Analyzing the Advising and Monitoring Roles of Corporate Boards: The Choice of Special Committees in Corporate Takeovers

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Abstract

We provide novel evidence on how boards of directors adapt to conflicts of interest by trading-off the benefits of additional monitoring against a potential reduction in information flow. Our paper uses a sample of 845 takeovers from the 2003 to 2007 time period and finds that firms respond to potential conflicts of interest by voluntarily forming special committees comprised of a set of disinterested directors. Moreover, the propensity to form a committee is negatively related to the board's overall independence; hence special committees substitute for the monitoring not found in the overall board composition. We also find that the formation of these committees is negatively related to factors and situations where insider knowledge is particularly valuable. These results suggest that insiders serve a valuable function on the board by relaying information relevant to the takeover transaction. Collectively, these findings also add to the debate regarding a one-size-fits all approach to boards. Firms can choose the board structure that suits their day-to-day operations, and then form special committees in particular situations where conflicts of interest exist among participants. These committees themselves come at a cost of decreasing information flow from insiders, and therefore, this mechanism is not always optimal in all takeover settings.

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The independence of a company's board of directors has become a focal point of emphasis in corporate governance. A central research question is the manner and degree to which the monitoring by independent board members mitigates the conflicts of interest inherent in the public corporation. A related policy question is whether corporations will voluntarily adapt their board structure to the severity of conflicts of interest or whether mandates such as the Sarbanes Oxley Act are required to ensure adequate corporate governance.

In this paper we provide novel evidence on these questions by studying the use of special committees of independent board members in response to the conflicts of interest arising during a corporate takeover. The change in control of a corporation via a takeover provides a setting where the potential conflicts of interest between management or directors and target shareholders are especially amplified and identifiable. One response to such conflicts is for the target firm to establish a special committee comprised of independent, disinterested directors who are not part of management and do not have a separate self-interest in the outcome of the sales process and whose interests are thereby aligned with the minority shareholders.

Whereas overall board independence is now regulated by federal law and exchange rules, the use of special committees is not legislatively mandated. Hence, target firms may voluntarily choose whether or not they want to implement these committees. While state courts such as Delaware monitor target firms, the use of a special committee is only one of many factors considered and is neither a necessary nor sufficient condition for a court to sanction the process in a given transaction.[1] The voluntary nature of the use of special committees allows us to follow the costly contracting literature[2] by examining the extent to which firms form special committees in takeovers and the factors affecting that use. We then consider the effects that special committees have on the takeover process and on target shareholder gains.

Our analysis provides a new wrinkle on the seminal question raised by Alchian and Demsetz (1972, p.782): "Who will monitor the monitor?" The incentive device emphasized by Alchian and Demsetz (1972) to promote monitoring is residual claimancy. But in the takeover setting, residual claimancy can actually accentuate the conflicts between management and shareholders, particularly in cases such as management buyouts where top officers of the target receive an equity interest in the continuing firm. Our analysis considers how the monitoring provided by the special committee helps to mitigate the incentive conflicts inherent in a corporate takeover.

In light of the potential monitoring benefits provided by special committees, why don't all firms choose to implement this structure in a takeover setting? Theoretical papers by Raheja (2005), Adams and Ferreira (2007) and Harris and Raviv (2008) provide some possible reasons. Their work suggests that even though outsider dominated boards help mitigate agency problems, they possess less information about the firm's available projects relative to insiders. When the costs of obtaining information are high, outsiders are not as effective at providing advisory services. Furthermore, when insiders possess valuable knowledge, their presence can facilitate information transmission to the other directors. Consistent with this notion, Schwartz-Ziv and

[1]For legal background on special committees, see Simpson (1988) and Varallo, McErlean and Silberglied (1998).
[2]See, for example, Alchian and Demsetz (1972), Demsetz and Lehn (1985), Jensen and Meckling (1976), Fama and Jensen (1983), and Smith and Warner (1979).

Weisbach (2012) argue that CEOs rather than boards have decision rights over projects and proposals because of the firm-specific knowledge possessed by the CEO.

Special committees face similar trade-offs. Though a special committee comprised entirely of outside and disinterested directors might help curtail conflicts of interest, the lack of insiders decreases valuable information flow. The information reduction can lessen the directors' ability to effectively evaluate alternatives or provide bidders with relevant details regarding the target's operations. Thus, our analysis considers the costs as well as the benefits of special committees in the takeover setting.

We first study whether the likelihood that a board will establish a special committee is positively or negatively related to the severity of potential conflicts of interest in a given corporate takeover. Is the monitoring provided by a special committee more likely when conflicts of interest are high? Or, by contrast, do managers in companies with large agency costs preclude the use of special committees in exactly the deals where they would most benefit target shareholders? We also consider how the costs of running a special committee affect the choice to use this structure to explore whether firms trade-off the benefits of monitoring against the loss of advising by the CEO or other insiders.

Our proxies for conflicts of interest are guided by prior research. As one measure of conflicts of interest, we use CEO tenure as a measure of CEO bargaining power (Hermalin and Weisbach (1998)). As a second measure, we proxy for the presence of controlling shareholders with variables such as officer and director ownership, and family and parent ownership stakes that are often associated with private benefits within a corporation.[3] As a third set of proxies for conflicts of interest, we use variables that identify potential self-dealing by target management following the takeover such as whether the target CEO retains a position at the bidding firm, whether any of the target directors are placed on the bidder's board and, in the case of private bidders, whether top management has a rollover equity position in the continuing firm.[4]

We next consider the factors that increase the cost of a committee such as asymmetric information and the value of insider knowledge. We follow prior empirical work and use firm size and R&D/Sales as proxies for asymmetric information (Boone, Field, Karpoff and Raheja (2007), Linck, Netter and Yang (2008), and Coles, Daniel and Naveen (2008)). We also obtain measures of takeover-specific information needs. Specifically, insider knowledge is particularly valuable to strategic bidders who require firm-specific information to make judgments about potential synergies. Moreover, deals that offer stock payment require more knowledge about the industry and synergy prospects since the target shareholders will bear some of the post-integration risk.

Our analysis adds a new dimension to the research on board independence. Extant research has provided important insights as to how the monitoring and information roles of directors shape the composition of boards across corporations (Boone, et al (2007), Linck, Netter and Yang (2008), Duchin, Matsusaka and Ozbas (2010)). Our analysis extends this line of research by addressing the degree to which a given board structure adapts to situation-specific conflicts of interest during a corporate takeover and the extent to which such adaptations are

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[3]See, for example, Doidge, Karolyi, Lins, Miller and Stulz (2009), Villalonga and Amit (2009), Bates, Lemmon and Linck (2006), Slovin and Sushka (1998), Denis and Denis (1994), and Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008).
[4]See, for example, Bargeron, Schlingemann, Stulz and Zutter (2010), Moeller (2005), and Hartzell, Ofek and Yermack (2004).

voluntarily undertaken by corporate boards. Empirically studying such issues is often problematic in practice because we have little information regarding the actual roles and decision-making process of the board (Schwartz-Ziv and Weisbach (2012)). In the takeover setting both monitoring and advising needs are high. Moreover, details of the sales process and role of the board are available, enabling us to examine how firms weigh the trade-off of getting information and advising against a reduction in agency costs.

Our research design allows us to address the fundamental question raised by Adams, Hermalin and Weisbach (2010, p. 98), "Are the various means of governing a corporation complements or substitutes?" As part of our analysis, we estimate how board independence is related to the use of a special committee. Are targets with greater board independence more likely to appoint a special committee, or is a special committee used as a substitute monitoring device at targets with below average board independence?

We conclude our analysis by examining the effects of special committees. We study how special committees interact with the use of financial advisors. Finally, we explore how special committees are associated with the level of takeover competition as well as the returns to target shareholders.

The role of the independent special committee has long been debated by policymakers and legal scholars. Speaking in 1980, the Chairman of the SEC, Harold Williams, suggested that the special committee of independent directors was an expected response to the inherent conflicts of interest in the growing incidence of corporate control transactions occurring in the U.S. Legal scholars subsequently have debated whether special committees actually do respond to agency costs (Gilson and Gordon (2003), Gordon (2007)) since their formation is a voluntary choice of the target firm. Still there has been little or no actual empirical analysis of the use of special committees (Allen 1990)).[5]

To provide empirical evidence on the use of special committees, we study 845 completed acquisitions of publicly traded targets by either a private bidder or a publicly traded bidder. Our time period is from 2003 to 2007. This period follows the enactment of the Sarbanes Oxley Act in 2002 and represents a period of rising acquisition activity by private equity bidders who often combine with management to buyout the shares of the target firm.

As we document in detail below, we find that 24 percent of the takeovers in our sample employ a special committee. Hence, there is variation regarding their use, unlike other takeover practices, such as fairness opinions, that are ubiquitous (Kisgen, Qian, and Song (2009)). The prototypical special committee in our sample has 3 to 4 of the *disinterested* board members of the target firm. The duty of the special committee is to represent the non-management shareholders when considering various corporate control transactions. Consistent with this task, our results indicate that the use of special committees is positively related to potential conflicts of interest in corporate takeovers such as ownership held by officers and directors, families and the parent or bidder, as well as rollover equity participation by management. Our results also show that when insiders possess valuable information relative to outsiders, then firms are less likely to form a special committee.

We also find that the use of special committees is negatively and significantly related to the percent of independent directors on the board of the target firm. Hence, special committees are substitutes for the monitoring provided by a firm's overall board structure. These results are

[5]In their recent survey of boards of directors, Adams, Hermalin and Weisbach (2010, p.90) reference some empirical research on board committees but do not note any studies of special committees.

consistent with a prediction in the model of Adams and Ferreira (2007, p. 242) that in cases where corporate boards have management-friendly tendencies, other governance mechanisms will pick up the slack. In related results we find that targets using special committees employ more financial advisors and that this effect is greater when the target has a less independent board.

Deals in which a special committee is used have greater takeover competition as compared to deals without special committees. Target abnormal returns are comparable in deals using special committees vis-à-vis deals that do not use special committees. These results indicate that special committees help to mitigate the potential negative effects on target shareholders in cases of severe conflicts of interest. The results help to explain why prior research has found that target shareholders are not harmed in deals where target management retains a position with the continuing firm (Bargeron, Schlingemann, Stulz and Zutter (2010)) and in cases of minority freezeouts (Bates, Lemmon and Linck (2006)) and acquisitions by parent firms (Slovin and Sushka (1998)).

Our analysis is pertinent to the issue of when we expect to find evidence that corporate governance matters. As surveyed by Bebchuk and Weisbach (2010), it has often been more difficult to find an overall impact of governance mechanisms such as board composition as compared to finding an impact in particular situations.[6] This is arguably due to the cogent observation made by Rodrigues (2008) that conflicts of interest themselves are situational. Our results indicate that special committees are a situational response to the potential conflicts of interest in corporate takeovers.

[6]Prior work on board composition and corporate takeovers includes Shivdasani (1993), Cotter, Shivdasani, and Zenner (1997) and Harford (2003).

Our findings on the use of special committees provide clues as to how closely held firms have survival characteristics. A number of papers report that closely held firms tend to have less independent boards of directors.[7] Our results suggest that devices such as special committees help to protect minority shareholders from the potential conflicts posed by majority block ownership.

Our results are also related to more general analysis in corporate governance. A growing body of work indicates that governance mechanisms such as board composition are tied to proxies for monitoring and information costs (Boone, Field, Karpoff and Raheja (2007), Linck, Netter and Yang (2008), Duchin, Matsusaka and Ozbas (2010)). Our results showing a systematic relation between the use of special committees and the potential severity of agency costs are consistent with the view that one size does not fit all in corporate governance.

To convey our evidence, the remainder of the paper proceeds as follows. Section 1 describes the formation of the sample of takeovers. Section 2 reports our findings on the rate of use of special committees. Section 3 provides evidence on the factors that affect the use of special committees. Section 4 analyzes the relation between special committees and financial advisors, takeover competition and target returns. Section 5 summarizes the results and offers some concluding comments.

1. The Sample

To perform our analysis, we study the use of special committees in a sample of corporate takeovers from the 2003 to 2007 time period. This period follows the passage of the Sarbanes Oxley Act of 2002. This period also is marked by a growing incidence of cases where

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[7]See, for example, Weisbach (1988), Hermalin and Weisbach (1988), Denis and Sarin (1999), and Denis and Denis (1994).

management teams together with private equity firms were the winning bidder, thereby creating noticeable conflicts of interest between a target's officers and shareholders (Leech and Mundheim (1976), Lowenstein (1985), McGuiness and Rehbock (2005)).

We form our sample of corporate takeovers from the mergers and acquisitions database of the Securities Data Corporation (SDC). We begin with all mergers and acquisitions announced between January 1, 2003, and December 31, 2007. We require that the deal be completed. We also require that the target be listed on the New York Stock Exchange, the American Stock Exchange, NASDAQ, or the small-cap market. We keep the deals where the bidder is seeking 100 percent of the target. We drop deals with a value of less than $50 million or where the price of the target on the day prior to the takeover announcement is less than $5. We drop deals where the target is a real estate investment trust, deals where the target is bankrupt, and listings on SDC that are joint ventures or spinoffs. We also drop takeovers without sufficient information on target value and returns on CRSP. Finally, we drop listings on SDC that do not have merger documents in the EDGAR filing system of the SEC. Our sample entails 845 completed takeovers from the 2003 to 2007 period.[8]

Table 1 reports information on the incidence of the sample firms over time. The number of takeovers trends upward over the sample period. The greatest number of takeovers is 217, occurring in 2006.

Table 1 also reports the incidence of takeovers by the characteristics of the winning bidder. The analysis by type of bidder follows recent research on corporate governance and control such as Bargeron, Schlingemann, Stulz and Zutter (2008, 2010) and allows for the

[8]Because part of our analysis studies the role played by target management in the merged firm, our sampling also excludes 25 withdrawn deals that were not completed. In these 25 withdrawn deals, 16 target firms did not use a special committee and 9 target firms used a special committee.

possibility that conflicts of interest may vary across bidder type. We determine the characteristics of the bidder from merger filings on SEC EDGAR and media reports on LexisNexis. A private equity firm was the winning bidder in 19.5 percent of the sample takeovers. A private operating firm was the winning bidder in 5.7 percent of the deals. A public firm paying all cash was the winning bidder 37.2 percent of the time. A public firm paying some or all stock in the transaction was the winning bidder in 37.6 percent of the deals.

The deals in which a private equity firm is the winning bidder increases noticeably over the sample period. In 2003, 8 of the 123 targets, or 7 percent, are acquired by private equity firms. By 2007, the number of targets acquired by private equity firms grows to 50 of the 170 takeovers, or 29 percent, a four-fold increase.

2. The Use of Special Committees

To determine the use of special committees in our sample of takeovers, we rely primarily on information from the EDGAR filing system of the SEC. For each takeover in our sample, we read the "Background of the Merger" section of the various merger filings such as DEFM14A (for cash mergers), S-4 (for stock mergers), SC14D9 (for tender offers), and SC13E3 (for going private transactions). The information in the filings reports whether a special committee was used in a particular transaction, the date on which the special committee was formed, the names of the members of the committee, and also identifies the financial and legal advisors used by the special committee. The same documents provide other pertinent information about a given deal such as how and when the deal was privately initiated, the competitiveness of the takeover process and the interests of target management subsequent to the completion of the takeover.

Table 2 provides an example of the information on the use of a special committee by the target firm Trover Solutions. The information was taken from a DEFM14A filing dated June 15, 2004, as well as an SC13E3 filing dated March 11, 2004. As reported in the documents, the deal was privately initiated on April 1, 2003, when the target board chose to consider the strategic alternatives of the firm. In part because the possible alternatives included a management buyout, the target firm elected to form a special committee comprised of all 5 of its independent directors. The committee was given exclusive authority to evaluate possible transactions. Acting on this authority, the special committee hired Houlihan Lokey as its financial advisor and Clifford Chance as its outside legal counsel. The company publicly announced the formation of the special committee on August 1, 2003, after which the special committee conducted an auction of the firm. During the auction, the target and its investment bank contacted 84 potential buyers, signed confidentiality agreements with 39 potential buyers, received 18 preliminary indications of interest, and received 3 binding bids. At the end of the auction, the special committee recommended that the firm be sold to the private equity firm Tailwind Capital Partners. In the transaction, the target's CEO and other top management retained their positions and received rollover equity stakes in the continuing firm. The deal with Tailwind was completed on July 16, 2004.

An alternative example from our sample is the acquisition of Del Laboratories by the private equity firm Kelso & Co. The background of this merger is reported in a DEFM 14A filing by Del Laboratories dated December 20, 2004. In that deal, several members of top management were given rollover equity participation in the continuing firm. While noting this potential conflict of interest between management and shareholders, the merger document stated that no special committee was established because: "A majority of Del's directors are ‘independent’ in accordance with American Stock Exchange listing standards and have no interest in the transaction apart from their interest as stockholders of Del” (page 16). Hence, as this example indicates, the use of a special committee is a matter of choice and is not simply a mechanical reaction to a given conflict of interest.

Table 3 reports the incidence of special committees over time. For the full sample, 207 targets use a special committee, a rate of 24 percent. Hence, special committees do not seem to be merely a rubber stamp in all takeovers, as appears to be the case for other monitoring devices such as fairness opinions (Kisgen, Qian, and Song (2009)). From SEC documents, we determined that the average special committee was formed 142 calendar days prior to the formal merger agreement date for the target firm. Hence, special committees are not simply a perfunctory device brought in at the last-minute. The rate of usage of a special committee increases from 15 percent in 2003 to 34 percent in 2007. This increase is partly driven by the growing incidence of private equity deals previously reported in Table 1.

Table 3 also reports the use of special committees across the types of bidders. The fraction of private equity deals with special committees is 58 percent, which is by far the highest rate across types of bidders. Deals with private operating companies use special committees 42 percent of the time, which is also above average. For public bidders, all cash deals use special committees 20 percent of the time, while stock deals use special committees only 9 percent of the time. This observable difference in the use of special committees across types of bidders provides initial suggestive evidence that special committees respond to potential agency costs. Deals involving private bidders where target management often receives a rollover equity interest in the continuing firm have by far the greatest use of special committees.

Table 4 provides some descriptive statistics on the size of the special committees in the sample. The representative firm using a special committee has an overall board size of roughly 8 directors, of which 6 directors are independent. The average special committee has 3.8 directors. On average, the number of special committee members is 47.2 percent of the total directors of the firm and 69.1 percent of the number of independent directors.[9]

One interesting question raised by the data in Table 4 is why, on average, only 69 percent of the independent directors are members of the special committee. Why is the special committee only a subset of the independent members of the board? Some insight on this query is provided by the target ShopKo Stores that was acquired by the private equity firm Sun Capital Partners in 2005. The background of the merger is provided in a DEFM14A filed by Shopko Stores dated November 23, 2005. ShopKo had six board members, five of which were deemed to be independent of the firm. However, one of these independent board members, Jack Eugster, potentially was to be offered a position in the continuing firm and to receive rollover equity participation. Hence, although he was independent of the target, Mr. Eugster was not disinterested in the deal. Hence, he was not assigned to the special committee. Instead, the other four independent board members who were also deemed to be disinterested in the deal comprised the special committee.

[9] Further analyses of the sample of directors that serve on the special committee indicate that the average tenure of these board members is 5.8 years. The special committee members have the following backgrounds: 48% of the special committee directors are current or retired executives at other firms, 22% are accountants, consultants, academics or politically connected, 20% are in investment related fields such as investment and commercial bankers, investment managers and venture capitalists, and 10% fall in other categories. Roughly 62% of the special committee members also serve on the audit committee of their respective boards.

3. Determinants of the Use of Special Committees

In this section we report evidence on the factors affecting the use of special committees in our sample of takeovers. A central question that we ask is how the use of a special committee is related to the independence of the target's board of directors. Are firms with a more independent board more likely to use a special committee, suggesting a complementary relation? Or, by contrast, do special committees serve as a substitute for the monitoring provided by independent boards?

We also examine how the use of special committees is related to conflicts of interest during a takeover. The Appendix sketches the variables used to proxy for conflicts of interest. We consider three main sources for conflicts of interest: CEO bargaining power, the private benefits of block ownership, and self-dealing by management as measured by post-takeover outcomes. We estimate whether self-dealing by management inhibits the use of special committees, suggesting a negative relation between conflicts of interest and special committees, or whether the presence of conflicts of interest induces the use of special committees, implying a positive relation between conflicts of interest and special committees.

We use CEO tenure to proxy for CEO bargaining power. We ask whether powerful CEOs are able to impede the monitoring implied by special committees (Hermalin and Weisbach (1998)). Alternatively, we estimate whether special committees are used to monitor powerful CEOs.

We proxy for the private benefits of block ownership with officer and director ownership and dummy variables for blocks held by families, parent bidders and other block bidders (Doidge, Karolyi, Lins, Miller and Stulz (2009), Villalonga and Amit (2009), Bates, Lemmon and Linck (2006), Slovin and Sushka (1998)). We estimate whether block ownership is positively or negatively related to the use of special committees.

Our third set of proxies for conflicts of interest capture potential self-dealing by target management based on post-takeover outcomes, including whether the target CEO gets a position with the continuing firm (Bargeron, Schlingemann, Stulz and Zutter (2010)), whether other top management stays with the continuing firm, the fraction of board seats in the continuing firm that are held by directors of the target firm and, for the targets acquired by private bidders, whether target managers had rollover equity participation in the continuing firm. Prior research suggests that target management can use the takeover to negotiate sweet deals for themselves at the expense of their shareholders (Moeller (2005), and Hartzell, Ofek and Yermack (2004)). Our analysis estimates whether special committees are used in reaction to the potential for self-dealing.

Though special committees can provide benefits, like board structure, there might not be a one-size-fits-all approach to using this device. Specifically, special committees are composed of disinterested outside directors, which can provide monitoring benefits, but lack the degree of valuable firm-specific knowledge that insiders possess in a takeover setting. Thus, it could be more difficult for outsiders to effectively compare restructuring alternatives and convey important details to bidders. Consequently, factors that intensify information asymmetry, such as smaller size and more R&D intensive assets, increase the value of having insiders involved in the sales process (Boone, Field, Karpoff and Raheja (2007), Linck, Netter and Yang (2008), and Coles, Daniel and Naveen (2008)). Within the takeover setting, insiders provide key information to bidders about firm prospects, which can be more important to strategic bidders that consider synergistic factors. Insiders are also likely to have more information about bidder prospects and integration risks, which makes insider knowledge particularly important when the bidder is expected to pay in stock. Moreover, stock payments are more likely to occur when there is more information asymmetry about the target firm (Hansen (1987)).

3.1. Summary Statistics on the Use of Special Committees

Table 5 reports summary statistics on the possible determinants of the use of special committees. Data are reported for the full sample and are also stratified according whether the target firm uses a special committee. Data are also reported by the four categories of winning bidders. We structure the panels in the table along three classes of the determinants of special committees: (a) governance and block ownership characteristics of the target firm, and (b) potential self-dealing by top management and the board of the target firm as measured by post-takeover outcomes, and (c) the target firm and deal characteristics that relate to information asymmetry and the value of insider knowledge during the sales process.

Panel A of Table 5 reports summary statistics on the governance and ownership characteristics of the sample firms. These data were taken mainly from proxy filings. As measures of the firm's governance, data are reported on board size and the fraction of independent directors. We use CEO tenure, which is measured as the number of years the target CEO has been in that position, to proxy for CEO bargaining power. To proxy for potential private benefits of control, we report three block ownership variables: the fraction of shares held by officers and directors, an indicator variable identifying whether a family or founder held a block of stock in the target firm, and an indicator variable identifying cases where the winning bidder was the target's parent or another firm holding a block of stock in the target.

Panel A.1 reports the results for the full sample. Panel A.2 reports the results for the sub-sample that does not use a special committee. Panel A.3 reports the results for the sub-sample that uses a special committee. An asterisk on a variable in Panel A.3 indicates that there is a significant difference in that variable (at the five percent level) between firms using and not using a special committee.

The data in Panel A indicate that while board size does not differ between the sub-samples, board independence is significantly different for firms using a special committee. For the full sample, the fraction of independent board members is roughly 6 percent lower for targets using a special committee than for targets not using a special committee. This result holds across the four sub-samples based on the type of bidder, although the difference is not statistically significant for the sub-sample of private equity bidders. These results provide initial evidence that special committees act as a substitute for the monitoring provided by overall board independence.

Panel A of Table 5 also reports evidence on CEO tenure. CEO tenure in deals with a special committee is 7.8 years as compared to 7.6 years for deals without a special committee. The difference between the two subsamples is not statistically significant. The results hold across bidder types. Hence, these basic comparisons suggest that the use of special committees is not affected by CEO bargaining power.

The data in Panel A indicate differences in the block ownership of firms that use and do not use a special committee. For the full sample, targets using a special committee have a higher concentration of ownership by officers and directors, are more likely to have a family or founder block of stock and are more likely to be acquired by either the target's parent or another firm holding a block of stock in the target. The direction of these differences tends to hold across the sub-samples of types of bidder, although the difference is not always statistically significant. The results on ownership characteristics indicate that special committees are used in cases where potential conflicts raised by private benefits of control are higher, providing initial evidence that special committees do serve a monitoring role.

Panel B of Table 5 reports data on four proxies for self-dealing related to the subsequent roles for the top management and board of the target firm in the continuing firm. We determine whether the target CEO gets a position with the continuing firm, whether other top management stays with the continuing firm, the fraction of board seats in the continuing firm that are held by directors of the target firm and, for the targets acquired by private bidders, whether target managers had rollover equity participation in the continuing firm. Information to create these variables were taken from merger documents, proxy statements and other SEC filings, news stories on LexisNexis, and other media sources such as Hoover's company reports. Panel B.1 reports the results for the full sample. Panel B.2 reports the results for the sub-sample that does not use a special committee. Panel B.3 reports the results for the sub-sample that uses a special committee. An asterisk on a variable in Panel B.3 indicates that there is a significant difference in that variable (at the five percent level) between firms using and not using a special committee.

The data in Panel B indicate that the subsequent role of target management varies between targets that use and do not use a special committee. For the full sample, targets using a special committee are more likely to have the CEO and other top management remain at the continuing firm, retain more board seats, and have greater rollover equity participation. Across the types of bidders, the results are strongest for the private equity sub-sample. Hence, where the role of management subsequent to the takeover provides a greater potential for self-dealing, the target firm is more likely to use a special committee as a monitor.

Panel C of Table 5 provides information on target firm and deal characteristics that increase the costs of running a special committee. We use variables that prior research has shown affect asymmetric information and the value of insider knowledge to boards such as equity value and research and develop expenses scaled by assets (Boone et al (2007) and Linck, Netter, and Yang (2008)).[10] Within takeovers, relinquishing negotiation and decision-making rights to outside directors reduces the information flow from insiders, which can be particularly valuable to strategic bidders and when the payment includes some stock. Panel C.1 reports the results for the full sample. Panel C.2 reports the results for the sub-sample that does not use a special committee. Panel C.3 reports the results for the sub-sample that uses a special committee. An asterisk on a variable in Panel C.3 indicates that there is a significant difference in that variable (at the five percent level) between firms using and not using a special committee comprised of outside directors.

The data in Panel C of Table 5 reveals that there are considerable differences between firms and deals that employ a special committee and those that do not. Special committee firms have significantly lower R&D/Assets ratios, fewer strategic winning bidders, and a lower portion of deals where stock is used as a method of payment. Though targets with special committees are on average smaller, the difference between the groups is not significant. Within the sub-samples of the types of winning bidders, stock payment is significantly different for the private equity sample and strategic bidder is significantly different for both the private equity and private operating bidder subsamples. These findings are generally consistent with the notion that special

[10] We also considered other variable that have been shown to affect board independence such intangible assets, firm age, and return standard deviation but these variables did not have a significant effect on the formation of a special committee.

committees are more costly for firms with more information asymmetry and in deals where the information possessed by insiders is more valuable.

As further robustness analysis, we examine whether the use of special committees is affected by state law. We measured the rate of usage of special committees in the 530 sample firms incorporated in Delaware. We found that the fraction of Delaware firms using a special committee was 24 percent, which is equivalent to that for the full sample. Similar analysis held for firms in strong antitakeover states as classified by Bebchuk and Ferrell (2002)[11].

3.2. Regression Analysis on the Use of Special Committees

The simple comparisons provided by the summary statistics suggest that governance, ownership the subsequent role of management in the continuing firm, and the ratio of R&D/Assets are related to the use of special committees. To more formally test for the determinants of special committees, we use probit regressions that model the choice of a special committee as a function of governance, block ownership, self-dealing characteristics, and the costs of relying only on outsiders to run the process. In all of the regressions we use target size as a control variable. We first study the effects of governance, ownership, potential self-dealing, and costs separately and then jointly regress these variables on the use of a special committee. A central question in our empirical tests is whether the monitoring provided by special committees is a substitute or a complement to overall board independence. As sketched in the Appendix, we also estimate whether special committees are positively or negatively related to our measures of conflicts of interest.

[11] Among the 165 target firms bought by a private equity firm, the rate of special committees is 54% for firms incorporated in Delaware versus 69% for other states. A test for a difference in means has a p-value of 0.078.

Table 6 reports the regression results. The first regression studies the impact of board independence on the use of a special committee, controlling for target size. The results indicate that the use of a special committee is negatively and significantly related to board independence. This confirms the results in Table 5 that special committees act as substitutes for board independence.

The second regression models the use of a special committee as a function of CEO tenure and ownership characteristics. The results indicate that CEO tenure is negatively related to the use of special committees (p-value = 0.10). By contrast, the use of a special committee is positively and significantly related to officer and director ownership, an indicator variable for family or founder block ownership, and an indicator variable for block ownership by a parent bidder or another bidding firm.

The third regression reports the relation between the attainment of subsequent positions by target management and the board and the use of a special committee. Whether the target CEO attains a position at the continuing firm does not affect the use of a special committee. The fraction of board seats is negatively related to the use of a special committee (p-value = 0.053). Rollover equity participation by target management is positively and significantly related to the use of a special committee.

The fourth regression contains factors where the cost of running a committee composed of outsiders is potentially the highest. Specifically, occasions where insider knowledge and information are most critical to the negotiation process include: higher levels of asymmetric information as proxied by firm size and R&D/Assets, the presence of strategic bidders, and the use of stock of a payment method. All variables are negatively related to the use of committee and with the exception of firm size, they are all significant. This evidence is consistent with the notion that special committees can be more costly when insider information is more important to the takeover process.

The fifth regression jointly models the use of a special committee on the governance, block ownership, potential self-dealing characteristics, and costs. Board independence continues to be negatively and significantly related to the use of a special committee. CEO tenure is negative and significant at the 10% level. The three block ownership characteristics are positively and significantly related to the use of a special committee. The only self-dealing characteristic that is significantly related to the use of a special committee is rollover equity participation. The proxies for the costs of using outsiders to run the sales process also remain negatively related to the use of a committee. We find that R&D/Assets is significant at the 5% level and the strategic bidder and stock payment dummies are significant at the 1% level.

Overall, the results indicate that a target firm's governance, block ownership, rollover participation by target management, as well as the type of bidder and payment method significantly affect the use of a special committee. The results find a negative relation between the use of the special committee and board independence, indicating that special committees provide a substitute monitoring device. The positive relation between the use of a special committee and proxies for conflicts of interest based on block ownership characteristics and rollover equity participation provide further evidence that special committees provide monitoring against self-dealing by target management. The negative signs on R&D/Assets and the strategic bidder and stock dummies indicate that a takeover process run only with outsiders has costs because it can inhibit the flow of firm-specific information possessed by insiders.

4. The Relation between Special Committees and Financial Advisors, Takeover Competition and Target Returns

We conclude our empirical analysis by considering how the use of special committees impacts the takeover process. We first consider how special committees are related to the number of financial advisors used by the target firm. We next study the relation between special committees and takeover competition. We then analyze special committees and target abnormal returns.

4.1. Special Committees and the Use of Financial Advisors

In addition to providing independent monitoring of the takeover process, special committees often also retain a separate financial advisor. Using SEC documents, we estimate the number of financial advisors used by the target in the deals in our sample. As reported in Panel A of Table 7, the average number of financial advisors used by the target in the full sample is 1.25 and the fraction of deals with two or more advisors is 23.4 percent. Deals with a special committee use a greater number of advisors and have a greater fraction of deals with multiple financial advisors.

Panel B of Table 7 provides regression analysis of the use of financial advisors. In the first regression, which employs the full sample, the coefficient for special committees is positive and significant, even after controlling for firm size. The second regression, also using the full sample, adds the percent of board members that are independent as an explanatory variable. The coefficient of % board independent is negative and significant at the 10 percent level, indicating that the use of advisors is a substitute for board independence.

The third regression in Panel B of Table 7 uses only the sample of 207 deals with a special committee. The dependent variable is a dummy equal to one when the special committee uses its own advisor. The coefficient on % board independent is negative and significant, also indicating a substitution between the use of a financial advisor and board independence. This adds to our prior results that other monitoring devices are employed for targets with a more management-friendly board.

4.2. Special Committees and Takeover Competition

To study the relation between special committees and takeover competition, we determine whether a given target was auctioned to multiple potential buyers or was instead sold via a negotiation with a single buyer. To estimate the use of auctions or negotiations, we read the information reported in SEC merger documents, as exemplified by the case of Trover Solutions in Table 2. For each takeover in our sample, we follow Boone and Mulherin (2007, 2011) and classify deals as auctions when two or more potential buyers signed confidentiality agreements with the target firm during the takeover process.

Table 8 reports the analysis of the relation between special committees and takeover competition. As reported in Panel A, 60 percent of the deals in the sample were conducted as auctions. Deals in which private equity firms were the winning bidder had the greatest fraction of auctions. Deals in which public bidders paid in stock had the lowest fraction of auctions.

Comparing Panel B and Panel C, takeovers with special committees tend to have greater levels of competition. For the full sample, takeovers using a special committee used an auction 77.3 percent of the time as compared to a 54.4 percent use of auctions for deals without a special committee. As reported in Panel D, the difference of 22.9 percent is significantly different from zero at the 5 percent level. Across bidder types, the takeovers with a special committee had a greater fraction of auctions, although the difference from the takeovers without a special committee was not significantly different.

Table 9 reports regression analysis of takeover competition and special committees that controls for target and deal characteristics. In the regressions, the dependent variable is an indicator equal to one for case where the takeover was conducted as an auction. In the first regression, the special committee dummy variable is positive and significant, even after controlling for target size, R&D/Assets, and method of payment. Similar results hold for the second regression which adds a dummy variable equal to one for deals in which a private firm is the winning bidder. As a whole, the regression analysis indicates that special committees are associated with greater levels of takeover competition.

4.3. Special Committees and Target Returns

We next study the relation between special committees and target abnormal returns. We have 839 takeovers with available stock price information on CRSP. We use a Fama-French three factor model that is estimated over the 253 days ending 127 trading days prior to the earliest in play announcement of the target firm (day 0), as determined from LexisNexis and other sources. The market index is the CRSP value-weighted index. As our measure of abnormal returns, we use the (-42, +126) window.

Table 10 reports the analysis of the relation between special committees and target abnormal returns. For the full sample reported in Panel A, the mean (median) target return is 22.0 percent (22.0 percent). Target returns are comparable across bidder types, although deals in which public bidders pay in stock are somewhat below average, as has been found in prior research (e.g., Schwert (1996)).

Panel B of Table 10 reports mean and median returns for the takeovers not using a special committee and Panel C reports comparable data for the deals using a special committee. As reported in Panel D, the mean difference of deals with a special committee minus deals without a special committee is -3.8 percent while the median difference is zero percent. Neither difference is significantly different from zero. The lack of a significant difference in the returns to target firms tends to hold across the different types of bidders. The only exception is for the subsample of public cash bids where the mean difference in the target return is -8.9 percent and is significantly different from zero at the 5 percent level. However, the median return for this subsample is not significantly different from zero.[12]

Table 11 reports regression analysis of the relation between target returns and special committees that controls for the same set of variables used in Table 6. The first regression includes the fraction of independent directors and the variables that capture conflicts of interest. The coefficient on the special committee variable is negative and insignificant. The second regression adds the variables that proxy for the cost of running a special committee and we find similar results. As a whole, our results indicate that the target returns to deals using special committees are not statistically different than deals that do not use a special committee.

Our earlier analysis indicates that some of the explanatory variables in the regressions of target returns in Table 11 are also related to the use of special committees. Furthermore, there

[12] As an alternative to target abnormal returns, we also examined the premiums paid to the target firms, where the premium is computed as the price paid per share as reported from SDC divided by the pre-announcement price of the target. Consistent with our results of no significant difference in target abnormal returns between the special committee and no special committee sub-samples, the results for premiums show no significant differences for the full sample as well as for the sub-samples across types of bidders.

could be a sample selection bias since firms choose whether or not to have a special committee. As an additional robustness, we extend our analysis of target returns with propensity score matching.[13] We first use the full regression specification in Table 6 to estimate a propensity score which is the probability that a given sample firm would use a special committee. We then match the firms that did use a special committee (treated group) with a sample firm that did not use a special committee (control group) using the nearest neighbor method. We match with replacement and ensure that all matches are in the region of common support, which ensures that the matches do not fall outside of the range of propensity values given by the treated group.

The results of the propensity score matching are reported in Table 12. The first row of results, labeled Unmatched, confirms the result from Table 10 that for the full sample, the special committee deals (Treated) have insignificantly lower target returns than the rest of the sample. The second row shows the average returns of the 206 special committee firms against the sample of 108 matched firms selected by the nearest neighbor approach. After we account for the attributes that drive the use of the special committee, the difference is reversed in that the special committee deals (Treated) have a larger, but insignificant, target return than the matched control sample, although differences are not significant. Matching against two neighbors gives similar results. As an additional check we use kernel matching and caliper matching with a range of 0.01. All of these robustness tests indicate that after matching between the special committee and non-special committee firms, target returns are similar and not statistically different.

In addition to these tests we investigate whether shareholders fare worse in situations where potential conflicts of interest were high yet the target chose not to form a special committee. We start by obtaining the predicted probability of using a special committee for each

[13]Roberts and Whited (2011, Section 6) provide a survey of matching methods.

firm from the full probit model in Table 6. We note that our model correctly predicts 82% of the target firms correctly, which suggests that our model is relatively complete.

Next, we examined what cutoff probability to use when classifying firms into those expected to have a special committee and those who are not expected to have one. One possibility is to naively use a 0.50 cutoff criterion where every firm above this level is classified as being predicted to have a committee. Such an analysis, however, would ignore the tradeoff of sensitivity versus specificity. If we use a low cutoff probability, then we would classify more firms correctly as ones that would have a special committee. However, that strategy comes at the cost of reducing specificity which means we would also incorrectly classify firms as likely having a committee when they do not. To pick a cutoff we use the lroc command in Stata to graph out the receiver operating characteristic area under the curve. It maps the sensitivity (true positive rate) versus 1 - specificity (false positive rate) for given cutoff points. The graph enables us to identify the cutoff that gets us closest to the ideal of 100% sensitivity and 100% specificity. For our model, that value is 0.75

Using that 0.75 as our criterion for being a target firm likely to have a special committee firm, we find that there are 10 firms that meet this threshold, yet choose not use one. We then compare the returns of this group against the other targets and find that these have much lower returns with a 1.8% mean and 5.3% median over the full window. Juxtaposed with our general results that special committees respond to conflicts of interest, these results for extreme firms indicates that when a special committee is not used, target shareholders can be harmed.

5. Summary and Concluding Comments

As noted by Stigler (1967), conflicts of interest arise in any situation where one person acts as an agent for another. Hence, in complex organizations such as the modern corporation, conflicts of interest are inevitable. A central question is whether incentive devices arise to mitigate the negative effects of such potential conflicts or whether entrenched management can extract private benefits at the expense of shareholders.

We address this question by studying the use of special committees of independent directors in a sample of 845 completed takeovers from the 2003 to 2007 time period. Our analysis entails a setting where conflicts of interest are especially amplified and identifiable. To proxy for the severity of incentive conflicts, we use block ownership characteristics of the target firms and the potential self-dealing outcomes that the takeovers have for the management and board of the target firms. We estimate whether the use of special committees is a positive or negative function of conflicts of interest: are special committees used when potential conflicts are high, or is the monitoring of special committees avoided when agency costs are high?

We find that the use of a special committee is positively related to the severity of conflicts of interest in corporate takeovers. The use of a special committee is positively and significantly related to officer and director ownership and is also more likely when a family, parent firm or the bidding firm hold a block in the target. Special committees are also more likely when target management has rollover equity participation in the continuing firm. In sum, target firms use special committees as monitoring devices to mitigate the potential negative effect of conflicts of interest.

We also study the relation between special committees and the overall board composition of the target firm. We find that the use of special committees is negatively and significantly related to the independence of the target board. Hence, special committees act as substitutes to the monitoring provided by overall board composition of the target firm.

As a further analysis we examine whether costs associated with a special committee affect their use. Specifically, a committee comprised solely of outsiders reduces the information flow from insiders that could provide valuable insight into firm-specific prospects. In general, we find that the use of a special committee is negatively related to the value of insider knowledge. The use of special committees is significantly negatively related to the strategic bidder and stock payment variables, indicating that insider can provide critical insight in these situations.

We conclude our empirical analysis by studying the relation between special committees and the use of financial advisors, takeover competition and target abnormal returns. We find that deals with special committees use more financial advisors and have greater takeover competition than deals without special committees. We also find that target abnormal returns are comparable in deals using special committees vis-à-vis deals that do not use special committees.

As a whole, our results are consistent with Fama and Jensen’s (1983) prediction that outside directors will perform tasks with the most serious agency costs. Our findings are also consistent with the prediction in 1980 by SEC Chairman Harold Williams that special committees of independent directors would respond to the potential conflicts of interest inherent in corporate takeovers. Indeed, our results add to the insights of Alchian and Demsetz (1972) by showing that in many takeover deals, it is important to monitor the target firm’s monitors with the unique contractual device of the special committee. Importantly, our evidence indicates that corporate boards voluntarily adapt to conflicts of interest without the prodding of legislative mandates.

Appendix

Variables Used to Proxy for Conflicts of Interest

This appendix defines the variables used to proxy conflicts of interest for the sample takeovers and the predicted signs of their association with the use of special committees based on self-dealing versus monitoring. CEO Tenure is the number of years the current target CEO been in that that position. O&D Own is the fraction of the target's shares held by officers and directors of the company. Family is a dummy variable equal to one if the target has family or founder ownership greater than 5%. Parent/Bidder is a dummy variable equal to one if the target's parent corporation or another blockholder is the winning bidder. CEO Gets Job is a dummy variable equal to one if the target CEO remains with the bidder in a management position in the year after the takeover. Other Manag. Stay is a dummy variable equal to one if other members of top management retain positions with the bidder in the year following the takeover. % Board Seats is the percent of the combined firm board seats that the target firm has in the year following the takeover. Rollover is a dummy variable equal to one if the target management rolls over their equity position into a stake in the continuing firm.

	Predicted Sign	
Variable	Self-Dealing	Monitoring
A. CEO Bargaining Power		
CEO Tenure	-	+
B. Private Benefits of Block Ownership		
O&D Own	-	+
Family Block	-	+
Parent/Bidder	-	+
C. Self-Dealing Based on Post-Takeover Outcomes		
CEO Gets Job	-	+
Other Manag. Stay	-	+
% Board Seats	-	+
Rollover Participation	-	+

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Table 1.The Sample of Takeovers

This table presents the full sample of 845 completed deals announced from 2003-2007. Total reports the full sample. Data are also reported based on the winning bidder as determined from merger filings and media reports. PE is a private equity bidder. Priv Op is a private operating company bidder. Public is a bidder with publicly traded stock. Public bidders are classified by method of payment where Cash indicates transactions where 100% of the payment is made in cash and Stock indicates transactions where the method of payment was some or all stock. Method of payment was determined from merger filings and media reports.

				Public	
Year	**Total**	**PE**	**Priv Op**	**Cash**	**Stock**
2003	123	8	10	31	74
2004	156	17	2	55	82
2005	179	32	12	65	70
2006	217	58	15	88	56
2007	170	50	9	75	36
Total	845	165	48	314	318
% of Sample	100%	19.5%	5.7%	37.2%	37.6%

Table 2. An Example of the Use of a Special Committee: Trover Solutions

This table sketches the use of a special committee of disinterested directors by Trover Solutions in its acquisition by the private equity firm Tailwind Capital Partners. The sources for the information in this table include a DEFM14A SEC merger filing by Trover Solutions dated June 15, 2004, an SC13E3 filing dated March 11, 2004, and media reports obtained from LexisNexis.

April 1, 2003	Trover board privately considers strategic alternatives Options include an ESOP-financed buyout by the company's CEO
June 17, 2003	Board establishes a special committee of its 5 independent members Committee has exclusive authority to evaluate possible transactions Special committee retains Houlihan Lokey as financial advisor Also retains Clifford Chance as its outside legal counsel
August 1, 2003	Company publicly announces the formation of the special committee
August 2003/ February 2004	Special committee and its advisors auction the company • Contact 84 potential buyers (30 strategic buyers and 54 financial buyers) • Sign confidentiality agreements with 39 potential buyers • Receive 18 preliminary indications of interest • Due diligence conducted by 8 potential buyers • Receive 3 proposals
February 19, 2004	Special committee recommends acceptance of deal with Tailwind
February 20, 2004	Announces merger with private equity firm Tailwind Capital Partners • The target's CEO and other management retain positions • Target management also has rollover participation in equity
July 16, 2004	Deal with Tailwind is completed

Table 3.The Use of Special Committees

This table presents the use of special committees within the sample of 845 takeovers. The information on special committees was gathered mostly from merger filings. Data are reported for the full sample of special committee deals and by type of winning bidder as defined in Table 1. The final row of the table reports % Using Special Committee which indicates the percent of deals that had a special committee in a given category.

Year	Number of Spec. Comm.	PE	Priv Op	Public Cash	Public Stock
2003	18	3	3	5	7
2004	26	9	1	12	4
2005	45	18	6	12	9
2006	61	34	6	15	6
2007	57	32	4	18	3
Total	207	96	20	62	29
% Using Special Committee	24%	58%	42%	20%	9%

Table 4. Special Committee Descriptive Statistics

This table presents statistics for the 207 target firms that use a special committee. Information in this table was collected from merger filings, other proxy documents, and 10-Ks. Bidder Type is defined in Table 1. Board Size is the number of directors on the target board. Number Independent is the number of members on the board who are not insider or affiliated directors. Spec. Comm. Size is the number of directors on the target firm's special committee. % Directors on Spec. Comm. is the percent of the targets total directors that are on the special committee. % of Independent on Spec. Comm. is the percent of the target's independent directors that are on the special committee.

Bidder Type	Obs	Board Size	Number Independent	Spec. Comm. Size	% Directors on Spec. Comm.	% of Independent on Spec. Comm.
Total	207	8.3	5.9	3.8	47.2%	69.1%
PE	96	8.1	6.0	3.8	49.6%	68.7%
Priv Op	20	7.9	5.5	3.4	44.2%	66.8%
Public Cash	62	8.3	5.7	3.7	46.0%	70.1%
Public Stock	29	9.2	6.4	3.9	44.1%	70.3%

Table 5. Summary Statistics on the Use of Special Committees

This table provides statistics on target governance and ownership, the subsequent role of target management, and target firm characteristics for the 845 sample takeovers. The data are shown for the full sample and by type of winning bidder as defined in Table 1. The data are further parsed by whether the target firm used a special committee during the takeover process. Panel A presents information on the target firm's governance and block ownership characteristics as reported in merger filings and related proxy documents. Board Size is the number of directors on the target board. % Indep is the percent of the members on the board that are non-insiders or unaffiliated with the firm. CEO Tenure is the number of years that the current target CEO has been in that position. O&D Own is the fraction of the target's shares that are held by directors and officers of the company. Family Block is a dummy variable equal to one if the target has family or founder ownership greater than 5%. Parent/Bidder is a dummy variable equal to one if the target's parent corporation or another blockholder is the winning bidder. Panel B presents information on the potential self-dealing by target management as determined from merger filings and media reports. CEO Gets Job is a dummy variable equal to one if the target CEO remains with the bidder in a management position in the year after the takeover. Other Manag. Stay is a dummy variable equal to one if other members of top management retain positions with the bidder firm in the year following the takeover. % Board Seats is the percent of the combined firm board seats that the target firm has in the year following the takeover. Rollover is a dummy variable equal to one if the target firm management rolls over their equity position into a stake in the continuing firm. Panel C presents information on the target firms' characteristics. Equity Value (in $ Billions) is the target firm's market value of equity 64 days prior to the first announcement that the company is in play. R&D/Assets is the ratio of research and development expenses of the target firm/the target firm's total assets. Strategic Bidder is a dummy variable equal to one in any of these three circumstances a) the winning bidder is a private or public operating company in the same Fama-French 48 industry as the target firm b) the winning bidder is a portfolio company of a private equity in the same operating industry as the target or c) one of the firms in the private equity bidding group is an operating company in the same sector as the target. Stock Payment is a dummy variable equal to one of the bidder uses some stock as the method of payment for the deal.

Panel A. Governance and Block Ownership Characteristics of Target Firms

A.1 Full Sample

Bidder Type	**Obs**	**Board Size**	**% Indep.**	**CEO Tenure**	**O&D Own**	**Family Block**	**Parent/ Bidder**
Total	845	8.4	75.6%	7.6	19.4%	16.6%	4.4%
PE	165	8.0	75.1%	8.0	22.6%	29.1%	7.3%
Priv Op	48	8.1	73.2%	7.3	25.6%	25.0%	12.5%
Public Cash	314	8.0	74.7%	7.2	18.8%	16.6%	4.1%
Public Stock	318	9.0	77.1%	7.9	17.3%	8.8%	1.9%

A.2 No Special Committee Subsample

Bidder Type	**Obs**	**Board Size**	**% Indep.**	**CEO Tenure**	**O&D Own**	**Family Block**	**Parent/ Bidder**
Total	638	8.4	77.1%	7.6	16.8%	12.5%	1.3%
PE	69	7.8	77.1%	8.2	20.8%	26.1%	1.4%
Priv Op	28	8.3	76.9%	6.3	23.6%	14.3%	7.1%
Public Cash	252	8.0	76.0%	7.1	16.2%	13.9%	1.2%
Public Stock	289	9.0	78.1%	8.0	15.7%	8.0%	1.0%

A.3 Special Committee Subsample

Bidder Type	**Obs**	**Board Size**	**% Indep.**	**CEO Tenure**	**O&D Own**	**Family Block**	**Parent/ Bidder**
Total	207	8.3	70.8%*	7.8	27.3%*	29.0%*	14.0%*
PE	96	8.1	73.6%	7.9	23.9%	31.3%	11.5%*
Priv Op	20	7.9	68.1%*	8.8	28.6%	40.0%*	20.0%
Public Cash	62	8.3	69.0%*	7.5	29.4%*	27.4%*	16.1%*
Public Stock	29	9.2	67.0%*	7.3	33.0%*	17.2%	13.8%*

* Indicates a significant difference between firms using and not using a special committee at the 5 percent level.

Panel B. Potential Self-Dealing Based on Post Takeover Outcomes

B.1 Full Sample

Bidder Type	Obs	CEO Gets Job	Other Manag. Stay	% Board Seats	Rollover
Total	845	53.8%	68.0%	8.7%	6.7%
PE	165	60.6%	81.2%	12.0%	30.9%
Priv Op	48	50.0%	58.3%	10.8%	12.5%
Public Cash	314	40.8%	53.5%	1.2%	0.0%
Public Stock	318	63.8%	77.0%	14.0%	0.0%

B.2 No Special Committee Subsample

Bidder Type	Obs	CEO Gets Job	Other Manag. Stay	% Board Seats	Rollover
Total	638	51.7%	66.0%	8.0%	1.3%
PE	69	44.9%	75.4%	7.6%	11.6%
Priv Op	28	46.4%	50.0%	7.7%	0.0%
Public Cash	252	41.3%	53.2%	1.1%	0.0%
Public Stock	289	63.0%	76.5%	14.1%	0.0%

B.3 Special Committee Subsample

Bidder Type	Obs	CEO Gets Job	Other Manag. Stay	% Board Seats	Rollover
Total	207	60.4%*	74.4%*	10.8%*	23.7%*
PE	96	71.9%*	85.4%	15.1%*	44.8%*
Priv Op	20	55.0%	70.0%	15.2%	30.0%*
Public Cash	62	38.7%	54.8%	1.7%	0.0%
Public Stock	29	72.4%	82.8%	13.0%	0.0%

* Indicates a significant difference between firms using and not using a special committee at the 5 percent level.

Panel C. Target and Deal Characteristics

C.1 Full Sample

Bidder Type	Obs	Equity Value ($ billions)	R&D/Assets	Strategic Bidder	Stock Payment
Total	845	1.76	0.037	72.3%	38.5%
PE	165	1.94	0.027	40.6%	1.8%
Priv Op	48	1.31	0.021	70.8%	14.3%
Public Cash	314	1.00	0.056	74.2%	0.0%
Public Stock	318	2.49	0.026	87.1%	100.0%

C.2 No Special Committee

Bidder Type	Obs	Equity Value ($ billions)	R&D/Assets	Strategic Bidder	Stock Payment
Total	638	1.78	0.040	78.4%	46.4%
PE	69	1.68	0.038	49.3%	3.8%
Priv Op	28	0.70	0.026	82.1%	14.3%
Public Cash	252	0.99	0.058	75.0%	0.0%
Public Stock	289	2.61	0.027	87.9%	100.0%

C.3 Special Committee

Bidder Type	Obs	Equity Value ($ billions)	R&D/Assets	Strategic Bidder	Stock Payment
Total	207	1.71	0.027*	53.6%*	14.0%*
PE	96	2.12	0.019	34.4%*	1.9%*
Priv Op	20	2.15	0.014	55.0%*	0.0%
Public Cash	62	1.07	0.050	71.0%	0.0%
Public Stock	29	1.40	0.015	79.3%	100.0%

*Indicates a significant difference between firms using and not using a special committee at the 5 percent level.

Table 6. Regression Analysis of the Use of Special Committees

This table presents probit regressions predicting the use of a special committee for the 845 sample takeovers. Target Size is the natural log of the target firm's market value of equity 64 days prior to the first announcement that the company is in play. % Independent is the percent of the members on the board that are non-insiders or unaffiliated with the firm. CEO Tenure is the log number of years that the current target CEO has been in that position. O&D Own is the fraction of the target's shares that are held by directors and officers of the company. Family is a dummy variable equal to one if the target has family or founder ownership greater than 5%. Parent/Bidder is a dummy variable equal to one if the target's parent corporation or another blockholder is the winning bidder. CEO Gets Job is a dummy variable equal to one if the target CEO remains with the bidder in a management position in the year after the takeover. % Board Seats is the percent of the combined firm board seats that the target firm has in the year following the takeover. Rollover is a dummy variable equal to one if the target firm management rolls over their equity position into a stake in the continuing firm. R&D/Assets is the ratio of research and development expenses of the target firm/the target firm's total assets. Strategic Bidder is a dummy variable equal to one in any of these three circumstances a) the winning bidder is a private or public operating company in the same Fama-French 48 industry as the target firm b) the winning bidder is a portfolio company of a private equity in the same operating industry as the target or c) one of the firms in the private equity bidding group is an operating company in the same sector as the target. Stock Payment is a dummy variable equal to one of the bidder uses some stock as the method of payment for the deal. We report p-values of the coefficients in parentheses.

Variable	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Intercept	0.626	-1.511	-1.030	0.031	0.235
	(0.195)	(0.002)	(0.021)	(0.946)	(0.730)
Target Size	0.021	0.039	0.017	-0.003	0.002
	(0.511)	(0.256)	(0.615)	(0.922)	(0.956)
% Board Independent	-2.136	--	--	--	-1.119
	(0.000)				(0.013)
CEO Tenure	--	-0.081	--	--	-0.099
		(0.100)			(0.068)
O&D Own	--	1.141	--	--	0.751
		(0.000)			(0.014)
Family	--	0.597	--	--	0.334
		(0.000)			(0.020)
Parent/Bidder	--	1.553	--	--	1.419
		(0.000)			(0.000)
CEO Gets Job	--	--	0.038	--	0.141
			(0.719)		(0.229)
% Board Seats	--	--	-0.790	--	0.343
			(0.053)		(0.490)
Rollover Participation	--	--	2.072	--	1.364
			(0.000)		(0.000)
R&D/Assets	--	--	--	-2.339	-1.504
				(0.003)	(0.049)
Strategic Bidder	--	--	--	-0.494	-0.299
				(0.000)	(0.013)
Stock Payment	--	--	--	-0.867	-0.710
				(0.000)	(0.000)
Pseudo R^2	0.038	0.112	0.116	0.116	0.261
Model *p*-value	0.000	0.000	0.000	0.000	0.000
Obs	845	845	845	845	845

Table 7. Special Committees and the Use of Financial Advisors

This table presents information on the use of financial advisors by target firms during the takeover process. Panel A lists the mean number of advisors used for the full sample of 845 firms and by use of a special committee. Panel B presents regressions explaining the use of advisors. The first two columns use a dependent variable that is equal to one if the target uses more than one financial advisor during the sales process. The third column uses only the subset of firms with a special committee and in this regression the dependent variable is equal to one if the special committee has its own advisor. We report p-values of the coefficients in parentheses.

Panel A: Average Number of Advisors

	Obs	**Number of Total Advisors**	**% of Firms with Multiple Advisors**
Total	845	1.25	23.4%
No Special Committee	638	1.21	18.8%
Special Committee	207	1.40	31.7%

Panel B: Regression Analysis of Target Financial Advisors

Variable	**Target Has Multiple Advisors**	**Target Has Multiple Advisors**	**Special Committee has Own Advisor**
Intercept	-4.607	-4.179	-0.088
	(0.000)	(0.000)	(0.922)
Target Size	0.278	0.283	0.146
	(0.000)	(0.000)	(0.023)
Special Committee	0.619	0.581	--
	(0.000)	(0.000)	
% Board Independent		-0.645	-1.739
		(0.096)	(0.010)
Pseudo R^2	0.111	0.114	0.045
Model *p*-value	0.000	0.000	0.004
Obs	845	845	207

Table 8. Special Committees and Takeover Competition

This table presents analysis of the relation between special committees and takeover competition. Takeover completion is proxied by the presence of a takeover auction, defined as a deal when two or more potential buyers sign a confidentiality agreement with the target firm during the takeover process. The table reports the fraction of deal conducted as an auction for the full sample as well as for the bidder types defined in Table 1.

Panel A: Full Sample - Fraction of Auctions

				Public	
	Total	**PE**	**Priv Op**	**Cash**	**Stock**
Mean	60%	87.3%	62.5%	61.5%	44.0%
Observations	845	165	48	314	318

Panel B: No Special Committee - Fraction of Auctions

				Public	
	Total	**PE**	**Priv Op**	**Cash**	**Stock**
Mean	54.4%	84.0%	53.6%	59.9%	42.6%
Observations	637	69	28	252	289

Panel C: Special Committee - Fraction of Auctions

				Public	
	Total	**PE**	**Priv Op**	**Cash**	**Stock**
Mean	77.3%	89.6%	75%	67.7%	58.6%
Observations	207	96	20	62	29

Panel D: Difference of Special Committee minus No Special Committee

				Public	
	Total	**PE**	**Priv Op**	**Cash**	**Stock**
Mean Difference	22.9%*	5.6%	21.4%	7.8%	16.1%

* Indicates that the mean difference is significantly different from zero at the 5 percent level.

Table 9. Regression Analysis of Special Committees and Takeover Competition

This table presents probit regressions of the use of an auction for the sample of 845 completed takeovers. The dependent variable takes a value of 1 for takeovers that are conducted as an auction, defined as takeovers where more than one potential bidder signs a confidentiality agreement. Special Committee is a dummy variable equal to one if the target used a special committee during the sales process. Target Size is the natural log of the target firm's market value of equity 64 days prior to the first announcement that the company is in play. R&D/Ratio is the ratio of the target firm's research and development expense scaled by assets. Cash is a dummy variable equal to one if the method of payment in the takeover is 100% cash. Private Bidder is a dummy variable equal to one if the winning bidder was either a private equity company or a private operating firm. We report p-values of the coefficients in parentheses.

Variable	**(1)**	**(2)**
Intercept	1.475	1.455
	(0.000)	(0.000)
Target Size	-0.128	-0.127
	(0.000)	(0.000)
Special Committee	0.490	0.363
	(0.000)	(0.003)
R&D Ratio	-0.090	0.216
	(0.881)	(0.726)
Cash	0.574	0.438
	(0.000)	(0.000)
Private Bidder	--	0.479
		(0.000)
Pseudo R^2	0.081	0.094
Model *p*-value	0.000	0.000
Obs	845	845

Table 10. Special Committees and Target Returns

This table presents the relation between target abnormal returns and special committees for the sample of 839 takeovers with stock return data available from CRSP. Target abnormal returns are cumulative abnormal returns over a (-42, +126) day window estimated using the Fama-French 3-factor model for the 253 trading days ending 127 trading days prior to the earliest in play announcement of a takeover for the target firm, which is used as day 0. The market index is the CRSP value-weighted index. Bidder Types are described in Table 1. Differences are tested using t-tests and the Wilcoxon rank-sum test.

Panel A: Full Sample, Target Abnormal Returns

				Public	
	Total	**PE**	**Priv Op**	**Cash**	**Stock**
Mean	22.0%	19.9%	23.8%	26.1%	18.9%
Median	22.0%	21.8%	24.6%	25.2%	17.4%
Observations	839	164	47	314	314

Panel B: No Special Committee, Target Abnormal Returns

				Public	
	Total	**PE**	**Priv Op**	**Cash**	**Stock**
Mean	23.0%	21.1%	27.8%	27.8%	18.8%
Median	22.0%	22.3%	26.3%	25.7%	17.2%
Observations	633	69	27	252	285

Panel C: Special Committee, Target Abnormal Returns

				Public	
	Total	**PE**	**Priv Op**	**Cash**	**Stock**
Mean	19.2%	18.9%	19.8%	18.9%	20.1%
Median	22.0%	21.6%	24.0%	23.1%	21.9%
Observations	206	95	20	62	29

Panel D: Difference of Means - Special Committee minus No Special Committee

				Public	
	Total	**PE**	**Priv Op**	**Cash**	**Stock**
Mean	-3.8%	-2.2%	-7.0%	-8.9%*	1.4%
Median	0.0%	-0.7%	-2.3%	-2.6%	4.7%

* Indicates that the mean or median difference is significantly different from zero at the 5 percent level.

Table 11. Regression Analysis of Special Committees and Target Returns

This table presents OLS regression analysis of target returns and special committees. Target abnormal returns are cumulative abnormal returns over a (-42, +126) day window estimated using the Fama-French 3-factor model for the 253 trading days ending 127 trading days prior to the earliest in play announcement of a takeover for the target firm, which is used as day 0. The market index is the CRSP value-weighted index. The market index is the CRSP value-weighted index. The regressions have results for the sample of 839 takeovers with available CRSP stock price data. Target Size is the natural log of the target firm's market value of equity 64 days prior to the first announcement that the company is in play. % Independent is the percent of the members on the board that are non-insiders or unaffiliated with the firm. CEO Tenure is the log number of years that the current target CEO has been in that position. O&D Own is the fraction of the target's shares that are held by directors and officers of the company. Family is a dummy variable equal to one if the target has family or founder ownership greater than 5%. Parent/Bidder is a dummy variable equal to one if the parent corporation or the bidder has stock ownership greater than 5%. CEO Gets Job is a dummy variable equal to one if the target CEO remains with the bidder in a management position in the year after the takeover. % Board Seats is the percent of the combined firm board seats that the target firm has in the year following the takeover. Rollover is a dummy variable equal to one if the target firm management rolls over their equity position into a stake in the continuing firm. Private Bidder is a dummy variable equal to one if the winning bidder is a non-public operating company or a private equity firm. R&D/Assets is the ratio of research and development expenses of the target firm/the target firm's total assets. Strategic Bidder is a dummy variable equal to one in any of these three circumstances a) the winning bidder is a private or public operating company in the same Fama-French 48 industry as the target firm b) the winning bidder is a portfolio company of a private equity in the same operating industry as the target or c) one of the firms in the private equity bidding group is an operating company in the same sector as the target. Stock Payment is a dummy variable equal to one of the bidder uses some stock as the method of payment for the deal. We report p-values of the coefficients in parentheses.

Variable	**(1)**	**(2)**
Intercept	0.556	0.523
	(0.000)	(0.000)
Special Committee	-0.018	-0.025
	(0.517)	(0.363)
Target Size	-0.022	-0.022
	(0.002)	(0.002)
% Board Independent	-0.009	-0.002
	(0.921)	(0.979)
CEO Tenure	-0.004	-0.003
	(0.675)	(0.778)
O&D Own	-0.126	-0.114
	(0.039)	(0.063)
Family	0.092	0.086
	(0.002)	(0.004)
Parent/Bidder	0.001	-0.007
	(0.978)	(0.892)
CEO Gets Job	-0.010	-0.003
	(0.647)	(0.889)
% Board Seats	-0.037	0.038
	(0.642)	(0.653)
Rollover Participation	-0.092	-0.116
	(0.049)	(0.018)
R&D/Assets		0.127
		(0.346)
Strategic Bidder		0.018
		(0.447)
Stock Payment		-0.056
		(0.024)
Adjusted R^2	0.024	0.043
Model *p*-value	0.001	0.001
Obs	839	839

Table 12.Propensity Score Matched Return Comparison

This table presents the results of a propensity score matching analysis of target returns for the 839 firms with complete data. Target abnormal returns are cumulative abnormal returns over a (-42, +126) day window estimated using the Fama-French 3-factor model for the 253 trading days ending 127 trading days prior to the earliest in play announcement of a takeover for the target firm, which is used as day 0. The market index is the CRSP value-weighted index. The first stage in the matching computes the propensity score as the probability of the target firm using a special committee based on the full regression from Table 6. The second stage matches each firm that uses a special committee (treated group) with a firm with the closest propensity score that did not use a special committee (control group). This process is followed for every firm with replacement to ensure the closest possible characteristic match. In the results below, the Unmatched sample computes the simple average of returns for the special committee sample versus all other firms. The Matched sample compares the special committee firms based on their nearest matched non-special committee firm counterparts who are in the region of common support.

Sample	Treated	Controls	Difference	S.E.	T-stat
Unmatched	19.16% (N=206)	22.97% (N=633)	-3.81%	0.023	-1.62
Matched	19.16% (N=206)	17.67% (N=108)	1.49%	0.050	0.30