

Does Board Classification Matter for Industry Rivals? Evidence of Spillover Effects in the Market for Corporate Control

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Abstract

This paper documents robust evidence of spillover effects in corporate governance. In particular, we consider the relation between board classification, takeover activity, and transaction outcomes for a panel of US public corporations between 1990 and 2006. We document a reliable negative association between board classification and transaction outcomes, such as likelihood of receiving a takeover bid and likelihood of bid completion, but only in industries with high incidence of board classification. Moreover, takeover bids for targets with a classified board lead to higher announcement returns for shareholders of targets and their industry peers, but only in industries with low incidence of board classification. Overall, these findings offer direct evidence supporting the hypothesis that board classification diverts takeover activity to substitute targets with better governance. Moreover, they imply that generally overlooked lax governance standards at the industry level are as important a determinant of managerial entrenchment as much looked upon firm-level governance measures.

1 Introduction

Much of the current debate on corporate governance has focused on an important governance mechanism – the market for corporate control. A recent empirical literature (Gompers, Ishii, and Metrick (2003), Bebchuk, Cohen, and Ferrell (2004)) and a long-standing theoretical literature (Manne (1965), Scharfstein (1988)) argue that antitakeover provisions (ATPs) shield management from the discipline of the market for corporate control, and, thus, are detrimental to shareholder value. This "agency" view is firmly established among academics and has provided the rationale for policy reforms (Sarbanes-Oxley act) and the recent wave of institutional shareholder initiatives aimed at repealing antitakeover provisions.

The agency view has been traditionally developed within a partial equilibrium setting that abstracts from interactions among firms in the market for corporate control. However, anecdotal accounts by M&A lawyers and business practitioners and a growing body of empirical evidence suggest that such interactions might be important. In fact, it is well documented that industry-specific shocks such as changes in interest rates, oil prices, or technology, lead to industry-wide restructuring, i.e., merger waves that cluster by industry.¹ Moreover, there is reliable evidence that acquisition activity within an industry is associated with positive abnormal returns to rivals of the targeted firm (Eckbo (1983, 1985), Eckbo and Wier (1985)), which is consistent with takeover bids being a positive signal about potential synergies between rivals and subsequent bidders. Overall, this evidence suggests that takeover targets are to some extent fungible, especially within industry.

This paper develops the equilibrium implications of substitutability among targets and shows that potentially important spillover, or peer, effects arise in the market for corporate control. This is the case since, by raising the expected acquisition costs for prospective bidders, ATPs not only

¹See Mitchell and Mulherin (1996) for a detailed analysis of the clustering of acquisitions within industries and the relation of acquisition waves to external shocks.

reduce the probability that a firm is successfully taken over (see Bebchuk, Coates, and Subramanian (2002) and Field and Karpoff (2002) for this well-known deterrence effect of ATPs), but also divert takeover pressure toward other targets. This diversion is especially strong for targets that are not protected by ATPs and hence are relatively easier to take over. Intuitively, this spillover story is analogous to the classical diversion of crime idea in the economics of crime literature (Shavell (1991)): a thief is more likely to steal an unprotected car if most cars nearby are protected by an antitheft device. In summary, our spillover story implies that a firm's ATPs have a social effect - a diversion effect - in that they shift takeover pressure toward relatively unentrenched peers.

While it is intuitive that substitutability between targets may give rise to potentially important spillover effects in the market for corporate control, this idea has surprisingly not been explored in the literature. This is particularly surprising in light of the growing attention peer effects have received in the asset pricing literature (see, for example, Bikhchandani, Hirshleifer, and Welch (1992) Brown, Ivković, Smith, and Weisbenner (2004), Coval and Moskowitz (1999, 2001), Hong, Kubik and Stein (2003, 2004))² and the large body of empirical evidence that local peer group effects have important consequences for a number of economic outcomes, including educational attainment and participation in crime (see, for example, Case and Katz (1991), Glaeser, Sacerdote, and Scheinkman (1996, 2003), and Bertrand, Luttmer, and Mullainathan (2000); Glaeser and Scheinkman (2002) provide a survey with more references).³

This paper fills the gap in the literature and studies, to the best of our knowledge for the first time, the role of spillover effects in corporate governance. We develop several unique cross-sectional predictions of our peer story for the link between own and peer board classification, takeover activity, and transaction outcomes. At the core of our argument is the observation that, if the ATPs of a

²Other recent related papers are Grinblatt and Keloharju (2001), Huberman (2001), Malloy (2004), and Pirinsky and Wang (2005).

³Relatedly, Dumais, Ellison, and Glaeser (2002) and Rosenthal and Strange (2001) provide evidence that geographic proximity facilitates intellectual spillovers across a variety of industries.

given firm, say firm A, shift takeover pressure toward relatively unentrenched peers, say firm B, then firm B's likelihood of becoming the target of a takeover bid depends on firm A's ATPs. This reasoning implies that unentrenched firms' likelihood of receiving a takeover bid gains an extra component with respect to standard firm-level determinants identified in the literature and that this new component depends on peer ATPs. Based on this reasoning, we expect that:

1) The negative relation between target board classification and the likelihood of receiving a takeover bid as well as, conditional on a bid, the likelihood of deal completion, should depend on peer board classification. In particular, we expect a stronger negative relation when there are relatively more peers with classified boards. This is the case since the diversion effect is increasing in peer entrenchment. Thus, due to diversion, ATPs are most entrenching for firms facing relatively more entrenched peers.

2) The relation between target board classification and the announcement effect of a takeover bid on target shareholder wealth should depend on peer board classification. In particular, we expect that target board classification is less likely to increase target shareholder wealth when peers are more protected. This is the case since, when peers are more protected, unprotected targets are relatively scarce and, thus, can extract higher premiums by leveraging the fact that there no cheap substitutes available to acquirers. By converse, when peers are relatively unprotected, unentrenched targets are in a weaker bargaining position. Therefore, when peers are relatively unprotected we expect to see larger differences between premiums of entrenched versus unentrenched targets.

In the second part of our analysis, we develop a direct test of the diversion effect based on the cross-sectional variation in the takeover bid announcement returns to peers. In particular, we build on the evidence that positive abnormal returns to rivals of the targeted firm around acquisition announcements reflect upward revisions by investors in the likelihood that peers will receive a takeover bid (Eckbo (1983, 1985), Eckbo and Wier (1985)). If target ATPs shift takeover pressure

toward relatively unentrenched peers, then we would expect larger announcement returns to peers whenever targets are relatively protected and peers are relatively unprotected.

In order to take these predictions to the data, we define peers based on primary SIC industry classification, based on the evidence of fungibility of targets in the same industry (see, for example, Song and Walking (2006) and Eckbo (1983)). We also use a finer peer definition based on headquarters location, consistent with the evidence of fungibility of targets in close geographic areas (Kedia, Panchapagesan, and Uysal (2006)), which suggests that targets in the same industry are more likely to be substitutes if they are also in the same area. In particular, we further subdivide peers based on whether firms that are in the same industry are also headquartered in the same area. The empirical identification of peer effects is a notoriously difficult issue. An important contribution of our paper is to employ a short-term event study approach, which is not subject to the simultaneity critiques levied on standard cross-sectional studies.

Using a panel of US public corporations between 1990 and 2006, we find strong support for our hypothesis that board classification diverts takeover activity to substitute targets with better governance. We document a reliable negative association between board classification and transaction outcomes, such as likelihood of receiving a takeover bid and likelihood of bid completion, but only in industries with high incidence of board classification. In these industries, the extent of bid deterrence attributable to classified boards is large. Classification is associated with a 1.0% reduction in the likelihood of receiving a takeover bid. This effect is substantial relative to the observed bid frequency of 4.16% for the subsample of targets with classified boards, leading us to infer that deterrence is the primary channel through which a classified board alters a firm's exposure to the market for corporate control. Further, controlling for transaction and target firm characteristics, we find that only in industries with high incidence of board classification targets with a classified board are ultimately acquired at a lower rate than targets with a single class of directors. This

result is consistent with the premise that board classification is systematically used by entrenched managers to defeat takeover bids.

Finally, we analyze the shareholder wealth effects associated with observed change-in control bids conditioned on the target's and its peers' use of a classified board. Controlling for bid and target firm characteristics, takeover bids for targets with a classified board lead to higher announcement returns for shareholders of targets and their industry peers, but only in industries with low incidence of board classification. In these industries, board classification has a significant positive impact on the cumulative abnormal returns (CARs) realized by target shareholders estimated either over the bid announcement period. Overall, this evidence suggests that the value of classification for shareholders depends on the relative scarcity of unprotected targets.

Our study makes two main contributions. First, we contribute to the corporate governance literature by introducing peer effects. Previous studies typically abstract from peers and focus on the effects of ATPs on executive compensation ((Bertrand and Mullainathan (1999), and Fahlenbrach (2004)), firm leverage (Garvey and Hanka (1999), John and Litov (2006)), firm cash holdings and dividend policies (John and Knyazeva (2006), Dittmar and Mahrt-Smith (2005)), acquirer returns (Masulis, Wang, and Xie (2006), and firm performance (Gompers, Ishii, and Metrick (2003), Bebchuk, Cohen, and Ferrell (2004), Core, Wayne, Rusticus (2004), Bebchuk and Cohen (2005), and Cremers and Nair (2003)). Our evidence strongly suggests the need for researchers to control for peers in their study of the consequences of corporate governance.

Second, we contribute to the growing literature on the role of peer effects in finance. Previous studies have documented peer effects for stock market participation and, more broadly, asset pricing (Bikhchandani, Hirshleifer, and Welch (1992) Brown, Ivković, Smith, and Weisbenner (2004), Coval and Moskowitz (1999, 2001), Hong, Kubik and Stein (2003, 2004)). We broaden the reach of this literature by studying peer effects in corporate governance.

Outline The remainder of the paper is organized as follows. Section 2 introduces data and describes the construction of our variables. Section 3 reports the results of the tests of our predictions. Section 4 concludes.

2 Data and Takeover Sample

Our sample includes US public corporations covered in at least one of the volumes published by the Investor Responsibility Research Center (IRRC) between 1990 and 2006. The IRRC reports about every two years (1990, 1993, 1995, 1998, 2000, 2002, 2004, 2006) data on a set of 24 governance provisions for firms in the Standard & Poor's 1500 and other major US corporations. The IRRC sample consists of 2,584 unique firms and 16,141 firm-year observations. We match firm-year observations from IRRC to Compustat and retain those with non-missing book value of assets. For all governance provisions except for board classification, we follow Gompers, Ishii, and Metrick (2003) and assume that a provision remains in place from the publication date of an IRRC volume until the next publication date.⁴ For board classification, we supplement information on year of adoption from IRRC with SEC filings from Edgar and newspaper article searches from Factiva.

2.1 Takeover Sample

In order to obtain information on both successful and unsuccessful takeover attempts involving IRRC firms, we use the mergers and acquisitions database maintained by Securities Data Corporation (SDC). We account for multi-bid auctions and follow-on bidding following Bates and Lemmon (2003) and Bates, Becher, and Lemmon (2008). In particular, we sample transactions from SDC

⁴Although both measures show little within firm change from point to point, our results do not depend on the assumption that the value of the antitakeover provision index in-between survey years is unchanged. In unreported results based solely on data from the survey years, we replicate the reported results.

announced from two years prior (1988) through 2 years following (2008) the panel interval.⁵ To discriminate between the economic effects of initial and follow-on bids, we define an auction sequence as follows: a bid is considered an initial bid if no bid for the target is identified for 365 calendar days before the announcement. Bids are part of an auction if announced within 365 calendar days of a prior bid announcement for a target. In the event that there is no follow-on bidding, an auction consists of only a single initial bid.

Our sample of 2,584 IRRC firms is associated with 1,404 merger and acquisitions transaction reports on SDC between 1988 and 2006. These deals are screened to include only deal forms coded as “mergers”, “acquisitions”, and “acquisitions of majority interest” and exclude spin-off “acquisitions” where the acquirers are the firm’s own shareholders. We retain initial bids announced between 1990 and 2006. To ensure that we observe a complete auction sequence, we retain follow-on bids announced after 2006 provided the auction was initiated before the end of 2006. Initial bids in each auction are matched to the merged IRRC/Compustat data by calendar year. The final data set consists of 872 initial bids and 130 follow-on bids (1002 bids in total).

Board Classification and other ATPs We use board classification as our main governance variable. This choice is motivated by the argument in Bebchuk, Coates and Subramanian (2002) and M&A practitioners (Lipton (2002), Gordon (2002)) that staggered (classified) boards constitute the most significant barrier to hostile acquisitions and, especially when combined with a poison pill, can impose up to a two-year delay on an acquirer.

We also control for other governance provisions covered in IRRC that have been previously considered in the literature. In particular, we control for the GIM-index (excluding classified boards)

⁵Targets are matched to CRSP/Compustat GVKEY identifiers using reported SDC target CUSIPs. Given variation in SDC and Compustat CUSIP codes we verify positive matches comparing the SDC reported company name against the historical name structure on CRSP. For a subset of targets not matched by CUSIP, we match using the target corporation’s name from SDC and the name structure on CRSP.

constructed by Gompers, Ishii, and Metrick (2003) and the E-index (excluding classified boards) constructed by Bebchuk, Cohen, and Ferrell (2004). The GIM-index is the sum of all antitakeover provisions in a firm’s charter⁶ that varies between 0 and 24, with higher values of the index corresponding to more ATPs. BCF argue that not all of the 24 provisions in the GIM index are effective antitakeover measures and construct the E-index, which uses only six provisions: staggered boards, limits to shareholder bylaw amendments, limits to shareholder charter amendments, supermajority requirements for mergers, poison pills, and golden parachutes. BCF show that the E-index has a stronger association with stock returns and firm value than the GIM-index.

To control for other antitakeover devices, we use data on state antitakeover protection from Bebchuk and Cohen (2003) to construct an indicator variable for states with a high number of state antitakeover statutes and for incorporation in Delaware. Daines and Klausner (1999) and Bebchuk and Cohen (2003) point out that some states, including Pennsylvania and Ohio, erect substantial barriers to takeovers, requiring bidders to disgorge short-term profit and allowing target management to resist a bid that might harm employees, creditors, or communities. Failure to include an opt-out term in firms incorporated in these states is thus equivalent to the inclusion of an explicit ATP in a firm’s charter. About a third of our firms are incorporated in states with substantial number of antitakeover statutes. Moreover, consistent with GIM and BCF, about 60 percent of firms in our sample are incorporated in Delaware.

Measuring Abnormal Returns to Targets and Their Rivals We compute abnormal returns using a standard event study methodology (see MacKinlay (1997) for a detailed review). For each event, we estimate abnormal returns to firm i at date t as $AR_{it} = R_{it} - \alpha_i + \beta_i R_{mt}$, where R_{mt} is the return on the CRSP value-weighted index on day t , R_{it} is the realized return to firm i on day t , and the parameters α_i and β_i are estimated using the market model. To estimate the market

⁶A detailed description of takeover defenses included in the GIM-index can be found in GIM, Appendix A.

model, we use CRSP daily return data from 241 to 41 trading days prior to the event date. To obtain cumulative abnormal returns (CAR), we sum the abnormal returns over a seven-day event window surrounding the announcement of the bid (-5,+2), with the announcement as reported in SDC's U.S. Mergers & Acquisitions database.⁷

We use this methodology to estimate CARs for target and bidder shareholders. However, to estimate CARs to industry peers, we amend this methodology and follow the literature by forming equally weighted portfolios of industry peers to account for any contemporaneous cross-correlation of returns (see, for example, Eckbo (1983) and Song and Walkling (2000) and, for BC laws, Karpoff and Malatesta (1989)).

Firm-Level and Deal-Level Controls There is a sizable literature that relates target characteristics to outcomes in the market for corporate control (see, for example, Jensen and Ruback (1983)). Thus, we use firm characteristics from Compustat and CRSP to control for firm size, leverage, and Tobin's Q, all of which are measured at the fiscal year end prior to bid announcement, and pre-announcement stock price runup, which is measured over the 200-day window from event day -241 to event day -41.

We measure market-to-book ratio as in Kaplan and Zingales (1997), i.e., as the ratio of market value of assets to book value of assets (item 6). Market value of assets is defined as book value of assets plus market equity (items 24-25) minus the sum of book equity (item 60) and balance sheet deferred taxes (item 74). For firm size, we use log of the book value of assets (item 6). Firms' leverage is defined as the sum of item 9 and item 34, normalized by firm's total assets (item 6) of the previous fiscal year. We also verify robustness of these results to normalization by capital stock (item 8). We remove outliers by winsorizing the extreme observations in the 1% left or right tail of

⁷We find qualitatively the same results using a shorter three-day window around the announcement of the bid (-1, +1).

the distribution.

Previous studies also found that deal characteristics are associated with outcomes in the market for corporate control. Thus, we use information from SDC to control for deal characteristics such as method of payment (cash or stock), target management’s hostility to the initial bid, and whether the bid is structure as a tender offer.

Other Governance Characteristics Finally, we control for internal governance by obtaining data on institutional blockholding, public pension fund ownership, and insider ownership. Our institutional blockholding and public pension fund data come from Cremers and Nair (2005), who argue that external (ATPs) and internal (institutional blockholding and public pension fund ownership) governance interact in their effect on firm value. Following Cremers and Nair (2005), we define blockholders as shareholders, external to the firm, with an ownership greater than 5% of the firm’s outstanding shares. Data on the percentage of shares held by the firm’s largest institutional blockholder and by the 18 largest public pension funds are collected from CDA Spectrum⁸. Our insider ownership data are from the ExecuComp database compiled by Standard and Poor’s. We define managerial ownership as the percentage of common equity held by the CEO through stocks and options. Since the ExecuComp database does not contain all companies that are part of the IRRC universe, we retrieve all missing CEO information by looking up the companies’ proxy statements directly.

2.2 Industry Peers

Industry peers are firms that share the same Fama and French (1997) primary SIC code as the target. The 48 industry classification of Fama and French (1997)⁹ roughly corresponds to the 2-digit SIC

⁸CDA Spectrum collects information on institutional shareholdings from the SEC 13f filings.

⁹The 48 Fama and French (1997) industries are agriculture, food products, candy & soda, beer & liquor, tobacco products, toys and recreation, fun and entertainment, books, consumer goods, apparel, healthcare, medical equipment,

level and is widely employed in finance. It groups firms that operate within relatively homogeneous sectors, which, thus, are more likely to be substitutes from the point of view of potential bidders. There are clearly trade-offs in the choice between coarser and finer industry partitions, since too coarse a partition may end up pooling together unrelated industries, while too narrow a partition may be subject to misclassification. We consider finer industry partitions based on 3- and 4-digit SIC codes in robustness checks.

Two important issues are worth discussing in the construction of our peer variables. First, as emphasized in Kahle and Walkling (1996), one major source of the inaccuracy of Compustat industry classifications is that the Primary SIC Code data item is based on the current primary SIC code of a given firm, and does not account for the fact that a large number of firms change their primary SIC code over time. Thus, to make reliable inference about a firm's industry classification it is important to correct for this deficiency. To this end, we use physical Compustat tapes to collect manually the historic information on firms' primary SIC on an annual basis over the period from 1990 to 2006. This allows us to identify all firms whose primary SICs have changed over our sample period. We also cross-checked this information for consistency using data from Compact Disclosure.

Second, we include both single and multiple-segment firms in our definition of peers. However, we recognize that diversified firms will also have segments in industries that are not affected by the takeover. Since we define peers based on their primary SIC codes, it is important to examine the importance of the business derived from the primary segment relative to the overall operations of the merging firms. We use the Compustat Industry Segment (CIS) tapes to collect data on the segments in which the sample targets and bidders operate. We find that 90% of targets and 77% of

pharmaceutical products, chemicals, rubber and plastic products, textiles, construction materials, construction, steel works, fabricated products, machinery, electrical equipment, automobiles and trucks, aircraft, shipbuilding, railroad equipment, defense, precious metals, non-metallic and industrial metal, mining, coal, petroleum and natural gas, utilities, communication, personal services, business services, computers, electronic equipment, measuring and control equipment, business supplies, shipping containers, transportation, wholesale, retail, restaurants, hotels, motels, banking, insurance, real estate, trading, miscellaneous.

bidders are single-segment firms. We also find that 95% of targets and 90% of bidders have more than 75% of their sales derived from their primary segment. Thus, the typical firm in our sample is focused and derives most of its business from the takeover industry. For robustness, we repeat our analysis using only single-segment firms to define peers and find results that are qualitatively similar to those reported.

We define industry peer governance for any given target firm i in a given year t as the equally-weighted average of board classification in the industry, i.e.,

$$\hat{E}_{-i,t}(ATP|x) = \frac{\sum_{j \in x \setminus \{i\}} ATP_{j,t}}{N_x - 1} \quad (1)$$

where $ATP_{j,t}$ is an indicator variable which equals one if firm j has a classified board in year t , N_x denotes the number of firms in industry x . Notice that in computing our peer variable we exclude own board classification, to avoid mechanical correlation between own and average board classification. Finally, since board classification is a dummy variable, our industry peer board classification variable measures the incidence of firms with classified boards in any given industry(-year).

Table 1 presents summary statistics of our takeover sample. Sample moments are in line with recent studies of ATPs in the context of the market for corporate control (e.g., Bates, Becher, and Lemmon (2008), Schwert (2000), and Bebchuk, Coates, and Subramanian (2002)).

3 Results

In this section we examine whether board classification of targets and of their industry peers are systematically associated with the outcomes of observed takeover bids. First, we investigate whether own as well as peer board classification are correlated with the likelihood that a firm receives a takeover bid and, with the likelihood that, once initiated, any given takeover bid results in a

successful change-in-control event. Second, we examine whether board classification of targets and of their industry peers are reliably associated with the wealth effects realized by target shareholders during change-in-control events. Finally, we study whether target and peer board classification are reliably associated with the wealth effects realized by the shareholders of the industry peers of target around takeover bid announcements.

3.1 Likelihood of Receiving a Takeover Bid and Bid Completion Likelihood

In Table 2 we summarize the results of probit regressions estimating the likelihood of a takeover bid for a firm-year observation as a function of the firm’s governance provisions as well as the governance provisions of its peers. The regressions also include controls for firm size, market-to-book, leverage, and abnormal performance measured as the rolling mean monthly net of market return on the firm’s stock computed over the 12 months prior to the calendar year of the observation in the panel. The regressions also control for industry fixed-effects using the industry classification of Fama and French (1997) and year fixed effects (1990 is the excluded year). The dependent variables equal to one for firm-year observations involving an initial takeover bid and zero otherwise. Statistical significance is evaluated using robust clustered standard errors adjusted for non-independence of observations within industries. The reported coefficients are marginal effects computed at the mean values of the independent variables.

Columns 1 and 2 of Table 2 summarize the results of individual probit models in the overall sample, a specification which is commonly employed in the governance literature that seeks to understand the deterrence effect of ATPs (e.g., Bebchuk, Coates, and Subramanian (2002), Bates, Becher, and Lemmon (2008)). We control for other governance characteristics using the net G-index (Column 1) based on Gompers, Ishii, and Metrick (2003) and the net E-index (Column 2) constructed by Bebchuk, Cohen, and Ferrell (2004). In both columns, the coefficient on the classified

board indicator is negative and not statistically different from zero. This result is consistent with the findings of the previous literature (e.g., Bates, Becher, and Lemmon (2008)). Coefficients on the control variables indicate that leverage increases the likelihood of becoming a bid target. Notably, neither the coefficient estimate for the net G-index, nor the coefficient estimate for the net E-index are statistically significant.

To examine the role of industry peer effects, Columns 3 and 4 and Columns 5 and 6 present results for these regressions when we split out takeover sample into two subsamples according to whether peer entrenchment is high or low, based on whether peer entrenchment is in the upper and lower quartiles of the distribution of entrenchment, respectively. Our diversion effect implies that we should see a negative effect of ATPs on the probability of receiving a takeover offer, but only when peer entrenchment is high.

Consistent with our diversion effect, the coefficient on board classification is negative and statistically significant only for firms that face relatively entrenched peers (Columns (5)-(6)). The marginal effect suggests that firms with classified boards are 0.8% less likely to receive a bid in a particular year relative to comparable firms with a single class of directors. Notably, the coefficient estimates for the net G-index and the net E-index are positive and statistically significant. Thus, controlling for board classification, firms with more anti-takeover provisions are more likely to receive a takeover bid. However, the marginal effect associated with this result is economically small, a result also in line with the previous literature (e.g., Bates, Becher, and Lemmon (2008)). In contrast with these results, board classification does not have a statistically significant effect on takeover bid deterrence for firms with unentrenched peers (Columns (3)-(4)).

Takeover Bid Completion Table 3 considers another aspect of deterrence associated with ATPs, the possibility that entrenched managers utilize the classified-board structure to repel change-in-control bids and preserve their private benefits of control (e.g., Bebchuk, Coates, and Subramanian,

2002). We reports the results of logistic regressions modeling the likelihood of completing a bid as a function of target board structure, bid disposition, and other governance, bid, and target characteristics. About 75% of the initial bids in our sample are completed. We report marginal effects for coefficients, which represent the change in the probability of bid completion for a change in an indicator variable from zero to one or a one standard deviation change in a continuous variable, holding all other variables constant at their mean values.

Columns 1 and 2 of Table 3 examine the likelihood that an initial bid is completed as a function of the target firm's governance characteristics. We model the effects of board classification with an indicator variable equal to one for targets with a classified board and zero otherwise. We control for other governance characteristics using the net G-index (Column 1) based on Gompers, Ishii, and Metrick (2003) and the net E-index (Column 2) constructed by Bebchuk, Cohen, and Ferrell (2004). The model also incorporates control variables for target size (log of total assets), leverage, and the market-to-book ratio, all measured in the fiscal year prior to the takeover bid.

In both columns, the coefficient on the classified board indicator is negative as expected, but not statistically different from zero, indicating that the likelihood of observing a completed initial bid is equivalent for targets with and without classified boards. This result is consistent with the findings of the previous literature (e.g., Bates, Becher, and Lemmon (2008)). Neither the coefficient estimate for the net G-index, nor the coefficient estimate for the net E-index are statistically significant, indicating that indexed governance features commonly associated with managerial entrenchment are not reliably associated with the likelihood of initial bid completion. In an otherwise identical unreported specification we replace the net G-index with the independent elements of the entrenchment index. None of the coefficients on board classification or the other elements of the entrenchment index are statistically significant in this specification.

To examine the role of peer effects, Columns 3 and 4 and Columns 5 and 6 present results for

these regressions when we split out takeover sample into two subsamples according to whether peer entrenchment is high or low, based on whether peer entrenchment is in the upper and lower quartiles of the distribution of entrenchment, respectively. Our diversion effect implies that we should see a negative effect of ATPs on the probability of bid completion, but only when peer entrenchment is high.

Consistent with our diversion effect, the coefficient on board classification is negative and statistically significant only for firms that face relatively entrenched peers (Columns (5)-(6)). The incremental effect of a classified board suggests an additional 19% reduction in the likelihood of initial bid completion for this subset of target firms. Neither the coefficient estimates for the net G-index nor the net E-index are statistically significant. In contrast with these results, board classification does not have a statistically significant effect on the likelihood of bid completion for targets facing relatively unentrenched peers (Columns (3)-(4)).

In unreported specifications we incorporate additional controls for deal characteristics, including the bidder toehold, indicator variables equal to one for deals with target payable termination fees, as well as target officer and director ownership and CEO duality. Officer and director ownership provides a measure of the direct incentives of target managers to accept bids. Bange and Mazzeo (2004) find that targets characterized by CEO duality are less likely to engage in public negotiations with a bidder but are more likely to be involved in completed transactions. The coefficient estimates on bidder toeholds, ownership by officers and directors, and CEO duality are not statistically significant. The fundamental conclusions regarding board classification, bid tenor, and the likelihood of initial bid completion remain unchanged in this specification.

Overall, the results in Tables 2 and 3 indicate that board classification of targets is reliably negatively associated with the likelihood receiving a takeover bid and with the likelihood of initial bid completion, but only for firms facing relatively entrenched peers.

3.2 Target Premiums

Incumbent management could use board classification to negotiate private benefits in merger transactions at the expense of target shareholders. Alternatively, the classified board mechanism could facilitate bargaining on behalf of target shareholders, consistent with Stulz (1988) and Schwert (2000). Thus, target board classification could be associated to either higher or lower target shareholder premiums. However, our diversion story implies unambiguously that target board classification is less likely to increase target shareholder wealth when peers are more protected, since that is exactly when unprotected targets are relatively scarce and, thus, are in a better bargaining position with respect to acquirers.

To evaluate whether target as well as peer board classification matter for shareholder welfare in takeover bids, we estimate changes in target shareholder wealth at the announcement of initial bids. Table 4 summarizes the results of ordinary least squares regressions modeling target returns. In all these specifications we control for initial bid hostility, bid completion, tender offers, and equity bids. Target firm variables include a classified board indicator and controls for the net G-index and net E-index, firm size, market-to-book, leverage, and pre-bid stock price performance. All specifications include year fixed effects (1990 is the excluded year).

Columns 1 and 2 of Table 4 summarize the regression results of target announcement period CARs in the overall sample, a specification which is commonly employed in the literature that seeks to understand target shareholder wealth effects in mergers and acquisitions (e.g., Schwert (2000) and Bates, Becher, and Lemmon (2008)). In both columns the coefficient associated with target board classification is insignificantly different from zero as is the coefficient on the net G-index and the net E-index. These results are consistent with the findings of the previous literature (e.g., Bates, Becher, and Lemmon (2008)). Consistent with other studies, target announcement CARs are higher in tender offers and are negatively correlated with equity bids, target firm size, the market-to-book

ratio, and pre-bid target returns.

To examine the role of peer effects, Columns 3 and 4 and Columns 5 and 6 present results for these regressions when we split out takeover sample into two subsamples according to whether peer entrenchment is high or low, based on whether peer entrenchment is in the upper and lower quartiles of the distribution of entrenchment, respectively. Our diversion effect implies that we should see a positive effect of ATPs on target announcement period CARs, but only when peer entrenchment is low.

Consistent with our diversion effect, the coefficient on board classification is positive and statistically significant only for firms that face relatively unentrenched peers (Columns (3)-(4)). For these firms, the marginal effect suggests that target announcement period CARs for firms with classified boards are about 7% higher relative to comparable firms with a single class of directors. Notably, the coefficient estimates for the net G-index and the net E-index remain statistically insignificant. Thus, controlling for board classification, firms with more anti-takeover provisions do not receive higher target premiums. In contrast with these results, board classification does not have a statistically significant effect on premiums for targets with entrenched peers (Columns (5)-(6)).

3.3 Wealth Effect of Acquisition Announcement on Target Rivals

There is reliable evidence that acquisition activity within an industry is associated with positive abnormal returns to rivals of the targeted firm (Eckbo (1983, 1985), Eckbo and Wier (1985)), which is consistent with takeover bids being a positive signal about potential synergies between rivals and subsequent bidders. We expect that the cross-sectional variation in the takeover bid announcement returns to peers should be systematically related to variables associated with the likelihood of diversion. In particular, since diversion likelihood is highest for unprotected firms facing relatively protected peers, the announcement effect on rivals should be larger whenever targets are relatively

more protected than their peers. In fact, in this case board classification makes a target harder to take over and, thus, increases that likelihood that the bid will not be completed and the bidder will turn to cheaper substitutes among target's peers. Moreover, the bid itself is a positive signal about potential synergies between relatively cheaper to take over rivals and subsequent bidders. Either way, we expect announcement effects on peers to be larger for relatively unprotected peers of targets with classified boards.

Results for CARs to industry peers are reported in Table 5, which reports estimates of changes in shareholder wealth of portfolios of target industry peers at the announcement of initial bids. Table 5 summarizes the results of ordinary least squares regressions modeling peer returns. In all these specifications we control for initial bid hostility, bid completion, tender offers, and equity bids. Target firm variables include a classified board indicator and controls for the net G-index and net E-index, firm size, market-to-book, leverage, and pre-bid stock price performance. All specifications include year fixed effects (1990 is the excluded year).

Columns 1 and 2 of Table 5 summarize the regression results of peer announcement period CARs in the overall sample. In both columns the coefficient associated with target board classification is not significantly different from zero as is the coefficient on the net G-index and the net E-index. To examine the role of peer effects, Columns 3 and 4 and Columns 5 and 6 present results for these regressions when we split out takeover sample into two subsamples according to whether peer entrenchment is high or low, based on whether peer entrenchment is in the upper and lower quartiles of the distribution of entrenchment, respectively. Our diversion effect implies that we should see a positive effect of target ATPs on peer announcement period CARs, but only when peer entrenchment is low.

Consistent with our diversion effect, the coefficient on board classification is positive and statistically significant only for firms that face relatively unentrenched peers (Columns (3)-(4)).

these firms, the marginal effect suggests that announcement period CARs for peers of targets with classified boards are about 2% higher relative to peers of comparable targets with a single class of directors. Notably, the coefficient estimates for the net G-index and the net E-index remain statistically insignificant. In contrast with these results, board classification does not have a statistically significant effect on entrenched peers (Columns (5)-(6)).

Overall, the results in Table 5 produce strong direct evidence of spillover effects in the market for corporate control.

3.3.1 Identification: Geography

So far we have documented evidence consistent with a diversion effect of ATPs in the market for corporate control. One potential shortcoming of our results, however, is that our definition of peers includes firms that may operate anywhere in the US market. Note that Eckbo (1983) deals with this issue by selecting a sample of mergers between firms that were operating nationally as stated in the court records for antitrust cases. We address this issue using the following approach. Since domestic firms are not required to disclose information on where they do business within the US market, it is not possible to accurately determine the extent to which they operate in a given market. Therefore, following the literature, we use headquarter location as the location in which the firm core business is located (see, e.g., Coval and Moskowitz (1999), Ivković and Weisbenner (2004), and Pirinsky and Wang (2005)). Corporate headquarters are close to corporate core business activities. More importantly, corporate headquarters are the center of information exchange between the firm and its suppliers, service providers, and investors (see Davis and Henderson (2004) for detailed discussion on the role of corporate headquarters).

To classify locations, we first obtain data on State and County of companies' headquarters from Compustat. The State/County combination defines the State/County code according to the

Federal Information Processing Standards (FIPS). Using the State/County FIPS code, we then merge the sample of firms with the Metropolitan Areas and Components data defined by the Office of Management and Budget (OMB) as of 2005.¹⁰ We define a firm's location as the Metropolitan Statistical Area (MSA) of its headquarters. As defined by the OMB, an MSA includes a core area containing a substantial population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. Metropolitan statistical areas are comprised of one or more entire counties. Some MSAs contain counties from several states. For example, the New York Metropolitan Statistical Area includes counties from four states, New York, New Jersey, Connecticut, and Pennsylvania. We include in our sample only firms from areas with at least five publicly traded firms in at least two different industry groups. Throughout the paper, we also refer to these MSAs as areas or regions.

One problem with the Compustat location data is that Compustat only reports the current state and county of firms' headquarters. Thus, to make reliable inference about firm location it is important to correct for this deficiency. To this end, we use physical Compustat tapes to collect manually the historic information on firms' headquarters on an annual basis over the period from 1990 to 2005. This allows us to identify all firms whose corporate headquarters have moved from one location to another over the period. We also cross-checked this information for consistency using data on city and state of incorporation from Compact Disclosure.

Using headquarter location, we can define a finer peer variable based on whether firms that are in the same industry are also headquartered in the same area. The results of repeating our analysis in the previous section using this finer peer variable are reported in Table 6. The results on board classification are qualitatively similar to those reported in Table 5, and somewhat stronger

¹⁰OMB defines metropolitan statistical areas for purposes of collecting, tabulating, and publishing Federal data. Metropolitan statistical area definitions result from applying published standards to Census Bureau data. Metropolitan statistical areas are redefined every 10 years after each census, but changes in recent revisions have been small.

quantitatively. This is perhaps to be expected given that our new peer variable narrows down the peer group to firms that are more likely to be good substitutes and, thus, likely to have stronger diversion effects.

4 Conclusion

This paper argues that corporate governance is influenced by peer effects. We test this idea using a large sample of US public corporations, and find strong support for it. In particular, we document that, consistent with our peer-story, there is a reliable negative association between board classification and transaction outcomes, such as likelihood of receiving a takeover bid and likelihood of bid completion, but only in industries with high incidence of board classification. Moreover, takeover bids for targets with a classified board lead to higher announcement returns for shareholders of targets and their industry peers, but only in industries with low incidence of board classification. Overall, these findings offer direct evidence supporting the hypothesis that board classification diverts takeover activity to substitute targets with better governance. Moreover, they highlight the important role played by lax governance standards at the industry level as a determinant of managerial entrenchment.

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Appendix A. Data

The variables used in this paper are extracted from four major data sources: IRRC, COMPUSTAT, CRSP, and SDC Platinum. For each data item, we indicate the relevant source in square brackets. The specific variables used in the analysis are defined as follows:

- Governance Measures
 - Classified board is a dummy indicating that the firm employs the governance feature. GIM-index is the sum of all antitakeover provisions in a firm’s charter that varies between 0 and 24. E-index is the sum of six provisions: staggered boards, limits to shareholder bylaw amendments, limits to shareholder charter amendments, supermajority requirements for mergers, poison pills, and golden parachutes. Higher values of these indices correspond to more entrenchment. [IRRC]
 - BC_t is a dummy which takes the value of one if the firm’s state of incorporation has passed an antitakeover law by time t . List of states and year and date of passage of the laws are from Bertrand and Mullainathan (2003) and Giroud and Mueller (2007).
- Industry and Local Governance:
 - MSA indicates the Metropolitan Statistical Area (MSA) of a firm’s headquarters. MSA definitions are based on Metropolitan Areas and Components data from the Office of Management and Budget (OMB). Historical data on location of headquarters is from physical Compustat tapes. [Compustat]
 - Industry incidence of classified boards is defined for each firm i as the ratio of the number of firms with classified board to overall number of firms in a given industry and year, excluding the firm itself.
- Outcomes:
 - Takeover likelihood is defined as the probability that a firm receives an initial takeover bid in a given year [IRRC and SDC]
 - Success is defined as the probability that a given initial bid is completed [SDC]
 - Target CAR: the cumulative abnormal return to the target firm’s stock for trading days (-5, +2) relative to the date of the first bid for acquisitions of targets for which governance data is available from the IRRC database. [SDC Platinum]
 - Industry Peer CAR: the cumulative abnormal return to an equally weighted portfolio of the target’s industry peers for trading days (-5, +2) relative to the date of the first bid for acquisitions of targets for which governance data is available from the IRRC database. [SDC Platinum]
- Controls:
 - Size is log of the book value of assets (item 6), deflated by CPI in 1990. [Compustat]
 - Market-to-book is defined as the market value of assets divided by the book value of assets (item 6), where the market value of assets equals the book value of assets plus the market value of common equity less the sum of the book value of common equity (item 60) and balance sheet deferred taxes (item 74). [Compustat]
 - Leverage is defined as long term debt (item 9) plus debt in current liabilities (item 34) over the book value of assets (item 6). [Compustat]

- Market-adjusted one-year pre-announcement target return
- Deal Controls
 - Stock is a dummy that takes the value of 1 if the method of payment includes bidder equity, 0 otherwise. [SDC]
 - Hostile is a dummy that takes the value of 1 if target management rejects the initial offer. [SDC]
 - Tender offer is a dummy that takes the value of 1 if the deal is structured as a tender. [SDC]

Appendix B. Tables

Table 1: Summary Statistics

The sample consists of 872 acquisition bids announced and completed or withdrawn for IRRC firms in the 1990 to 2006 period. Definitions for all variables are in Appendix A.

Variable	Observations	Mean	Median	Standard Deviation
Target Classified Board	872	0.53	1	0.50
Net G-index	872	8.48	8	2.48
Net E-index	872	1.62	2	1.03
Industry Classified Board	872	0.57	0.56	0.12
Bid Frequency	872	4.16%	3.96%	1.32%
Hostility	872	5.70%	0	18.89%
Tender Offer	872	19.65%	0	39.76%
Success	872	75.62%	1	46.42%
Stock	813	54.23%	1	49.70%
Target CAR	813	25.88%	22.16%	26.47%
Industry Peer Portfolio CAR	781	0.15%	0.01%	3.18%
Local Industry Peer Portfolio CAR	584	0.58%	0.31%	3.70%
Size	872	6.93	6.77	1.44
Market-to-book	872	1.48	1.16	1.08
Debt/Assets	872	0.26	0.20	0.25
Concentration	756	0.32	0.31	0.18
Number of Firms (thousands)	756	30.06	5.32	86.64

Table 2: Diversion Effect and the Probability of Receiving Takeover Bid

This table reports panel probit regressions of the likelihood that a firm receives an initial takeover bid in a given year as a function of governance and controls. Governance is measured by a classified board dummy in the sample of 2584 firms from IRRC in the 1990 to 2006 period. This regression is performed on subsamples corresponding to top and bottom quartiles by industry governance. Industry governance is measured as incidence of classified boards in a given industry and year, where industry is defined by four-digit SIC code. The net G-index is the G-index from Gompers, Ishii, and Metrick (2003) minus one if the firm has a classified board. The net E-index is the E-index from Bebchuk, Cohen, and Ferrell (2009) minus one if the firm has a classified board. Controls include lagged size measured by the logarithm of the book value of assets, market-to-book measured as the ratio of book value to market value of equity, debt-to-assets measured as the ratio of long-term debt to book value of assets, and year and industry fixed effects. For details on definitions of all variables, including industry governance, see Appendix A. Standard errors (in parentheses) are robust to heteroskedasticity and arbitrary serial correlation within industries. Coefficients are reported as marginal effects. Levels of significance are indicated by *, **, and *** for 10%, 5%, and 1% respectively.

Variable	All		Democracy		Dictatorship	
	(1)	(2)	(3)	(4)	(5)	(6)
Target Classified Board	-0.003 (0.002)	-0.002 (0.002)	0.0002 (0.001)	0.001 (0.001)	-0.008** (0.004)	-0.008** (0.004)
Net G-index	0.001 (0.001)		0.0004 (0.0003)		0.002** (0.001)	
Net E-index		0.001 (0.001)		0.0002 (0.001)		0.004** (0.002)
Size	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	-0.004*** (0.001)	-0.004*** (0.001)
Market-to-book	-0.001 (0.001)	-0.001 (0.001)	-0.0002 (0.0004)	-0.0002 (0.0004)	0.002 (0.002)	0.002 (0.002)
Debt/Assets	0.021*** (0.005)	0.021*** (0.005)	0.006* (0.003)	0.007* (0.004)	0.015* (0.009)	0.013 (0.009)
Industry Indicators	Yes	Yes	Yes	Yes	Yes	Yes
Year Indicators	Yes	Yes	Yes	Yes	Yes	Yes
<i>t</i> -test						
Pseudo-R ²	5.4%	5.4%	9.3%	9.1%	9.0%	8.9%
Observations	16034	16034	3461	3461	3419	3419

Table 3: Diversion Effect and the Probability of Successful Completion

This table reports probit regressions of the likelihood that an initial bid in the sample is completed as a function of target governance and controls. The sample consists of 872 initial bids in the 1990 to 2006 period for targets covered by the IRRC sample. Target governance is measured by a dummy that takes the value of one if the target has a classified board. This regression is performed on subsamples corresponding to top and bottom quartiles by industry governance. Industry governance is measured as incidence of classified boards in a given industry and year, where industry is defined by four-digit SIC code. The net G-index is the G-index from Gompers, Ishii, and Metrick (2003) minus one if the target has a classified board. The net E-index is the E-index from Bebchuk, Cohen, and Ferrell (2009) minus one if the target has a classified board. Controls include size measured by the logarithm of the book value of assets, market-to-book measured as the ratio of book value to market value of equity, debt-to-assets measured as the ratio of long-term debt to book value of assets, and year fixed effects. All controls are measured at the end of the fiscal year before the bid. In addition, several takeover characteristics are included in the model. Stock equals one if the method of payment includes bidder's equity, Tender offer equals one if the deal is a tender offer, Hostility equals one if the target management rejects the offer (SDC). For details on definitions of all variables, including industry governance, see Appendix A. Robust standard errors are in parentheses. Coefficients are reported as marginal effects. Levels of significance are indicated by *, **, and *** for 10%, 5%, and 1% respectively.

Variable	All		Democracy		Dictatorship	
	(1)	(2)	(3)	(4)	(5)	(6)
Target Classified Board	-0.041 (0.035)	-0.044 (0.035)	0.090 (0.072)	0.107 (0.071)	-0.170** (0.075)	-0.188** (0.076)
Net G-index	-0.000 (0.007)		-0.003 (0.013)		-0.001 (0.016)	
Net E-index		0.007 (0.017)		-0.028 (0.029)		0.017 (0.039)
Firm						
Size	-0.007 (0.012)	-0.001 (0.013)	-0.030 (0.023)	-0.022 (0.025)	-0.025 (0.027)	-0.020 (0.028)
Market-to-book	-0.004 (0.004)	-0.004 (0.004)	-0.008 (0.008)	-0.009 (0.008)	-0.007 (0.010)	-0.006 (0.011)
Debt/Assets	-0.007 (0.074)	-0.036 (0.083)	-0.149 (0.145)	-0.183 (0.158)	-0.173 (0.159)	-0.119 (0.175)
Deal						
Stock	-0.645*** (0.035)	-0.673*** (0.036)	-0.665*** (0.072)	-0.684*** (0.072)	-0.590*** (0.076)	-0.613*** (0.076)
Hostility	-0.585*** (0.081)	-0.598*** (0.080)	-0.558*** (0.212)	-0.548** (0.217)	-0.510*** (0.125)	-0.535*** (0.120)
Tender Offer	0.222*** (0.035)	0.223*** (0.037)	0.259*** (0.067)	0.270*** (0.070)	0.228*** (0.067)	0.224*** (0.073)
Year Indicators	Yes	Yes	Yes	Yes	Yes	Yes
<i>t</i> -test						
Adjusted-R ²	32.8%	34.0%	36.1%	36.1%	32.2%	32.9%
Observations	860	860	213	213	221	221

Table 4: Diversion Effect and Target Premiums

This table reports pooled OLS regressions of the target takeover premium (the cumulative abnormal return to the target firm's stock for trading days (-5, 2) relative to the date of the first bid) in a sample of 872 initial bids in the 1990 to 2006 period for targets covered by the IRRC sample. Target governance is measured by a dummy that takes the value of one if the target has a classified board. This regression is performed on subsamples corresponding to top and bottom quartiles by industry governance. Industry governance is measured as incidence of classified boards in a given industry and year, where industry is defined by four-digit SIC code. The net G-index is the G-index from Gompers, Ishii, and Metrick (2003) minus one if the target has a classified board. The net E-index is the E-index from Bebchuk, Cohen, and Ferrell (2009) minus one if the target has a classified board. Controls include size measured by the logarithm of the book value of assets, market-to-book measured as the ratio of book value to market value of equity, debt-to-assets measured as the ratio of long-term debt to book value of assets, pre-bid target runup measured as the abnormal stock return over the 200-day window prior to initial bid, and year fixed effects. All controls are measured at the end of the fiscal year before the bid. In addition, several takeover characteristics are included in the model. Stock equals one if the method of payment includes bidder's equity, Success equals one if the initial bid is completed, Tender offer equals one if the deal is a tender offer, Hostility equals one if the target management rejects the offer (SDC). For details on definitions of all variables, including industry governance, see Appendix A. Robust standard errors are in parentheses. Levels of significance are indicated by *, **, and *** for 10%, 5%, and 1% respectively.

Variable	All		Democracy		Dictatorship	
	(1)	(2)	(3)	(4)	(5)	(6)
Target Classified Board	0.007 (0.014)	0.009 (0.014)	0.067** (0.029)	0.069** (0.028)	0.004 (0.025)	0.003 (0.025)
Net G-index	0.004 (0.003)		0.0004 (0.006)		0.005 (0.006)	
Net E-index		0.006 (0.006)		-0.003 (0.013)		0.006 (0.014)
<u>Firm</u>						
Size	-0.022*** (0.005)	-0.022*** (0.005)	-0.027*** (0.010)	-0.029*** (0.009)	-0.011 (0.010)	-0.010 (0.010)
Market-to-book	-0.006*** (0.002)	-0.006*** (0.002)	-0.006*** (0.002)	-0.006*** (0.002)	-0.002 (0.003)	-0.002 (0.003)
Debt/Assets	0.033 (0.037)	0.037 (0.038)	0.003 (0.079)	0.005 (0.079)	0.123** (0.062)	0.126** (0.062)
Runup	-0.160*** (0.038)	-0.161*** (0.038)	-0.096 (0.078)	-0.090 (0.079)	-0.185*** (0.069)	-0.178*** (0.069)
<u>Deal</u>						
Stock	-0.051** (0.022)	-0.049** (0.022)	-0.113*** (0.044)	-0.107** (0.044)	-0.037 (0.041)	-0.035 (0.042)
Success	0.048** (0.020)	0.046** (0.020)	0.031 (0.039)	0.029 (0.039)	0.117*** (0.039)	0.109*** (0.038)
Hostility	0.030 (0.029)	0.024 (0.028)	0.093 (0.057)	0.090 (0.058)	0.041 (0.047)	0.026 (0.047)
Tender Offer	0.123*** (0.019)	0.119*** (0.020)	0.093** (0.039)	0.096** (0.040)	0.097*** (0.033)	0.100*** (0.034)
Year Indicators	Yes	Yes	Yes	Yes	Yes	Yes
<i>t</i> -test						
Adjusted-R ²	19.7%	19.1%	25.4%	25.5%	26.6%	25.5%
Observations	813	813	202	202	207	207

Table 5: Diversion Effect and Industry Peer Announcement Returns

The sample is based on 872 initial bids in the 1990 to 2006 period for targets covered by the IRRC sample. This table reports pooled OLS regressions of takeover bid announcement returns to industry peers as a function of governance characteristics of the targeted firm. Industry peer announcement return is measured as the cumulative abnormal return to an equally weighted portfolio of the target's industry peers for trading days (-5, 2) relative to the date of the first bid. Target governance is measured by a dummy that takes the value of one if the target has a classified board. This regression is performed on subsamples corresponding to top and bottom quartiles by industry governance. Industry governance is measured as incidence of classified boards in a given industry and year, where industry is defined by four-digit SIC code. The net G-index is the G-index from Gompers, Ishii, and Metrick (2003) minus one if the target has a classified board. The net E-index is the E-index from Bebchuk, Cohen, and Ferrell (2009) minus one if the target has a classified board. Target controls include target size measured by the logarithm of the book value of assets, target market-to-book measured as the ratio of book value to market value of equity, target debt-to-assets measured as the ratio of long-term debt to book value of assets, and year fixed effects. Industry controls are from the Census bureau and include Concentration, measured as the market share of four largest firms in the industry, and Number of firms, measured as the number of establishments in the industry. All controls are measured at the end of the fiscal year before the bid. In addition, several takeover characteristics are included in the model. Stock equals one if the method of payment includes bidder's equity, Success equals one if the initial bid is completed, Tender offer equals one if the deal is a tender offer, Hostility equals one if the target management rejects the offer (SDC). For details on definitions of all variables, including industry governance, see Appendix A. Robust standard errors are in parentheses. Levels of significance are indicated by *, **, and *** for 10%, 5%, and 1% respectively.

Variable	All		Democracy		Dictatorship	
	(1)	(2)	(3)	(4)	(5)	(6)
Target Classified Board	0.004 (0.004)	0.005 (0.005)	0.018** (0.009)	0.018** (0.008)	-0.005 (0.006)	-0.004 (0.006)
Net G-index	0.0003 (0.001)		-0.0003 (0.001)		0.001 (0.001)	
Net E-index		-0.0001 (0.003)		-0.001 (0.004)		-0.0002 (0.004)
<u>Target</u>						
Size	0.001 (0.001)	0.001 (0.002)	0.0002 (0.002)	0.0001 (0.002)	0.003 (0.002)	0.003 (0.002)
Market-to-book	0.0003 (0.001)	0.000 (0.001)	-0.001 (0.002)	-0.001 (0.002)	0.003 (0.002)	0.003 (0.002)
Debt/Assets	0.004 (0.011)	0.004 (0.011)	0.015 (0.015)	0.015 (0.015)	-0.009 (0.014)	-0.010 (0.013)
<u>Deal</u>						
Success	-0.008* (0.005)	-0.008 (0.005)	-0.007 (0.010)	-0.007 (0.010)	-0.008 (0.006)	-0.009 (0.006)
Hostility	-0.008 (0.007)	-0.008 (0.007)	0.0004 (0.011)	-0.0001 (0.010)	-0.008 (0.010)	-0.007 (0.010)
Tender Offer	0.021** (0.008)	0.021** (0.008)	0.009 (0.012)	0.009 (0.013)	0.024** (0.011)	0.024** (0.011)
<u>Industry</u>						
Concentration	0.007 (0.013)	0.000 (0.000)	0.016 (0.025)	0.016 (0.025)	0.004 (0.016)	0.006 (0.016)
Number of firms	-0.00001 (0.00001)	-0.00001 (0.00001)	0.0002* (0.0001)	0.0002* (0.0001)	-0.00002 (0.00002)	-0.00001 (0.00002)
Year Indicators	Yes	Yes	Yes	Yes	Yes	Yes
<i>t</i> -test						
Adjusted-R ²	4.4%	4.4%	10.1%	10.0%	9.9%	9.7%
Observations	748	748	180	180	189	189

Table 6: Diversion Effect and Local Industry Peer Announcement Returns

The sample is based on 872 initial bids in the 1990 to 2006 period for targets covered by the IRRC sample. This table reports pooled OLS regressions of takeover bid announcement returns to industry peers headquartered in the same area (MSA) as a function of governance characteristics of the targeted firm. Local industry peer announcement return is measured as the cumulative abnormal return to an equally weighted portfolio of the target's local industry peers for trading days (-5, 2) relative to the date of the first bid. Target governance is measured by a dummy that takes the value of one if the target has a classified board. This regression is performed on subsamples corresponding to top and bottom quartiles by industry governance. Industry governance is measured as incidence of classified boards in a given industry and year, where industry is defined by four-digit SIC code. The net G-index is the G-index from Gompers, Ishii, and Metrick (2003) minus one if the target has a classified board. The net E-index is the E-index from Bebchuk, Cohen, and Ferrell (2009) minus one if the target has a classified board. Target controls include target size measured by the logarithm of the book value of assets, target market-to-book measured as the ratio of book value to market value of equity, target debt-to-assets measured as the ratio of long-term debt to book value of assets, and year fixed effects. Industry controls are from the Census bureau and include Concentration, measured as the market share of four largest firms in the industry, and Number of firms, measured as the number of establishments in the industry. All controls are measured at the end of the fiscal year before the bid. In addition, several takeover characteristics are included in the model. Stock equals one if the method of payment includes bidder's equity, Success equals one if the initial bid is completed, Tender offer equals one if the deal is a tender offer, Hostility equals one if the target management rejects the offer (SDC). For details on definitions of all variables, including industry governance, see Appendix A. Robust standard errors are in parentheses. Levels of significance are indicated by *, **, and *** for 10%, 5%, and 1% respectively.

Variable	Democracy		Dictatorship	
	(1)	(2)	(3)	(4)
Target Classified Board	0.034*** (0.008)	0.039*** (0.007)	0.010 (0.008)	0.009 (0.007)
Net G-index	-0.003 (0.004)		0.005 (0.004)	
Net E-index		-0.007 (0.005)		-0.001 (0.005)
<u>Target</u>				
Size	-0.006** (0.003)	-0.006** (0.003)	0.002 (0.002)	0.001 (0.002)
Market-to-book	-0.005*** (0.002)	-0.005*** (0.002)	-0.002 (0.003)	-0.005 (0.004)
Debt/Assets	0.123*** (0.021)	0.117*** (0.021)	0.022 (0.016)	0.003 (0.012)
<u>Deal</u>				
Success	0.012* (0.007)	0.013* (0.007)	-0.018** (0.008)	-0.015* (0.008)
Hostility	0.008 (0.009)	0.018** (0.008)	-0.042*** (0.010)	-0.055*** (0.011)
Tender Offer	-0.087*** (0.018)	-0.097*** (0.015)	0.065*** (0.010)	0.063*** (0.011)
<u>Industry</u>				
Concentration	0.026 (0.044)	0.019 (0.043)	0.034 (0.024)	0.031 (0.028)
Number of firms	0.00001 (0.00001)	0.00001 (0.00001)	-0.00004 (0.00003)	-0.00004 (0.00004)
Year Indicators	Yes	Yes	Yes	Yes
<i>t</i> -test				
Adjusted-R ²	14.3%	14.9%	12.6%	12.1%
Observations	123	123	136	136