Lobbying Activities and Mergers and Acquisitions

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Abstract

We examine corporate lobbying activity and mergers & acquisitions. If effective, firm lobbying expenditures could influence legislation and facilitate favorable regulatory treatment, which would be positively reflected in market reactions to merger announcements. However, average announcement returns for lobbying firms are lower than for non-lobbying firms. In addition, lobbying firms tend to have powerful CEOs that receive more cash compensation after a merger. CEO turnover is unaffected by lobbying activity. These results suggest that corporate lobbying may be indicative of CEO entrenchment rather than a firm's attempt to maximize shareholder wealth.

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1. Introduction

Corporate takeovers are a major device used by a firm that wants to enter new industry or increase its market power. Besides the approvals of boards and shareholders, mergers in the U.S. generally require approval of the Department of Justice or Federal Trade Commission. Moreover, certain deals involving heavily regulated industries or national security issues might require approval by corresponding government agencies such as the Department of Defense, Federal Communications Commission, or Federal Reserve.

In this regulatory environment, a firm may have incentives to spend money on government lobbying in order to receive favorable treatment from regulatory agencies. Besides the incentive in the takeover process, corporations may spend money on lobbying to influence legislation or regulations. However, Ansolabehere et al. (2003) points out that such political expenditure by corporations is quite small considering the benefits from policy changes, suggesting that political spending is a type of consumption good, rather than as a market for buying political benefit.

From this perspective, the question is whether lobbying expenditures are a potential investment in political benefits that is reflected in M&A outcomes, or another type of managerial consumption indicative of CEO entrenchment. However, the effect of lobbying expenditures is not easy to pinpoint, even though expenditure data are publicly available. One reason is that lobbying firms tend to spend continuously, that is, firms spending lobbying in one year tend to spend money to lobby in next year (Chen et al. (2009)). Moreover, if the purpose of lobbying activity is to influence the regulatory and legislative process, we cannot be certain whether legislative and regulatory changes can be attributed to lobbying.

Duchin and Sosyura (2012) measure firm political connections multiple ways, including lobbying, political contributions, and the recruiting of politically connected directors. They find that politically connected firms were more likely to receive funding under the Troubled Asset Relief Program (TARP) enacted during the 2008-2009 financial crisis. The authors also find that connected firms perform more poorly than their unconnected counterparts,

consistent with the argument that spending on political influence is not representative of value-maximizing behavior. Coates (2012) finds a negative relation between political activity and shareholder value, measured by Tobin's Q. He also finds evidence that political activity is positively associated with signs of agency costs such as CEO corporate jet use.

In contrast, Hill et al. (2013) examine both lobbying and firm contributions to political action committees and find that firms have higher excess returns in the year following lobbying and political contributions. Lux et al. (2011) conduct a meta-analysis and also report a positive association between political activity and accounting measures of firm performance. Confounding this issue is evidence from Chaney et al. (2011), who find that politically connected firms tend to have poorer earnings quality. Sobel and Graefe-Anderson (2014) find a positive relation between lobbying and executive compensation, but they do not find conclusive evidence of an association between lobbying and firm performance.

The market for corporate control may provide an appealing environment to investigate such lobbying effects on firms by looking at announcement period abnormal returns. If lobbying expenditure represents a firm's investment in potential political benefits, then announcement returns for lobbying firms should be higher than for non-lobbying firms. We find that announcement returns for lobbying firms are lower than those for non-lobbying firms, suggesting that the lobbying expenditures are either not an investment in shareholder wealth maximization, or they are just ineffective.

Takeover activity also affects rival firms in the industry. Eckbo (1983) argues that rivals of merging firms can benefit from merger activity in their industry because successful mergers can create the monopolistic rents. Alternatively, rivals could experience negative effects if merging firms gain a competitive advantage which rival firms are not expected to replicate (Fee and Thomas (2004)). We investigate the lobbying effects on rival firms in takeover markets by studying the announcement returns of rival firms with lobbying and those with non-lobbying firms. The evidence is consistent with the collusion hypothesis for rivals of target firms that engage in lobbying, while the rivals of acquiring firms do not seem to

experience such merger benefits.

Next, we further test the possibility that lobbying can be interpreted as a form of consumption by entrenched managers. We find a positive relationship between lobbying expenditures and CEO entrenchment, consistent with the hypothesis that corporate lobbying is a form of consumption rather than investment, consistent with Ansolabehere et al. (2003). In addition, we investigate lobbying and CEO turnover and compensations under the hypothesis that powerful CEOs tend to spend money in lobbying. Although the CEO turnover is not related with lobbying activity, CEO compensation, especially M&A bonus and salary are higher at firms with lobbying experience.

The remainder of this paper is organized as follows. Section 2 describes data and variable construction. Section 3 shows the univariate analysis and empirical findings. Finally, section 4 concludes this paper.

2. Data description and variables

2.1. Sample and variable construction

Our initial sample consists of mergers and acquisitions from Securities Data Company's (SDC) Mergers and Acquisitions database. The sample period begins in 2000, when the lobbying disclosure database was first publicly available. We select completed and partially completed transactions that are categorized as mergers. We exclude exchange offers, acquisition of assets, acquisition of certain assets, privatization, buybacks, recapitalization, and acquisition (of stock). We obtain daily stock returns from CRSP, and financial statement information from COMPUSTAT. A total of 7,357 acquisitions between January 1, 2000, and December 31, 2008, meet these criteria.

As in Betton et al. (2008), we differentiate a tender offer and a merger as follows: if the tender offer flag is "no" and the deal form is a merger, then the deal is a merger. If the tender flag is "yes", or if the tender flag is "no" and the deal form is not "merger" and the

effective date of the deal doesn't equal the announcement date, then the deal is classified as a tender offer. Deal completion date is defined as the minimum date between the effective date in SDC and the delisting date in CRSP. We use indicator variables for cash-financed deals, stock-financed deals, mergers of firms in the same industry, where at least one of the four-digit SIC codes of the bidder firm coincides that of the target firm in any given year.

We calculate firm size, Tobin's Q, return on assets, free cash flow, leverage ratio, and the Herfindahl-Hirschman index (HHI) using the COMPUSTAT XpressFeed annual database. Firm size is the log of total assets (AT). Return on assets (ROA) is operating income before depreciation (OIBDP) divided by total assets (AT). Tobin's Q is the ratio of a firm's total market value to its book value (AT). The market value of assets equals total assets (AT) minus common equity (CEQ) plus the firm's market value of equity (stock price (PRCC_F) time shares outstanding(CSHO)). Free cash flow is operating income before depreciation (OIBDP) minus Interest Expense (XINT) minus Income Taxes (TXT) minus Capital Expenditures (CAPX), scaled by book value of total assets (AT). The leverage ratio is the ratio of a firm's book value of debt (DLC +DLTT) to its market value of total assets. The Herfindahl-Hirschman index is constructed based on four-digit SIC codes in the entire COMPUSTAT universe. All the firm and industry characteristics variables are calculate in the year prior to the deal announcement date.

2.2. Lobbying database

We obtain lobbying data from the Senate's Office of Public Records from 1999 to 2008[1]. The Lobbying Disclosure Act of 1995 requires that firms disclose lobbying expenditures totaling more than $25,000 with the Senate's Office of Public Records. Registrants must file semi-annual reports describing the issues, lobbying amounts, the government agencies, and other detailed information. We select the lobbying firms which have spent to lobby only government agencies, i.e., we exclude lobbying of Congress, and the White House.

[1]Available at http://www.senate.gov/legislative/Public_Disclosure/LDA_reports.htm

For an individual firm's annual lobbying expenditure, we sum each firm's mid-year and year-end lobbying spending. Because the lobbying disclosure act database does not provide any firm identifiers such as CUSIP, permno in CRSP, or gvkey in COMPUSTAT, we manually match the names of the firms in the lobbying database with the permno in CRSP. As in Yu and Yu (2011), if a public parent firm of a private firm lobbies, we attribute lobbying spending to the parent firm. We identify 2,166 unique firms from our initial sample with lobbying expenditures from 1999 to 2008.

2.3. CEO turnover, compensation, and other governance characteristics

We extract CEO compensation data for every bidder CEO from the ExecuComp database. ExecuComp database includes firms since 1993 for every S&P500, S&P MidCap 400, and S&P SamllCap 600 firm, and for other firms that were once included in those indices. We retrieve total compensation, bonuses, salaries, and equity compensation from ExecuComp. Total compensation is the variable *tdc1* in ExecuComp, which consists of salary, bonus, value of restricted stock granted, value of options granted using Black-Scholes option valuation formula, long-term incentive payouts, and other compensation. The equity-based portion consists of the value of the options (ExecuComp variable BLK_VALUE) and the value of the restricted stock (ExecuComp variable $RSTKGRNT$). We also use ExecuComp to identify CEO turnover. CEO turnover is an indicator variable that takes the value of one if the pre merger period executive id (execid in ExecuComp) of acquiring firm's CEO is different from post merger id within 5 years of the merger and acquisition's announcement.

We obtain board information such as board size, the percentage of independent directors, and whether the CEO serves as board chair or is a member/chair of the firms nominating committee from the Investor Responsibility Research Center (IRRC) database. Because IRRC data is only available biannually before 2006, we use the most recent year available prior to the merger announcement date. For CEO characteristics, when multiple observations

occurred in the same year for a given firm, we check ExecuComp CEO information or firm proxy statements.

To measure corporate governance, we use the entrenchment index (E-index) in Bebchuk et al. (2009) from Lucian Bebchuk's web page [2]. Since IRRC does not provide 24 provisions used in calculating the G-index after 2007, we use the entrenchment index (E-index). Bebchuk et al. (2009) find that only six of the 24 provisions included in the original G-index of Gompers et al. (2003) are principally correlated with firm value. Higher index values imply poorer governance and greater managerial control right over the firm.

2.4. Rival firms

We use SIC codes in the SDC database to identify industry rivals of merging firms. SDC provides detailed SIC information for each bidder and target firm. As in Fee and Thomas (2004), we define a rival as any firm with at least one industry for the year prior to the merger in the four-digit SIC code industry group in which the bidder and target overlap, excluding firms which are involved in M&A in that year. We identify an average of 152 firms for each merging firm. Only rivals with sufficient stock return data prior to the deal announcement are included. To investigate whether lobbying activities can affect the announcement returns of rival firms, we also divide rival firm portfolios into lobbying rivals and non-lobbying rivals.

2.5. Stock Market Analysis of Acquisitions

We measure merging firm announcement returns as the market model adjusted stock returns around each firm's merger announcement date. We retrieve the announcement date for each merger from the SDC database. We use the CRSP value-weighted index as the market return. The estimation period is from 240 days to 61 days prior to the announcement date for each acquisition to avoid the runup period. For the estimation of market model parameters, we require a minimum of 100 daily returns during the estimation period. Following Masulis

[2]See http://www.law.harvard.edu/faculty/bebchuk/data.shtml

et al. (2007) and Fuller et al. (2002), we compute 5-day cumulative abnormal returns (CARs) during the window encompassed by event days $[-2, 2]$, where event day 0 is the announcement date [3]

3. Empirical Findings

3.1. Sample characteristics and univariate analysis

Table 1 summarizes characteristics of "lobbying firms" versus "non-lobbying firms" for the full sample of acquiring firms (Panel A) and target firms (Panel B). Lobbying firms are defined as those which have spent money in lobbying government agencies in the two years prior to the year in which the merger is announced. There are several notable differences between lobbying firms and non-lobbying firms. First, lobbying firms tend to use cash rather than stock as the method of payment. This implies that lobbying firms have either large internal cash flows or good debt financing abilities, i.e. large debt capacity, compared to non-lobbying firms. Further, lobbying firms' preference for cash deals suggests that managers of acquiring firms may be concerned about potential dilution in stock deals which can weaken the managers' control over the companies. This is particularly interesting because lobbying firms tend to be involved in larger M&A deals. In contrast, target lobbying firms are less likely to be offered stock as a form of payment.

Lobbying firms also tend to be larger in size, have higher return on assets, higher free cash flow, and higher leverage ratios. These firm characteristics are similar in both acquiring and target firms. The higher return on assets and free cash flow of lobbying acquirers accords with the fact that lobbying firms are more likely to engage in cash mergers. Moreover, such firms with more excessive internal cash flows can give managers more discretion, and top managers at those firms tend to spend money on lobbying.

CEOs of lobbying firms are older, more likely to serve as board chair, and receive larger

[3] We also compute 3-day cumulative abnormal returns for the robustness and obtain very similar results.

pecuniary compensation than CEOs of non-lobbying firms. Such CEO characteristics suggest that CEOs in lobbying firms have more managerial power compared to those of non-lobbying firms. Higher frequency of CEO turnover in lobbying firms may be inconsistent with this managerial power, but it may be related to the higher age of lobbying firm CEOs, who may be closer to retirement. The mean entrenchment index (E-index) of acquirer lobbying firms is lower than that of non-lobbying firms. This might imply that a CEO of firms with relatively low entrenchment index can increase managerial power through lobbying activity.

Lobbying firms tend to have larger boards and higher independent director ratios. Jensen (1993) suggest that larger boards, having beyond seven or eight people, are less likely to function effectively than smaller boards because of potential free-rider problems. Yermack (1996) and Eisenberg et al. (1998) provide evidence that there is an inverse relation between board size and firm value as measured by Tobin's Q. Yermack also suggests that the ability of the board to incentivize CEOs via compensation and the threat of termination are diminished as board size increases. Thus, results suggest lobbying firms may be less effective at controlling top executives.

Table 2 and Table 3 provide summary statistics for lobbying expenditures and CEO compensation by year and industry, respectively. Panels A and B of each table represent the summary for bidder and target firms, respectively. Both tables show that acquiring firms tend to lobby more and spend more money on lobbying than target firms. In each year, over 25.93% (9.46%) of the acquirer (target) firms report lobbying expenditures. Moreover, firms have spent more money on lobbying than on CEO compensation, confirming that lobbying amounts are substantial. Table 3 shows summary statistics of variables of interest by two-digit SIC code. In panels A and B of the table, merging firms in transportation & utilities (two-digit SIC in $40-49$) and manufacturing (two-digit SIC in $20-39$) are more active in lobbying activities, similar to patterns identified in Chen et al. (2009).

3.2. Event-study analysis

In this section, we present estimates of abnormal stock returns to bidders and targets around merger announcements. Table 4 presents cumulative abnormal returns for acquiring firms and target firms over the five-day event window period for the entire sample and various subsamples, classified by merger versus tender offer (Panel B), whether the merger is viewed as hostile or friendly (Panel C), the payment method (Panel D), same versus different industry (Panel E), and industry concentration proxy by the Herfindahl-Hirschman index (Panel F). For illustrative purposes, Figures 1 and 2 plot cumulative abnormal returns from day -36 through day +14 for lobbying and non-lobbying acquirers and targets in mergers and tender offers.

Table 4 illustrates significant differences in the announcement period abnormal returns for lobbying firms versus non-lobbying firms in previous deal periods. Overall, average CARs are lower for lobbying firms than non-lobbying firms in both acquiring and target firms, as illustrated in Figures 1 and 2. These differences are particularly pronounced in target firms. In Panel A, average announcement period CAR of non-lobbying firms is 0.41%, while CAR for lobbying firms is -0.22%, although this figure is not statistically significant in the whole sample. The average CAR for non-lobbying acquirers is significantly positive for tender offers (Panel B), in friendly mergers (Panel C), in all-cash deals (Panel D), in diversifying mergers (Panel E), and when the bidder's industry is concentrated moderately and severely (Panel F). It is significantly negative for bidders when they offer a mixture of cash and stock as payment (Panel D). For the lobbying bidders, the average announcement CAR is significantly negative for the mixed deals(Panel D) and when the bidder's industry is more competitive (Panel F).

The average target CAR of non-lobbying firms is 21.09% while the CAR of the lobbying firms is 15.21%, and both are statistically significant. The average target CAR is positive and significant in all the subsamples. The largest target CAR occurs in all-cash offers in non-lobbying target firms (Panel D). These event-study results suggest that lobbying activities

do not seem to increase shareholder value. As such, shareholders regard these lobbying expenditures as costs rather than investment by the firm. Bebchuk and Neeman (2010) argue that managers with a low fraction of cash-flow rights tend to use corporate resources to lobby for low levels of investor protection. The abnormal return analysis in this section supports this prediction .

3.3. Responses of rival firms of merging firms

As illustrated in Betton et al. (2008), Chrysler demanded publicly that the FTC take action to stop the joint venture between GM and Toyota in 1983 because it would "harm competition" in the automobile industry. At the announcement of the joint venture, the announcement abnormal return for Chrysler were -9.0% (Eckbo (1990)). Thus, merging activity in one industry can adversely affect other rival firms by creating monopolistic rents for the merged firms or threatening the existing firms in that industry.

If merging firms have negotiating power with respect to their suppliers or customers and they can reduce output or increase prices, rival firms can benefit from mergers by sharing market negotiation powers with the merging firms. Under this collusion hypothesis, rivals of the merging firms can benefit from the merger because successful mergers can introduce the monopolistic rents in that industry (Eckbo (1983)). Alternatively, rivals could experience negative effects if the merging firms obtain a competitive advantage which rival firms are not expected to replicate (Fee and Thomas (2004)). In this case, rival firms of the merging firms may lose existing market share, which efficient markets would reflect through negative cumulative abnormal returns around the announcement date of the competitor mergers. In recent studies, Fee and Thomas (2004) study the horizontal mergers and find the positive announcement returns on rival firms supporting the collusion hypothesis.

In this section, we investigate the effect of lobbying on returns of rival firms around merger announcement. We examine rivals of bidder firms and target firms separately. Table 5 divides announcement period returns for rival portfolios according to whether they are

rivals of bidders or targets. Abnormal returns for rival portfolios of target firms are positive and significant, while abnormal returns of bidder rivals are negative and significant. We further subdivide the merger sample according to whether the rivals, bidders and targets engage in lobbying activity. In the subsample of rivals that report lobbying expenditures, we observe positive and significant stock price reactions for target firm rivals. Bidder firm rivals in this sub-sample have negative and significant announcement period returns, and returns remain significantly negative when we further sub-divide the sample according to whether the bidder engages in lobbying.

Results for rivals of target firms are consistent with the collusion hypothesis. As described above, lobbying firms tend to be larger and have higher return on assets (ROA) than non-lobbying firms. If both target firms and their rivals engage in lobbying, they may be market leaders and already possess market power in the industry with respect to their customers and suppliers. If a much larger firm buys one firm in such industry, the existing shareholders of the rival firms may believe existing market power will be strengthened by merger activity. In addition, market participants may believe that market power may not be enhanced by non-lobbying firms (i.e. less powerful bidders), consistent with the insignificant announcement returns for that sub-sample.

For non-lobbying rivals of acquirers, abnormal announcement returns are negative and significant for both lobbying and non-lobbying acquirers. The only negative insignificant return occurs when both the bidder and rivals of the bidder do have lobbying experience. Unlike the previous studies, we do not limit the analysis to horizontal mergers. So, the analysis in this paper can result in different consequences. Similar to the above argument in the rivals of the target firms, if the non-lobbying firms are regarded as having less market power in an industry, one weak non-lobbying firm's acquisition attempt can threaten other weak firms because via the merger such acquirer might increase their market power or obtain unique skills that rivals will not have. This possibility make the shareholders of the rival firms of the acquiring firms view such M&A activity negatively affecting on the rival firms.

Unlike merging firms, the table also shows that the announcement returns of rival firms with lobbying activities are greater than those without lobbying activities even though the significance rates are low. These results suggest that market participants may view lobbying spending by rival firms as an attempt to have more market powers or to share the monopolistic rents with merging firms.

3.4. Determinants of Lobbying Expenditure in M&A deals

In the previous section, we investigate the market responses of merger activities by looking at both merging firms and rival firms. In this section, we look at which variables are related with the lobbying activities. In particular, we study lobbying activities during the deal period and other deal characteristics, firm and industry characteristics, and CEO and governance traits. The duration for a deal is defined as the period between the announcement date and the deal completion date. The main dependent variable in this multivariate analysis is an indicator variable that takes a value one if a firm engages in lobbying between the announcement date and the deal completion date.

To control for deal characteristics, we include the following independent variables in each model: an indicator that takes a value of one if the firm is an acquirer, and zero otherwise (Acquire Dummy), the cumulative abnormal return over the five day window surrounding the acquisition announcement, an indicator that takes the value of one if the method of payment in the deal is 100% stock (Stock deal), an indicator taking a value of one if the method of payment in the deal is 100% cash (Cash deal), and an indicator that takes a value of one if both bidder and the target share at least one common four-digit SIC code (Same Industry).

We also include the following industry and firm characteristics in the regression. Following the definition of market concentration used by the Department of Justice and the calculation of the Herfindahl-Hirschman Index (HHI), each firm's primary industry belongs to one of the following category: no concentration if HHI < 1000, moderately concentrated

if $1000 \leq \text{HHI} \leq 1800$, and highly concentrated if $\text{HHI} > 1800$. We include two indicator variables for moderately and highly concentrated industries. We also include each firm's size, Tobin's Q, return on assets (ROA), free cash flow (FCF), and leverage ratio.

Finally, to confirm the univariate analysis in previous section that more powerful CEO managing firms tend to spend in lobbying expenditures, we include the following governance and board characteristics: an indicator that equals one if the CEO is also chairman of the board (CEO/Chair), an indicator that equals one if the CEO is a member of the nominating committee (CEO/Nominating), board size defined as total number of directors, the percentage of independent directors (Independent Board), and the entrenchment index (E-index). Throughout our analysis, all regressions include year and industry dummy variables to control for possible unobserved heterogeneity across years and industries, and we employ heteroscedasticity- and autocorrelation-robust standard errors. The Fama-French 48 industry categories are used for controlling unobserved industry effects.

Table 6 presents the estimated logistic regression models. The coefficients on the acquirer dummy variable are positive and significant across all specifications even after controlling for other firm characteristics, suggesting that there is a strong positive relation between acquirer status and lobbying intensity. Next, the coefficients on duration are positive and significant across all regressions, suggesting that managers expecting the deal periods to be longer are more likely to lobby government agencies. Both bidder and target firm managers likely wish to complete mergers as soon as possible once the deal conditions are agreed. Besides the approval of boards and shareholders, mergers generally require approval from either the Department of justice or Federal Trade Commission. Thus, longer duration for a deal may induce merging parties to lobby government agencies.

The coefficient on the indicator for highly concentrated industries ($\text{HHI} > 1800$) is positive and significant while the coefficient on the indicator for moderately concentrated industries ($1000 \leq \text{HHI} \leq 1800$) is positive but not significant. Moreover, the magnitude of coefficients on the highly concentrated dummy is greater than that on the moderately concentrated

dummy, suggesting that the more a particular industry is concentrated, the more the firms in the industry tend to lobby [if we want to say this, we need to test whether the coefficients are significantly different from one another].

Among firm characteristics, coefficients on firm size and return on assets are positive and significant across all specifications. These results suggest that larger firms and more profitable firms tend to spend money on lobbying. Hermalin and Weisbach (1998) suggest that as performance increases, CEO bargaining power also increases, consistent with the positive relation between the CEO power and lobbying intensity. Tobin's Q is positive and significant in column (4) and (5), free cash flow is negative and significant column (1), and leverage is negative and significant in columns (1), (2) and (4). Consistent with Jensen (1986), the negative relation between the leverage ratio and the lobbying intensity suggests that high debt use limits lobbying expenditures. As emphasized in Masulis et al. (2007), financial leverage is an effective governance device to limit managerial discretion because higher leverage can enforce managers to invest properly. In this spirit, the negative relation between lobbying intensity and firm leverage implies that lobbying activity can be a proxy for one type of managerial entrenchment.

We find some evidence that firms with more powerful CEOs tend to lobby more. The coefficient on the indicator for CEO as the chair of the board is insignificant, but the CEO nominating coefficients are positive and significant, implying that firms are more likely to lobby when their CEOs have more influence over the firm's board of directors In addition, the positive and significant coefficients on the entrenchment index (E-index) is consistent with this argument. Board size is also positively related to lobbying activity, in line with the evidence in Yermack (1996) that smaller boards are more effective if the lobbying activity is another type of CEO entrenchment.

As previously demonstrated, abnormal returns for lobbying firms are lower than those for non-lobbying firms, suggesting that lobbying activities are not likely to be consistent with shareholder interests. Here, results suggest that firms with more entrenched and influential

CEOs, along with larger, less effective boards are more likely associated with lobbying activity. Taken together, these results are consistent with our contention that lobbying activity can be interpreted as a type of CEO consumption or the results of managerial entrenchment rather than value-maximizing investment. In the following two sections, we further investigate whether lobbying activities are related to executive power by looking at CEO turnover and compensation.

3.5. CEO turnover and lobbying effects

Lehn and Zhao (2006) study the relation between bidder abnormal returns and the probability of CEO turnover in acquiring firms. They find that 47% of acquiring firms' CEOs are replaced within 5 years of a merger or acquisition announcement. Moreover, they find that CEOs who make value-destroying acquisitions are more likely to be replaced than CEOs who pursue value-increasing acquisitions. In addition to the independent variables used in Lehn and Zhao (2006), we also include lobby_{t-1}, lobby_t,$\text{lobby}_{t-1,t}$, and interaction terms with CAR$[-2,2]$ to test whether lobbying activities can affect the likelihood of acquirer CEO turnover at the . lobby_{t-1} is an indicator that equals one if the firm has lobbying expenditures in the two years prior to the merger announcement, lobby_t equals one if a firm engages in lobbying at least one time during the deal period, and $\text{lobby}_{t-1,t}$ equals one if a firm has lobbying expenditures from two years before the merger announcement to the merger completion date.

Table 7 shows the estimated logit regression results. As in Lehn and Zhao (2006), the coefficient on CAR$[-2,2]$ is negative and significant in two of three models, consistent with the argument that value-reducing CEOs are likely to be fired or leave the company within 5 years. As emphasized in Brickley (2003), CEO age is the most significant variable in explaining CEO turnover, which is not significant in Lehn and Zhao (2006). The coefficient on the percentage of independent board members is positive and significant in all the specifications, suggesting that a more independent board is associated with greater CEO turnover likelihood

in takeover markets. Weisbach (1988) finds that the poorly managing CEOs are more easily replaced when the fraction of independent directors is higher. None of the coefficients on the lobbying activity indicator variables are significant, nor are their interactions with announcement period CAR. Thus, we find no evidence that lobbying expenditures are associated with CEO turnover, or that lobbying together with value-destructive acquisitions are associated with CEO turnover. If political activities through lobbying expenditures can increase the political connectedness or enhance social networks of CEOs and directors, those expenditures do not appear to be an important factor when considering the CEO replacement.

3.6. CEO compensations and lobbying effects

Previous studies document the relationship between CEO compensations and merger activities. Datta et al. (2001) find a strong positive relation between stock price reactions and the equity compensation of acquiring firm managers. Hartzell et al. (2004) study target firm CEOs and find top managers tend to receive large cash compensation such as bonuses. Grinstein and Hribar (2004) find that more powerful CEOs tend to engage in larger deals and receive larger bonuses, concluding that managerial power is the main source of completed M&A bonuses. Along the lines of this previous research, we investigate whether the lobbying is associated with larger CEO bonuses and thus can be interpreted as another type of managerial entrenchment.

We use multiple measures of CEO compensation as dependent variables, including total compensation, bonus, salary, the sum of bonus and salary, and equity compensation. Consistent with existing literature, we take the natural log of all dependent variables in our analysis, and compensation is measured at the end of the year in which the merger is completed. We use the same independent variables in Grinstein and Hribar (2004). All other independent variables except lobby_t are used for the year preceding the deal announcement date.

Table 8 shows the pooled ordinary least square estimation results. OLS regression results

reported in the table 8. Overall, the results in Table 8 show the similar patterns across all specifications.

The coefficient on the indicator for lobbying expenditure during the deal period is positive and significant in the three models where compensation is measured by salary, bonus and their sum. However, lobbying is not significantly associated with total CEO compensation or equity compensation. Berger, Ofek and Yermack (1997) show that higher cash compensation in the form of salary and bonus is preferred by entrenched managers. Our results here are consistent with this contention and our previous evidence that lobbying as a form of consumption by entrenched managers. Furthermore, in the context of mergers and acquisitions, it is possible that stock-financed deals may be viewed negatively by managers because they may dilute manager equity compensation.

The positive coefficients on firm size are positive and significant in all specifications, consistent with previous studies (e.g., Gabaix and Landier (2008)). Grinstein and Hribar (2004) look at M&A bonuses and argue that larger deals require greater managerial effort and skill, thus justifying greater compensation. The coefficient on deal duration is negative, but significance is mixed.

Consistent with previous studies, coefficients on indicators for the CEO being board chair or a member of the nominating committee are positive and significant in most regression specifications. Interestingly, board size is positively related to CEO salary, but negatively related to total compensation and equity compensation. Ryan and Wiggins (2004) find that firms with entrenched CEOs are less likely to receive equity compensation. The negative relation between board size (effectiveness) and equity compensation is consistent with the idea that equity compensation is one tool that can be used to align CEO and shareholder interests.

The results in this section suggest that lobbying activity is associated with powerful CEO behavior. The increased likelihood of lobbying activity during the duration of a deal implies that CEO's power may grow during a merger process. Lobbying activity itself may not be

a direct factor in increasing CEO bonus and salary, but it may be another aspect of CEO entrenchment.

4. Conclusion

In this paper, we examine how lobbying activity can affect shareholder wealth of merging firms and their rivals. In addition, we investigate which deal, firm, or governance characteristics are related to lobbying activity. Based on our results, lobbying expenditures appear to be used by entrenched CEOs, but it does not increase the shareholders' wealth. To support this explanation, we investigate CEO turnover and compensation during the merger period. We find further evidence that firms that lobby tend to have powerful CEOs.

The cumulative abnormal returns during announcement period of lobbying firms are lower than those of non-lobbying firms, suggesting that lobbying activities do not seem to increase shareholder value. The difference in abnormal returns between lobbying and non-lobbying firms is more pronounced in target firms. This difference may also reflect the possibility that firms with poor governance are more likely to be targets in the takeover market. The analysis in rival firms does not seem to show strong results. The abnormal return analysis for rival firms supports the collusion hypothesis for the rivals of target firms with both having lobbying expenditures. However, the analysis in acquiring firms does not seem to support the collusion hypothesis.

Second, we study lobbying activities during the deal period and other deal characteristics, firm and industry characteristics, and CEO and governance traits by using logit regression model. We find that lobbying firms tend to have larger firm size, higher return on asset, and lower leverage. For deal characteristics, acquire companies with longer deal duration tend to lobby. Finally, the coefficients on variables representing CEO powers such as CEO/chair, CEO/nominating, and higher E-index, are positively associated with lobbying intensity.

Finally, we investigate whether lobbying activities are related to firms with powerful CEO. Unfortunately, CEO turnover is not related to lobbying activities. But, the lobbying

activity is strongly associated with CEO compensation, especially in M&A bonus and salary after controlling firm characteristics and CEO characteristics. These results further confirm that firms with powerful CEO tend to spend internal financial resources in lobbying.

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Figure 1: Average cumulative abnormal returns for merger deals

We plot the average cumulative abnormal return for the merger deals during forty trading dates before and twenty trading dates after merger announcement period. The top graph shows average cumulative abnormal returns of bidder firms while the bottom graph shows those of target firms. We use blue dotted (red connected) line to indicate lobbying (non-lobbying) firms. A vertical line is placed on the announcement date.

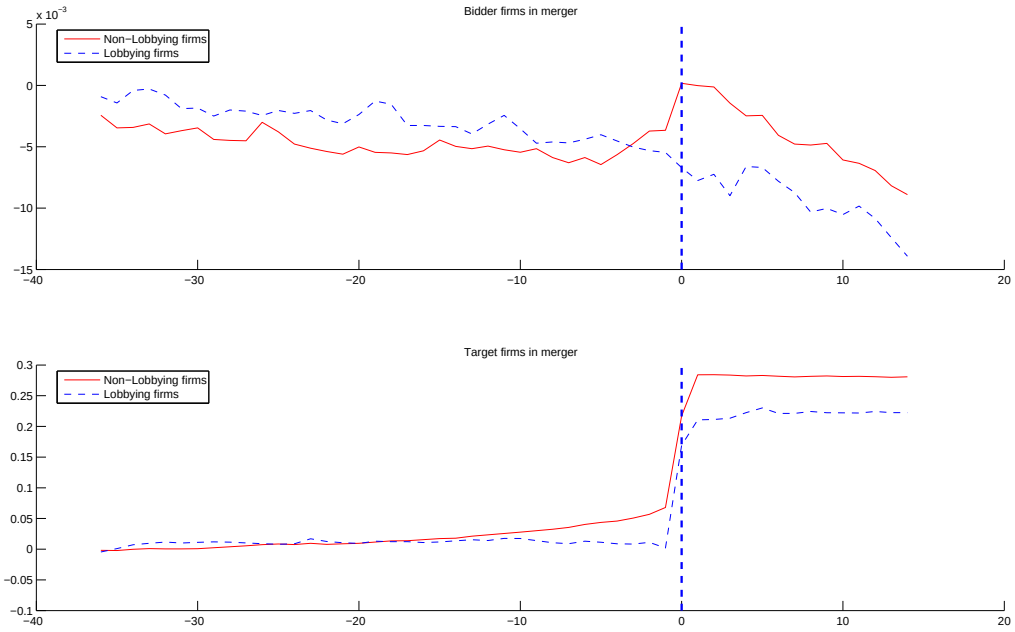

Figure 2: Average cumulative abnormal returns for tender offer deals

We plot the average cumulative abnormal return for the tender offer deals during forty trading dates before and twenty trading dates after tender offer announcement period. The top graph shows average cumulative abnormal returns of bidder firms while the bottom graph shows those of target firms. We use blue dotted (red connected) line to indicate lobbying (non-lobbying) firms. A vertical line is placed on the announcement date.

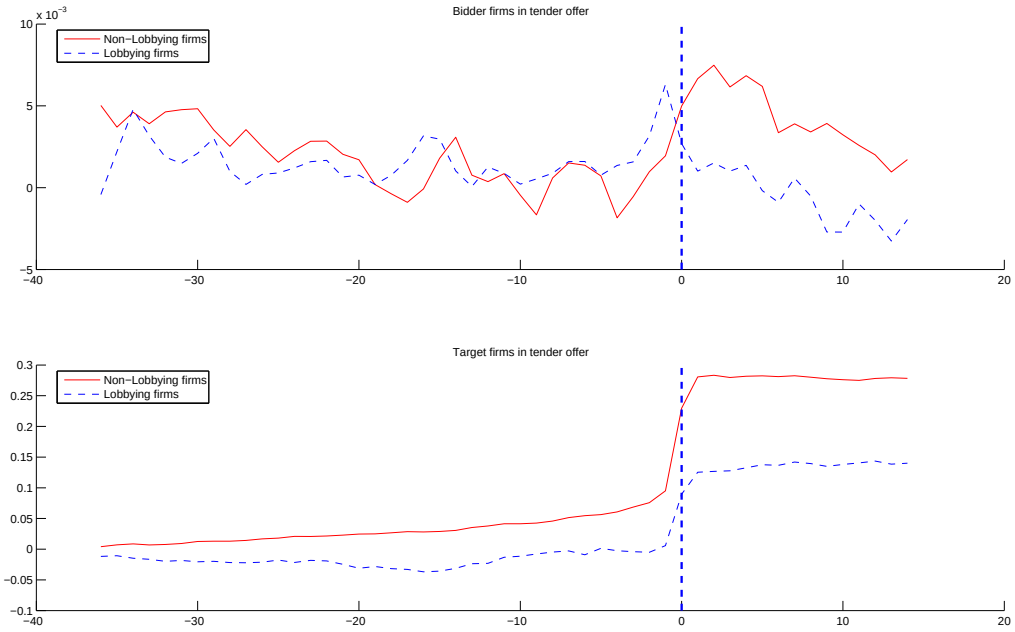

Table 1: Summary Statistics

This table presents summary statistics. Deal value is the total consideration paid for the target. Duration is the number of days between the merger announcement and completion or delisting date. Cash Deal equals one if the merger is paid for in cash. Stock Deal equals one if the merger is paid for in stock. Same Industry Deal equals one if the acquirer and target share at least one digit in their SIC codes. Firm Size is the log of total assets. ROA is operating income before depreciation divided by total assets. Tobin's Q is the ratio of total market value to book value of assets. Free Cash Flow is operating income before depreciation minus Interest Expense minus Income Taxes minus Capital Expenditures, scaled by book value of total assets. Leverage is the ratio of debt to total assets. The Herfindahl-Hirschman index is constructed based on four-digit SIC codes in the entire Compustat universe. CEO/Chairman equals one if the CEO is board chair. CEO/Nominating equals one if the CEO is on the nominating committee. Turnover equals one if the acquiring firm changes its CEO within five years of merger announcement. CEO Compensation (salary, bonus, total) is measured in millions of dollars. The E-Index is calculated as in Bebchuk, Cohen and Ferrell (2008). Board Size is the total number of directors. All firm and industry characteristics are measured in the year prior to the merger announcement date.

	Lobbying Activities						Mean	
	Yes			No			Diff	T-stat
	Obs	Mean	Std Dev	Obs	Mean	Std Dev		
Panel A: Summary statistics for bidder firms								
Deal Characteristics								
Deal Value	1,009	5.42	2.06	3,752	4.03	1.92	1.40	19.4***
Duration	922	4.25	0.97	3,208	4.28	1.02	- 0.03	-0.85
Cash Deal	1,290	36.98%	0.48	4,502	26.63%	0.44	0.10	6.91***
Stock Deal	1,290	25.04%	0.43	4,502	41.89%	0.49	- 0.17	-11.93***
Same Industry Deal	1,290	0.68	0.47	4,502	0.68	0.47	0.00	0.25
Firm/Industry Characteristics								
Firm Size	1,290	23.06	2.14	4,472	20.37	2.14	2.69	39.74***
ROA	1,277	0.13	0.13	4,326	0.04	0.24	0.09	16.99***
Tobin's Q	1,288	2.87	4.07	4,417	2.79	4.97	0.08	0.56
Free Cash Flow	1,134	0.04	0.12	3,105	- 0.04	0.27	0.08	13.17***
Leverage	1,288	0.15	0.15	4,417	0.14	0.15	0.01	1.77*
Herfindahl Index	1,290	0.21	0.18	4,498	0.60	19.15	- 0.39	-1.36
CEO Charcteristics								
Age	984	55.55	6.60	1,572	54.33	7.98	1.22	4.18***
CEO/Chairman	1,053	0.67	0.47	1,757	0.61	0.49	0.06	3.19***
CEO/Nominating	1,053	0.01	0.10	1,757	0.01	0.09	0.00	0.26
Turnover	865	47.75%	0.50	1,369	40.03%	0.49	0.08	3.6***
Total Compensation	1,053	9.12	1.21	1,932	7.95	1.22	1.17	25.13***
Bonus	694	7.24	1.20	1,289	6.23	1.32	1.02	17.32***
Salary	1,054	6.64	1.66	1,965	6.33	0.61	0.31	5.89***
Governance Characteristics								
E-Index	1,061	2.39	1.33	1,787	2.56	1.41	- 0.17	-3.28***
Board Size	999	11.12	2.86	1,652	9.62	3.61	1.50	11.85***
% of Ind Directors	998	71.81%	15.44	1,647	64.90%	17.32	6.91	10.65***
Panel B: Summary statistics for target firms								
Deal Characteristics								
Deal Value	269	6.77	2.25	2,821	4.93	2.02	1.84	12.88***
Duration	229	4.58	1.08	2,580	4.54	0.77	0.04	0.52
Cash Deal	310	46.77%	0.50	3,053	49.75%	0.50	- 0.03	-1
Stock Deal	310	22.26%	0.42	3,053	28.76%	0.45	- 0.07	-2.43**
Same Industry Deal	310	0.47	0.50	3,053	0.54	0.50	- 0.07	-2.27**
Firm/Industry Characteristics								
Firm Size	310	21.58	2.48	3,025	19.41	1.81	2.17	14.98***
ROA	308	0.03	0.26	2,904	- 0.01	0.41	0.04	2.26**
Tobin's Q	309	2.04	1.74	2,997	2.06	5.04	- 0.02	-0.12
Free Cash Flow	283	- 0.06	0.25	2,115	- 0.09	0.50	0.03	1.75*
Leverage	309	0.21	0.19	2,997	0.18	0.20	0.03	2.56**

Table 1 Summary Statistics -Continued

	Lobbying Activities						Mean	
	Yes			No			Diff	T-stat
	Obs	Mean	Std Dev	Obs	Mean	Std Dev		
Herfindahl Index	310	0.20	0.16	3,049	0.52	16.46	- 0.31	-1.05
CEO Charcteristics								
Age	179	55.47	7.55	590	54.94	7.45	0.54	0.84
CEO/Chairman	205	0.61	0.49	654	0.61	0.49	0.00	0.04
CEO/Nominating	205	0.00	0.07	654	0.01	0.11	- 0.01	-1.13
Turnover	55	49.09%	0.50	105	56.19%	0.50	- 0.07	-0.85
Total Compensation	116	8.76	1.20	241	7.81	1.47	0.95	6.47***
Bonus	53	6.55	1.38	127	6.15	1.42	0.40	1.72*
Salary	116	6.58	1.39	243	6.35	1.00	0.23	1.6
Governance Characteristics								
E-Index	222	2.52	1.34	848	2.45	1.33	0.07	0.69
Board Size	203	9.91	2.62	649	8.98	2.85	0.93	4.14***
% of Ind Directors	201	68.26%	18.25	645	65.73%	17.91	2.53	1.74*

Table 2: Average lobby spending and CEO compensation by year

This table presents lobbying information and CEO compensation by year for acquirers and targets by year. Lobbying firms are those that disclose lobbying expenditures in the two years prior to merger announcement. Lobbying amounts and CEO compensation (salary, bonus, total) are measured in millions of dollars.

Deal Year	Total firms	Lobbying firms	Percent lobbying	Lobbying Amount	Total Compen	Bonus	Salary
Panel A: Bidder firms							
2000	1158	263	22.71%	15.04	13.10	1.23	0.63
2001	699	168	24.03%	14.60	11.20	1.24	0.70
2002	519	119	22.93%	13.78	12.81	0.94	0.70
2003	578	158	27.34%	5.54	7.12	0.96	0.71
2004	589	128	21.73%	5.43	6.43	1.20	0.71
2005	622	188	30.23%	14.67	8.09	1.54	0.81
2006	595	177	29.75%	18.07	8.78	2.01	0.83
2007	589	170	28.86%	26.00	9.23	1.14	0.84
2008	424	126	29.72%	20.84	10.08	1.17	0.89
Total	5773	1497	25.93%	14.89	9.65	1.27	0.76
Panel B: Target firms							
2000	697	55	7.89%	1.79	4.64	0.86	0.60
2001	477	33	6.92%	2.30	9.99	0.81	0.58
2002	307	20	6.51%	3.09	13.78	0.52	0.53
2003	305	20	6.56%	0.38	7.56	0.63	0.68
2004	247	18	7.29%	1.67	3.45	0.61	0.61
2005	283	34	12.01%	8.21	3.89	0.60	0.67
2006	342	42	12.28%	5.82	3.85	0.62	0.69
2007	401	54	13.47%	10.76	5.87	0.68	0.76
2008	304	42	13.82%	10.31	5.54	0.59	0.73
Total	3363	318	9.46%	4.93	6.51	0.66	0.65

Table 3: Average lobby spending and CEO compensation by industry

This table presents lobbying information and CEO compensation by year for acquirers and targets by industry. Lobbying firms are those that disclose lobbying expenditures in the two years prior to merger announcement. Lobbying amounts and CEO compensation (salary, bonus, total) are measured in millions of dollars.

Industry (2-digit SIC)	Total firms	Lobbying firms	Percent lobbying	Lobbying Amount	Total Compen	Bonus	Salary
Panel A: Bidder firms							
Agriculture, forestry & fishing	7	0	0.00%	-	2.83	0.80	0.59
Mining & Construction	307	72	23.45%	9.82	8.89	1.97	0.70
Manufacturing	610	270	44.26%	11.83	8.75	1.18	0.96
Manufacturing	1272	429	33.73%	19.68	11.54	0.88	0.70
Transportation & Utilities	451	160	35.48%	8.07	10.77	1.50	0.84
Wholesale & retail	242	43	17.77%	1.97	6.55	0.94	0.71
Finance, insurance, & real estate	1545	227	14.69%	7.63	8.28	1.88	0.74
Personal & business services	1089	246	22.59%	28.73	12.33	1.05	0.67
Healthcare & other services	248	50	20.16%	0.81	5.25	0.58	0.60
Public Administration	2	0	0.00%	-	-	-	-
Total	5773	1497	25.93%	8.85	7.52	1.08	0.65
Panel B: Target firms							
Agriculture, forestry & fishing	8	3	37.50%	0.60	2.24	0.37	0.64
Mining & Construction	146	16	10.96%	1.07	3.60	0.49	0.54
Manufacturing	365	61	16.71%	3.05	4.54	0.72	0.76
Manufacturing	666	50	7.51%	10.12	3.31	0.35	0.57
Transportation & Utilities	263	66	25.10%	2.72	4.78	0.57	0.66
Wholesale & retail	280	14	5.00%	0.48	4.27	0.31	0.72
Finance, insurance, & real estate	812	47	5.79%	16.78	8.36	1.63	0.78
Personal & business services	654	38	5.81%	1.84	10.99	0.45	0.59
Healthcare & other services	136	22	16.18%	0.58	4.97	0.48	0.69
Public Administration	1	1	100.00%	0.06	-	-	-
Total	3331	318	9.55%	3.73	4.71	0.54	0.59

Table 4: Average cumulative abnormal returns by deal and industry characteristics

This table presents cumulative abnormal returns (CAR) for acquirers and targets. CAR is the excess return over the market model for the [-2, 2] day period surrounding the merger announcement. Lobbying firms are those that disclose lobbying expenditures in the two years prior to merger announcement. Low, medium, and high industry concentration are measured by Herfindahl-Hirschman Index values of 0-1000, 1000-1800, and >1800, respectively.

Firms	Category	Lobbying Activities						Percent
			Yes			No		of
		Obs	$CAR[-2,2]$	T-stat	Obs	$CAR[-2,2]$	T-stat	Lobbying
Panel A: Cumulative Abnormal return for Mergin firms								
A		1,290	-0.12%	-0.66	4,502	0.54%	2.5**	22.27%
T		310	15.39%	8.08***	3,053	21.87%	37.75***	9.22%
Panel B: Cumulative Abnormal return for Mergin firms by Merger and Tender Offer								
A	Merger	752	-0.22%	-0.86	3,360	0.45%	1.68*	18.29%
	Tender Offer	538	0.01%	0.02	1,142	0.80%	2.6***	32.02%
T	Merger	133	18.79%	5.23***	1,731	22.58%	35.79***	7.14%
	Tender Offer	177	12.84%	6.59***	1,322	20.93%	19.93***	11.81%
Panel C: Cumulative Abnormal return for Mergin firms by Bidder Attitude								
A	Friendly	1,237	-0.09%	-0.48	4,394	0.54%	2.44**	21.97%
	Hostile	12	-0.16%	-0.11	10	1.23%	1.23	54.55%
T	Friendly	272	15.95%	7.48***	2,859	22.60%	37.24***	8.69%
	Hostile	8	14.00%	4.53***	32	19.39%	5.39***	20.00%
Panel D: Cumulative Abnormal return for Mergin firms by Payment Methods								
A	Cash	477	0.34%	1.42	1,199	0.69%	2.86***	28.46%
	Mixed	138	-1.92%	-2.85***	884	-0.64%	-1.81*	13.50%
	Stock	189	-0.64%	-0.92	993	0.70%	0.91	15.99%
T	Cash	145	22.00%	8.01***	1,519	28.56%	29.94***	8.71%
	Mixed	45	14.25%	6.18***	357	21.56%	19***	11.19%
	Stock	24	22.25%	1.68	513	17.28%	16.11***	4.47%
Panel E: Cumulative Abnormal return for Mergin firms by Same Industry Deals								
A	Same	877	-0.30%	-1.39	3,044	0.07%	0.35	22.37%
	Differ	413	0.26%	0.72	1,458	1.51%	2.99***	22.07%
T	Same	147	18.92%	6.31***	1,654	24.29%	31.41***	8.16%
	Differ	163	12.21%	5.1***	1,399	19.03%	21.94***	10.44%
Panel F: Cumulative Abnormal return for Mergin firms by Herfindahal Index								
A	HHI $<$ 1000	416	-0.79%	-2.45**	1,806	-0.02%	-0.05	18.72%
	1000 $\leq$ HHI $\leq$1800	292	0.11%	0.24	874	1.44%	2.73***	25.04%
	HHI $>$ 1800	582	0.24%	0.9	1,822	0.66%	2.31**	24.21%
T	HHI $<$1000	90	20.57%	7.85***	1,120	20.90%	21.57***	7.44%
	1000 $\leq$ HHI $\leq$ 1800	92	5.54%	2.13**	693	21.28%	17.27***	11.72%
	HHI $>$ 1800	128	18.83%	5.08***	1,240	23.07%	25.89***	9.36%

Table 5: Average cumulative abnormal returns for rival firms

This table presents cumulative abnormal returns (CAR) for rivals of merging firms. CAR is the excess return over the market model for the [-2, 2] day period surrounding the merger announcement. Lobbying firms are those that disclose lobbying expenditures in the two years prior to merger announcement.

	All	Lobbying by merging firms	No-lobbying by merging firms
Panel A: Abnormal returns on announcement for rival portfolios: rival firms lobbying			
Rivals of Bidder firms			
CAR$[-2, 2]$	-0.11%	-0.06%	-0.13%
T-stat	-1.887*	-0.585	-1.807*
Obs	5792	1,290	4,502
Rivals of Target firms			
CAR$[-2, 2]$	0.30%	0.41%	0.29%
T-stat	2.67***	1.81*	2.329**
Obs	3363	310	3053
Panel B: Abnormal returns on announcement for rival portfolios: rival firms no lobbying			
Rivals of Bidder firms			
CAR$[-2, 2]$	-0.15%	-0.16%	-0.15%
T-stat	-3.298***	-1.843*	-2.773***
Obs	5792	1290	4502
Rivals of Target firms			
CAR$[-2, 2]$	0.16%	0.17%	0.16%
T-stat	2.629***	1.05	0.16%
Obs	3363	310	3053

Table 6: Logit regression of the probability that merging firms spend to lobby during deal period

This table presents determinants of lobbying activity during the merger period. The dependent variable equals one if a firm makes lobbying expenditures between the merger announcement date and its completion or delisting date. Acquirer Dummy equals one if the firm is the acquirer in a merger. Cumulative Abnormal Return (CAR) is the excess return over the market model for the [-2, 2] day period surrounding the merger announcement. Stock Deal equals one if the merger is paid for in stock. Cash Deal equals one if the merger is paid for in cash. Duration is the number of days between the merger announcement and completion or delisting date. Same Industry Deal equals one if the acquirer and target share at least one digit in their SIC codes. Low, medium, and high industry concentration are measured by Herfindahl-Hirschman Index values of 0-1000, 1000-1800, and >1800, respectively. Firm Size is the log of total assets. Tobin's Q is the ratio of total market value to book value of assets. ROA is operating income before depreciation divided by total assets. Free Cash Flow is operating income before depreciation minus Interest Expense minus Income Taxes minus Capital Expenditures, scaled by book value of total assets. Leverage is the ratio of debt to total assets. CEO/Chairman equals one if the CEO is board chair. CEO/Nominating equals one if the CEO is on the nominating committee. Board Size is the total number of directors. Independent Board is the percentage of independent directors. The E-Index is calculated as in Bebchuk, Cohen and Ferrell (2008).

	(1)	(2)	(3)	(4)	(5)
Intercept	-20.563	-21.91	-22.276	-23.487	-22.864
	(29.711)	(66.624)	(92.445)	(34.966)	(81.812)
Acquirer Dummy	0.542***	0.513***	0.587***	0.548***	0.497**
	(0.128)	(0.178)	(0.185)	(0.17)	(0.198)
CAR$[-2, 2]$	0.058	0.039	0.295	0.4	0.234
	(0.267)	(0.482)	(0.506)	(0.445)	(0.549)
Stock deal	-0.169	-0.139	-0.252	-0.036	-0.151
	(0.141)	(0.182)	(0.192)	(0.178)	(0.203)
Cash deal	0.029	-0.028	-0.05	0.105	0.029
	(0.131)	(0.168)	(0.174)	(0.165)	(0.183)
Duration	0.103**	0.183***	0.171**	0.182***	0.165**
	(0.052)	(0.068)	(0.07)	(0.066)	(0.074)
Same Industry	-0.062	-0.126	-0.115	-0.108	-0.118
	(0.104)	(0.135)	(0.14)	(0.13)	(0.147)
$1000 \leq$ HHI ≤ 1800	0.011	0.072	0.023	0.043	0.102
	(0.076)	(0.099)	(0.101)	(0.094)	(0.108)
HHI > 1800	0.187***	0.173*	0.169*	0.183**	0.156
	(0.07)	(0.091)	(0.094)	(0.089)	(0.1)
Firm Size	0.8***	0.899***	0.808***	0.918***	0.834***
	(0.031)	(0.048)	(0.053)	(0.047)	(0.057)
Tobin'Q	0.019	0.013	0.023	0.057*	0.062*
	(0.013)	(0.018)	(0.019)	(0.031)	(0.034)
ROA	3.332***	3.013***	3.631***	2.968***	3.176**
	(0.7)	(1.083)	(1.138)	(1.086)	(1.235)
Free Cash Flow	-3.357***	-0.384	-1.138	-0.569	-1.282
	(0.684)	(1.193)	(1.207)	(1.203)	(1.331)
Leverage	-0.922***	-1.114**	-0.671	-1.044**	-0.641
	(0.351)	(0.498)	(0.526)	(0.49)	(0.573)
CEO/Chairman		0.14			0.085
		(0.128)			(0.141)
CEO/Nominating		1.406**			1.342*
		(0.66)			(0.735)
Board Size			0.136***		0.148***
			(0.03)		(0.033)
Independent Board			0.013***		0.012***
			(0.004)		(0.004)
E Index				0.152***	0.099*
				(0.047)	(0.054)
Year Dummy	Y	Y	Y	Y	Y
Industry Dummy	Y	Y	Y	Y	Y
Number of obs.	4730	2077	1988	2255	1790
Pseudo-R^2	31.76%	36.42%	37.82%	36.58%	38.83%

Table 7: Logit Regression of the probability that the acquiring firm's CEO is replaced after merger or acquisition

This table presents determinants of CEO turnover following a merger. The dependent variable equals one if the acquiring firm changes its CEO within five years of merger announcement. Lobby_{t-1} equals one if a firm makes lobbying expenditures in the two years prior to the merger announcement. Lobby_t equals one if the firm makes lobbying expenditures between the merger announcement date and its completion or delisting date. $\text{Lobby}_{t-1,t}$ equals one if the firm lobbies during either of these time periods. Cumulative Abnormal Return (CAR) is the excess return over the market model for the [-2, 2] day period surrounding the merger announcement. Stock Deal equals one if the merger is paid for in stock. Relative size is the ratio of acquirer and target market values of equity. CEO age is measured in years. CEO/Chairman equals one if the CEO is board chair. Board Size is the total number of directors. Independent Board is the percentage of independent directors.

	(1)	(2)	(3)	(4)
Intercept	-9.478	-9.488	-9.413	-9.526
	(33.433)	(33.434)	(33.435)	(33.435)
$\text{CAR}[-2,2]$	-20.667**	-20.76**	-19.78**	-20.328**
	(8.365)	(8.385)	(8.441)	(8.36)
lobby_{t-1}			0.525	
			(0.357)	
$\text{lobby}_{t-1} \times \text{CAR}[-2,2]$			0.376	
			(5.031)	
lobby_t		0.055	-0.367	
		(0.209)	(0.356)	
$\text{lobby}_t \times \text{CAR}[-2,2]$		-1.444		
		(3.027)		
$\text{lobby}_{t-1,t}$				0.097
				(0.21)
$\text{lobby}_{t-1,t} \times \text{CAR}[-2,2]$				-1.811
				(3.001)
Stock deal	-0.071	-0.061	-0.057	-0.053
	(0.207)	(0.208)	(0.21)	(0.208)
Stock deal $\times$ $\text{CAR}[-2,2]$	0.919	0.644	0.402	0.519
	(3.035)	(3.073)	(3.106)	(3.074)
Relative size of target	0.04	0.041	0.042	0.04
	(0.05)	(0.051)	(0.051)	(0.051)
CEO age	0.104***	0.104***	0.104***	0.104***
	(0.015)	(0.015)	(0.015)	(0.015)
CEO/Chairman	-0.01	-0.014	-0.007	-0.017
	(0.205)	(0.207)	(0.207)	(0.206)
CEO/Charman $\times$ $\text{CAR}[-2,2]$	0.031	0.1	-0.182	-0.077
	(3.179)	(3.191)	(3.244)	(3.186)
Board Size	0.051	0.048	0.043	0.046
	(0.034)	(0.035)	(0.035)	(0.035)
Board Size $\times$ $\text{CAR}[-2,2]$	0.609	0.674	0.685	0.702
	(0.516)	(0.532)	(0.539)	(0.535)
Independent Board	0.017***	0.017***	0.017**	0.017***
	(0.007)	(0.007)	(0.007)	(0.007)
Independent Board $\times$ $\text{CAR}[-2,2]$	0.151*	0.154*	0.143	0.149*
	(0.09)	(0.09)	(0.091)	(0.09)
Year Dummy	Y	Y	Y	Y
Industry Dummy	Y	Y	Y	Y
Number of obs.	725	725	725	725
Pseudo-R^2	23.21%	23.25%	23.49%	23.29%

Table 8: The lobbying activity on CEO compensation after merger or acquisition

This table presents determinants of CEO compensation. Bonus, salary, and equity compensation are measured in millions of dollars. Lobby$_{t-1}$ equals one if a firm makes lobbying expenditures in the two years prior to the merger announcement. Lobby$_t$ equals one if the firm makes lobbying expenditures between the merger announcement date and its completion or delisting date. Firm Size is the log of total assets. Deal Value is the total consideration paid for the target. Duration is the number of days between the merger announcement and completion or delisting date. Same Industry Deal equals one if the acquirer and target share at least one digit in their SIC codes. CEO/Chairman equals one if the CEO is board chair. CEO/Nominating equals one if the CEO is on the nominating committee. Board Size is the total number of directors. Independent Board is the percentage of independent directors.

Dependent Variable	Total Compen	Bonus	Salary	Bonus+ Salary	Equity Compen
Intercept	0.657	-0.847	2.707***	1.654***	-1.207
	(0.639)	(0.644)	(0.284)	(0.417)	(0.865)
lobby$_{t-1}$	0.116	0.004	-0.008	0.044	0.214
	(0.101)	(0.096)	(0.041)	(0.057)	(0.139)
lobby$_t$	0.018	0.291***	0.087**	0.169***	-0.014
	(0.096)	(0.09)	(0.038)	(0.054)	(0.133)
Firm Size	0.372***	0.367***	0.148***	0.276***	0.422***
	(0.027)	(0.027)	(0.014)	(0.017)	(0.038)
Deal Value	0.108***	0.063***	0.016*	0.039***	0.156***
	(0.02)	(0.018)	(0.008)	(0.012)	(0.027)
Deal Duration	-0.121***	-0.031	-0.001	-0.024	-0.188***
	(0.036)	(0.035)	(0.013)	(0.022)	(0.05)
Same Industry	0.019	-0.061	-0.051*	-0.038	-0.052
	(0.065)	(0.064)	(0.028)	(0.04)	(0.091)
CEO/Chairman	0.066	0.307***	0.111***	0.193***	0.008
	(0.061)	(0.06)	(0.024)	(0.036)	(0.088)
CEO/Nominating	0.644*	0.744**	0.269**	0.46*	0.496
	(0.361)	(0.323)	(0.115)	(0.24)	(0.447)
Independent Board	-0.001	-0.002	0.001	-0.001	0
	(0.002)	(0.002)	(0.001)	(0.001)	(0.003)
Board Size	-0.05***	-0.011	0.012***	-0.007	-0.071***
	(0.011)	(0.011)	(0.005)	(0.007)	(0.019)
Year Dummy	Y	Y	Y	Y	Y
Industry Dummy	Y	Y	Y	Y	Y
Number of obs.	830	830	830	830	830
Adjusted R^2	46.94%	49.46%	51.68%	58.13%	44.31%