%)	(1.23%)
Institutional ownership fraction	72.71%	79.82%	77.55%
-	(75.69%)*	(85.85%)	(79.74%)
Institutional ownership concentration	0.042	0.044	0.044
-	(0.042)	(0.044)	(0.039)
Institutional investor turnover	0.221	0.219	0.234
	(0.206)	(0.212)	(0.225)
Board size	10.42	10.24	10.21
	(10)	(10)	(10)
Outsiders on the board	75.4%	81.3%	80.7%
	(79.3%)*	(87.5%)	(87.5%)
CEO duality	82.3%	88.2%	69.8%
Number of obs. for board ownership	62	17	43
Number of obs. for board characteristics	62	17	43
Number of obs. for institutional ownership	63	19	41

Table 3

Probit regressions modeling the probability of being a takeover target in a particular year

The full sample consists of 13,187 firm-year observations between 2003 and 2011 for firms covered in at least two consecutive data releases in the Risk Metrics database that also have total assets data available on Compustat. Firms with dual class common stock are excluded. The dependent variable equals one if a firm receives an initial takeover bid within 365 days from the fiscal year-end and equals zero otherwise. Declassified last 5 years is an indicator variable that equals one if the firm declassified its board within the last five years and equals zero otherwise. Classified board is an indicator variable equal to one if the firm has a classified board and equal to zero otherwise. Prior year return is the firm's abnormal return measured as the average monthly abnormal return over the prior fiscal year. All other variables are defined in Table 2. Robust standard errors adjusted for clustering at the firm level are in parentheses, and marginal effects computed at the mean values of the independent variables are in brackets. Marginal effects reflect the change in the probability of receiving a takeover bid for a one standard deviation change in a continuous variable, or a shift from zero to one for an indicator variable. The symbols *,**, and *** indicate statistical significance of the coefficient estimates at the 10%, 5%, and 1% level, respectively.

Table 3 - continued

Sample	All firms	All firms	S&P 500 firms
Column	(1)	(2)	(3)
Declassified last 5 years	0.222***	0.138	0.344**
	(0.084)	(0.097)	(0.142)
	[0.023**]	[0.013]	[0.030**]
Classified board	0.016	-0.024	0.058
	(0.044)	(0.050)	(0.091)
	[0.001]	[-0.002]	
S&P 500 constituent	0.070	0.151*	
	(0.073)	(0.081)	
	[0.006]	[0.013*]	
Size (log total assets)	-0.119***	-0.124***	-0.276***
	(0.022)	(0.027)	(0.055)
	[-0.010***]	[-0.010***]	[-0.019***]
Market-to-book (Tobin's Q)	-0.167***	-0.176***	-0.254***
	(0.029)	(0.035)	(0.072)
	[-0.014***]	[-0.015***]	[-0.018***]
Debt-to-assets	0.287**	0.401**	0.520
	(0.132)	(0.165)	(0.319)
	[0.025**]	[0.034**]	[0.036]
Prior year abnormal return	-0.782	-2.040**	-3.593*
	(0.747)	(0.889)	(1.949)
	[-0.068]	[-0.171**]	[-0.252*]
Board ownership		0.346	-0.155
		(0.277)	(0.646)
		[0.029]	[-0.011]
Institutional ownership fraction		0.557***	0.216
		(0.171)	(0.342)
		[0.047***]	[0.015]
Institutional ownership			
concentration		0.471	-0.302
		(0.887)	(1.211)
		[0.040]	[-0.021]
Institutional investor turnover		2.574***	1.965*
		(0.548)	(1.148)
		[0.216***]	[0.138*]
Industry and year dummics	Yes	Yes	Vaa
Industry and year dummies Observations	12971	10351	Yes 3461
Pseudo R ²	0.049	0.063	0.098

Table 4Summary statistics for takeover premiums

The sample includes 557 initial takeover bids from SDC announced over the period 2003-2012. Target firms are screened to be covered by Risk Metrics in at least two consecutive releases of the data and to have a non-missing value of total assets from Compustat. Firms with dual class stock are excluded. Initial bids in an auction are the takeover bids that are not preceded by any other takeover bids for the same company in the prior 365 days. Follow-on bids in an auction are the bids that follow the initial bids. Raw premium is the offer price divided by the stock price four weeks prior to the initial bid announcement date minus one. CAR {-5, +5} premium is the 10-day cumulative abnormal return around the initial bid announcement date. Auction CAR {-42, end} premium is the abnormal return cumulated from -42 days prior to the initial bid announcement date to either completion date or one day after the withdrawal date of the last bid in the auction. The symbols *,**, and *** in columns (1) and (3) indicate that the subsample i and iii means (medians) are significantly different from that of the subsample ii at the 10%, 5%, and 1% level, respectively.

	Targets with classified boards (subsample i)	Targets that declassified within the last 5 years (subsample ii)	Other targets (subsample iii)
	Column (1)	Column (2)	Column (3)
Panel A: All takeovers			
Raw premium	31.12%***	22.15%	31.33%***
[Number of observations]	(27.86%)***	(19.38%)	(28.81%)***
	[312]	[43]	[191]
CAR {-5, +5} premium	20.75%**	14.76%	23.82%***
	(19.71%)***	(12.19%)	(21.47%)***
	[317]	[44]	[195]
Auction CAR {-42, end} premium	22.91%	20.41%	27.56%
	(22.85%)	(21.63%)	(24.97%)
	[317]	[44]	[195]
Panel B: Takeovers of S&P 500 firms			
Raw premium	27.67%	19.75%	31.03%**
	(23.88%)	(19.38%)	(29.83%)**
	[63]	[19]	[42]
CAR {-5, +5} premium	16.14%	14.13%	23.53%**
	(15.22%)	(11.81%)	(21.24%)**
	[63]	[19]	[43]
Auction CAR {-42, end} premium	17.87%	18.34%	25.89%
	(18.67%)	(20.41%)	(21.49%)
	[63]	[19]	[43]

Table 5
Ordinary least squares (OLS) regression of target premium

The sample includes 557 initial takeover bids from SDC announced over the period 2003-2012. Target firms are screened to be covered by Risk Metrics in at least two consecutive releases of the data and to have a non-missing value of total assets from Compustat. Firms with dual class stock are excluded. Initial bids in an auction are the takeover bids that are not preceded by any other takeover bids for the same company in the prior 365 days. Follow on bids in an auction are the bids that follow the initial bids. Raw premium is the offer price divided by the stock price four weeks prior to the initial bid announcement date minus one. CAR {-5, +5} premium is the 10-day cumulative abnormal return around the initial bid announcement date. Auction CAR {-42, end} premium is the abnormal return cumulated from -42 days prior to the initial bid announcement date to either completion date or one day after the withdrawal date of the last bid in the auction. Declassified last 5 years is an indicator variable that equals one if the firm declassified its board within the last five years and equals zero otherwise. Classified board is an indicator variable equal to one if the firm has a classified board and equal to zero otherwise. Firm characteristics are computed using data from the fiscal year-end immediately preceding an initial bid in an auction. Takeover characteristics are from SDC. Competed bid is an indicator variable that equals one for the initial bids that were followed by a follow on bids. Pre-bid abnormal return {-46, -6} is the CAR cumulated from the day -46 to the day -6 relative to the takeover announcement. All other variables are defined in Table 2. Robust standard errors are in parentheses. The symbols *,**, and *** indicate statistical significance of the coefficient estimates at the 10%, 5%, and 1% level, respectively.

Table 5 – continued

Panel A

Dependent Variable	Raw premium			
Sample	All firms		S&P 500 firms	
Column	(1)	(2)	(3)	(4)
Declassified last 5 years	-0.093***	-0.124***	-0.113**	-0.120**
	(0.029)	(0.035)	(0.050)	(0.054)
Classified board	0.013	0.006	0.014	0.017
	(0.019)	(0.020)	(0.039)	(0.040)
Size (log total assets)	-0.022**	-0.007	-0.012	0.005
	(0.010)	(0.010)	(0.017)	(0.018)
Market-to-book (Tobin's Q)	-0.021**	-0.019*	-0.012	-0.004
	(0.011)	(0.011)	(0.019)	(0.021)
Debt-to-assets	0.027	0.047	-0.033	-0.024
	(0.052)	(0.061)	(0.106)	(0.107)
S&P 500 constituent	0.028	0.016		
	(0.026)	(0.028)		
Stock	-0.048**	-0.067***	-0.138***	-0.116***
	(0.021)	(0.023)	(0.039)	(0.042)
Hostile	-0.071	-0.073	0.009	0.026
	(0.061)	(0.068)	(0.120)	(0.117)
Completed	0.026	0.034	-0.024	-0.024
	(0.030)	(0.032)	(0.054)	(0.054)
Tender offer	0.066**	0.052	0.050	0.077
	(0.030)	(0.032)	(0.084)	(0.077)
Toehold	-0.002	-0.003	-0.004	-0.004
	(0.002)	(0.002)	(0.004)	(0.004)
Competed bid	0.040	0.042	-0.023	-0.016
	(0.044)	(0.045)	(0.072)	(0.081)
Board ownership		-0.192*		-0.317
		(0.103)		(0.234)
Institutional ownership fraction		0.054		0.181*
		(0.069)		(0.107)
Institutional ownership		0.575		1.309
concentration		(0.538)		(0.956)
Institutional investor turnover		0.272		1.153*
		(0.263)		(0.617)
Year dummies	Yes	Yes	Yes	Yes
Observations	541	416	124	118
Adjusted R ²	0.133	0.156	0.188	0.223

Table 5 – continued

Panel B

Dependent Variable	Target CA	AR {-5, +5}	Auction CA	R {-42, end}
Sample	All firms	S&P 500	All firms	S&P 500
Column	(1)	(2)	(3)	(4)
Declassified last 5 years	-0.094***	-0.105***	-0.100***	-0.125**
	(0.022)	(0.038)	(0.037)	(0.051)
Classified board	-0.021	-0.043	-0.032	-0.043
	(0.014)	(0.027)	(0.023)	(0.045)
Size (log total assets)	-0.013*	-0.003	-0.028**	-0.009
	(0.007)	(0.012)	(0.013)	(0.021)
Market-to-book (Tobin's Q)	-0.006	-0.002	-0.016	0.008
	(0.009)	(0.016)	(0.012)	(0.023)
Debt-to-assets	-0.010	-0.042	0.086	0.130
	(0.039)	(0.083)	(0.065)	(0.114)
S&P 500 constituent	0.011		0.025	
	(0.018)		(0.032)	
Stock	-0.068***	-0.137***	-0.036	-0.116**
	(0.015)	(0.028)	(0.026)	(0.047)
Hostile	0.017	0.056	0.008	0.220**
	(0.038)	(0.071)	(0.078)	(0.087)
Completed	0.075***	0.043	0.315***	0.329***
	(0.019)	(0.038)	(0.054)	(0.072)
Tender offer	0.051**	0.025	0.080**	0.027
	(0.022)	(0.049)	(0.033)	(0.067)
Toehold	-0.002	-0.004*	-0.001	-0.004**
	(0.001)	(0.002)	(0.002)	(0.002)
Competed bid	0.009	-0.046	0.061*	-0.003
	(0.024)	(0.034)	(0.035)	(0.049)
Pre-bid abnormal return {-46, -6}	-0.293***	-0.219**		
	(0.060)	(0.110)		
Year dummies	Yes	Yes	Yes	Yes
Observations	551	125	551	125
Adjusted R ²	0.226	0.286	0.213	0.309

Table 6

Post-transaction target CEO employment with acquirer in completed deals

The sample includes 438 completed initial takeover bids from SDC announced over the period 2003-2012. Target firms are screened to be covered by Risk Metrics in at least two consecutive releases of the data and to have a non-missing value of total assets from Compustat. Firms with dual class stock are excluded. The sample includes only those completed transactions where the acquirer is a public firm or where we can verify target CEO employment after the transaction. Indicator variables for post-takeover CEO employment equal one if the target CEO is an employee of the acquirer after the takeover for at least six months and if the target CEO is a director of the acquirer after the takeover for at least six months. The differences between subsamples are not statistically significant at any conventional levels.

	Targets with classified boards (subsample i)	Targets that declassified within the last 5 years (subsample ii)	Other targets (subsample iii)
Target CEO becomes an employee of			
acquirer	36.78%	34.38%	31.94%
Target CEO becomes a director of acquirer	35.41%	31.25%	35.71%
Target CEO becomes either an employee or a director of acquirer	41.98%	40.63%	40.97%
Number of observations	262	32	144

 Table 7

 Logistic regressions modeling probabilities of board declassification in any given year

The sample consists of firm-year observations between 2003 and 2011 for firms covered in at least two consecutive data releases in the Risk Metrics database that also have total assets data available on Compustat. Only observations with a classified board and those that start declassifying are included. Firms with dual class common stock are excluded. The dependent variable equals one for firm years in which a firm starts to declassify its board. Shareholder proposal is an indicator variable that equals one if the firm received a non-binding shareholder proposal to declassify its board in prior year. Firm characteristics are computed using data from the fiscal yearend prior to the start of declassification. Return on assets is operating income divided by assets. Average monthly abnormal return is measured over the fiscal year prior to the start of declassification. Industry M&A activity is the sum of the value of all takeovers in the same industry in the prior calendar year (from SDC) divided by total assets in the industry in that year (from Compustat). Industries are defined based on the Fama-French 49 industry classifications. All other variables are defined in Table 2. Robust standard errors adjusted for clustering at the firm level are in parentheses, and marginal effects computed at the mean values of the independent variables are in brackets. Marginal effects reflect the change in the probability of declassification for a one standard deviation change in a continuous variable, or a shift from zero to one for an indicator variable. The symbols *,**, and *** indicate statistical significance of the coefficient estimates at the 10%, 5%, and 1% level, respectively.

Sample	Declassifying firms and firms with a classified board		
Column	(1)	(2)	
Shareholder proposal	2.759***	2.636***	
	(0.180)	(0.171)	
	[0.237***]	[0.226***]	
Board ownership	-2.934**	-2.273*	
	(1.454)	(1.323)	
	[-0.107**]	[-0.085*]	
Board size (log)	0.910***	1.042***	
	(0.353)	(0.341)	
	[0.033**]	[0.039***]	
CEO duality	0.182	0.184	
	(0.188)	(0.181)	
	[0.007]	[0.007]	
Proportion of outsiders on board	0.251	0.305	
	(0.678)	(0.627)	
	[0.009]	[0.011]	

Table 7 - continued

Sample	Declassifying firms and firms with a classified board	
Column	(1)	(2)
Institutional ownership fraction	0.695	1.028*
	(0.607)	(0.581)
	[0.025]	[0.038*]
Institutional ownership concentration	4.174*	3.124
	(2.465)	(2.284)
	[0.152*]	[0.117]
Institutional investor turnover	5.108***	6.277***
	(1.837)	(1.473)
	[0.187***]	[0.234***]
S&P 500 constituent	0.556**	0.479**
	(0.225)	(0.217)
	[0.022**]	[0.019**]
Size (log total assets)	0.136	0.169**
	(0.087)	(0.084)
	[0.005]	[0.006**]
Market-to-book (Tobin's Q)	0.000	0.042
	(0.110)	(0.097)
	[0.000]	[0.002]
Debt-to-assets	-0.434	-0.516
	(0.526)	(0.503)
	[-0.016]	[-0.019]
Return on assets	-0.857	-1.131
	(1.124)	(1.092)
	[-0.031]	[-0.042]
Average monthly abnormal return	-3.152	-3.639
· ·	(3.311)	(3.131)
	[-0.115]	[-0.136]
Industry M&A activity	0.133	1.442
•	(1.546)	(1.303)
	[0.005]	[0.054]
Year dummies	Yes	No
Observations	5317	5317
Pseudo R ²	0.231	0.211