

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

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Abstract

We extend the literature on boards of directors and corporate governance by studying the use of special committees of disinterested directors by target firms in the course of a takeover. Special committees provide a response to conflicts of interest but they potentially impede information flow between the target management and potential bidding firms. The use of a special committee is a voluntary choice that is not subject to federal mandates. Our analysis covers the post-Sarbanes Oxley the period of 2003-2007, in which all firms are required to conform to a new regulatory regime and is characterized by a high level buyout activity that can increase potential conflicts. Our results show that special committee use is positively related conflicts and negatively related to factors and situations where insider knowledge is particularly valuable. 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. Special committees, on average, are formed well in advance of the merger agreement, employ additional financial advisors, and are more likely to run an auction process. Collectively, provide the ability of boards to adapt to situational conflicts, which may help explain when independent directors matter for corporate governance.

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“People often question whether corporate boards matter because their day-to-day impact is difficult to observe. But when things go wrong, they can become the center of attention”

-Adams, Hermalin, and Weisbach (2010) p 58

The role and function of boards as effective agents for shareholders has been widely debated by academicians and regulators. Whether certain board structures provide better advice or are more effective in controlling opportunistic behavior by executives is not clear. Addressing these issues is challenging because the inner workings of the board are typically not directly observable, making the directors’ role in setting firm policy a black box.¹ To surmount this problem research has often focused on observable factors such as the composition of insiders and outsiders on the board. Based on the conventional wisdom that outsiders are more independent of CEO influence, and therefore provide better monitoring, research sought to examine the relationship between the degree of independence and firm performance. Drawing causal claims from such studies is problematic due to the endogenous nature of board structure with performance, which may explain why empirical evidence on this topic is often mixed.²

As noted by Bebchuck and Weisbach (2010) the board’s impact is more likely to be noticeable in situation-specific settings.³ Rodrigues’ (2008) provides a possible explanation via her observation that independent directors are particularly beneficial in the presence of conflicts, but conflicts are often only situational. If boards are structured to handle the fundamental needs

¹ Schwartz-Ziv and Weisbach (2012) overcome this constraint with a unique dataset of minutes from board meetings at Israeli firms. Lorsch and MacIver (1989) provide survey-based evidence on board operations.

² See Linck, Netter, and Wintoki (2012) for a summary of the literature and findings between board structure and firm performance.

³ Prior work on board composition and corporate takeovers includes Shivdasani (1993), Cotter, Shivdasani, and Zenner (1997) and Harford (2003).

of the firm, it begs the question whether they are well-suited to handle situational conflicts. This paper provides insight into this issue by examining the degree to which a given board structure adapts to circumstantial conflicts of interest and information needs during a corporate takeover. In particular, we investigate the use of 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.

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)).⁴

The role and function of the board is particularly important in the takeover setting. The change in control of a corporation provides a setting where the potential conflicts of interest between management or directors and target shareholders are especially amplified and identifiable. It is the final opportunity for target shareholders to receive a premium for their equity stakes. If situational conflicts prevent members of the board from bargaining sufficiently hard, they might fail to extract the highest possible premiums from potential acquirers. Factors such as current career concerns, future jobs, golden parachutes, and other conflicts among

⁴In 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.

executives underscore this particular concern (Hartzell, Ofek, Yermack (2004), Boone and Mulherin (2011)).

To analyze the takeovers, we form a sample of deals announced from 2003 through 2007, which is a particularly salient time period. First, this era is post Sarbanes-Oxley (SOX) where firms face added regulatory constraints on how they structure the board. As shown by Linck, Netter, and Yang (2009), the nature and compensation of directors changed substantially following the enactment of SOX. Starting our sample after the regulatory shift ensures that our observations regarding board structure are not due to firms conforming to the new mandates. Second, this time period was characterized by a high rate of private equity buyers in the market (see Officer et al (2010) and Boone and Mulherin (2011)), which can lead to greater conflicts with managers who may bargain for rollover equity or future positions at the firm.

Our results indicate that special committees are positively related the potential conflicts of interest. Because these committees are not universally used in corporate takeovers, we also investigate the factors that reduce the likelihood of their formation. Theoretical work on board structure provides some insight by noting firm-specific factors such as CEO bargaining power and firm complexity also affect the need for independent directors (Hermalin and Weisbach (1998), Raheja (2005), Adams and Ferreira (2007) and Harris and Raviv (2008)). Though boards comprised of more independent directors can mitigate agency problems, these directors possess less information about the firm's available projects relative to insiders. As the costs of acquiring information about the firm increase, outsiders will have a more difficult time assessing skill and providing relevant advice. Empirical research has largely confirmed the notion that board

structure evolves as an efficient response to the firm-specific environment.⁵ Our analysis of special committees in takeovers finds support for the trade-off effects of insiders versus outsiders. Firms with more opaque information environments or where input from executives would be particularly valuable are negatively related to their use.

Our work provides several important insights. First, we are able 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?” The results indicate that special committees are substitutes for overall board independence. Further, our findings 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.⁶ Our results suggest that devices such as special committees help to protect minority shareholders from the potential conflicts posed by majority block ownership.

Second, our analysis is pertinent to the issue of when we expect to find evidence that corporate governance matters. Adams (2003) suggests that much of the work on the board is carried out within committees. Moreover, Klein (1998) provides evidence that the structure of committees is important by showing that insiders on finance and investment committees are associated with better accounting and stock performance. She concludes that insiders likely add value in these committees by providing firm-specific information, which is consistent with subsequent theoretical work.

⁵ Boone, Field, Karpoff and Raheja (2007), Linck, Netter and Yang (2008), and Coles, Daniel and Naveen (2008), Lehn, Patro, and Zhao (2009), Duchin, Matsusaka and Ozbas (2010), and Schwartz-Ziv and Weisbach (2012)

⁶See, for example, Weisbach (1988), Hermalin and Weisbach (1998), Denis and Sarin (1999), and Denis and Denis (1994).

Reeb and Upadhyay (2010) note that committee structures can overcome coordination problems, but also can foster information asymmetries among directors. While board size is positively related to the use of a committee, it is not significant in our regressions, indicating that special committees in takeover settings are more than just reactions to coordination problems of large boards. Other work has found that board structure overall is related to the firm's information environment, and hence, outside directors are not always value increasing (Duchin, Matsusaka and Ozbas (2010)).

We demonstrate that special committees provide the ability of boards to adapt to specific situations, which may explain why the relationship between independence and other firm factors are often ambiguous. Special committees help offset a lack of independence in the overall board structure, but prior work has not been able to capture these intermediate arrangements. Thus, our study shows that accounting for situational responses can yield important insights into the inner workings of the board and when they matter. We find some evidence consistent with the notion that firms with more opaque, hard-to-value structures might not want a committee.

Collectively, the results indicate that special committees are more than just window dressing or mere legal reactions. If that were true, we would expect these arrangements to be nearly ubiquitous. However, in our sample only 24% of firms employ a special committee. Moreover, the Delaware courts have repeatedly ruled that a committee in and of itself is not sufficient to show good faith negotiating. The process should be free from biases and the directors should be well informed with regard to alternatives.

We explore the functioning in further detail by examining the factors that point toward a well-functioning committee. We first note that these committees are formed, on average, well in

advance of the formal merger agreement. This observation shows that committees have time to run the process and become informed rather than rubber-stamping the deal. We also study whether the committees employ additional and/or separate financial advisors to help guide the process. Separate advisors are often necessary if the firms' primary investment bank has its own conflict in the deal. We find that 31% of committee firms have multiple advisors and that this use is decreasing in board independence and size/complexity.

We also find that committees are associated with higher instances of auctions. Though firms might select the sales method that best suits them, the fact that they use auctions allows more bidders to challenge the deal, which is not consistent with self-dealing and rubber stamping. Finally we analyze returns. Initial evidence shows a bit lower return to firms with committees, but further analysis indicates this could be due to sample selection.

Our other analysis shows that firms don't just form a committee, but pay attention to the process and employ advisors to gather information. Our results are not consistent with the notion that target CEOs have merely captured the boards. Moreover, our findings indicate why prior work might found mixed evidence with regard to independence. We show that boards are much more dynamic and complex than previously thought. The ability to adapt to situational concerns indicates that there could be latent factors that drive performance not captured in standard analyses of boards.

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 management works together with private equity firms to bid for the target firm. This situation creates noticeable conflicts of interest between a target's officers and shareholders (Leech and Mundheim (1976), Lowenstein (1985), McGuinness 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.⁷

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 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.

⁷Because 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.

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 top members of 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. It also suggests that various governance mechanisms can act as substitutes.

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.⁸

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

⁸ 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.

by the target firm 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.

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 (Harford (2003)) 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 there can be drawbacks 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)).⁹ 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

⁹ 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.

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 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).¹⁰

¹⁰ 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.

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.

Table 6 reports the regression results. The first regression studies the impact of board independence and board size 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. Board size is not significant, which does not indicate that special committees are formed merely to overcome coordination problems in large boards.

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 obtained by target directors is negatively related to the use of a special committee (p-value = 0.053), which suggests that special committees do not result in a higher level of directors getting seats in the merged firm. 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. While the strategic bidder and stock payment dummies are significant at the 1% level, R&D/Assets is no longer significant at the 10% 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 whether the takeover process varies by use of special committee. The courts of law have looked beyond the mere forming of a committee to see whether the process itself was fair and directors were informed. To examine these issues we first consider how special committees are related to the number of financial

advisors used during the sales process. We next study the relation between special committees and takeover competition. Finally, we 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. Separate advisors might be necessary because the regular board investment bank has a separate interest in the outcome of the deal (see *In re Del Monte Foods Company Shareholder Litigation*) or not independent of the conflicted managers or directors. 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. We estimate the use of auctions or negotiations by reading 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.¹¹

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 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.¹² 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

¹¹ 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.

¹² Roberts and Whited (2011, Section 6) provide a survey of matching methods.

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 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, disinterested 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, such as officer and director ownership, large affiliated block ownership in the target, and when target management gets 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. The adaptability enables firms to structure board based on their day-to-day needs, but enables them to respond to situational conflicts.

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.

Variable	Predicted Sign	
	Self-Dealing	Monitoring
A. CEO Bargaining Power		
CEO Tenure	-	+
<hr/>		
B. Private Benefits of Block Ownership		
O&D Own	-	+
Family Block	-	+
Parent/Bidder	-	+
<hr/>		
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.

Year	Total	PE	Priv Op	Public	
				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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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	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 if 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. Board Size is the natural log of the number of directors on the target board. 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 if 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	0.662 (0.204)	-1.511 (0.002)	-1.030 (0.021)	0.031 (0.946)	-0.208 (0.773)
Target Size	0.023 (0.500)	0.039 (0.256)	0.017 (0.615)	-0.003 (0.922)	-0.022 (0.609)
% Board Independent	-2.131 (0.000)	--	--	--	-1.170 (0.009)
Board Size	-0.024 (0.857)		--	--	0.340 (0.140)
CEO Tenure	--	-0.081 (0.100)	--	--	-0.008 (0.320)
O&D Own	--	1.141 (0.000)	--	--	0.718 (0.019)
Family	--	0.597 (0.000)	--	--	0.339 (0.021)
Parent/Bidder	--	1.553 (0.000)	--	--	1.409 (0.000)
CEO Gets Job	--	--	0.038 (0.719)	--	0.137 (0.241)
% Board Seats	--	--	-0.790 (0.053)	--	0.381 (0.446)
Rollover Participation	--	--	2.072 (0.000)	--	1.373 (0.000)
R&D/Assets	--	--	--	-2.339 (0.003)	-1.186 (0.131)
Strategic Bidder	--	--	--	-0.494 (0.000)	-0.309 (0.011)
Stock Payment	--	--	--	-0.867 (0.000)	-0.740 (0.000)
Pseudo R ²	0.038	0.112	0.116	0.116	0.260
Model <i>p</i> -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 (0.000)	-4.295 (0.000)	0.083 (0.881)
Target Size	0.278 (0.000)	0.274 (0.000)	0.070 (0.066)
Special Committee	0.619 (0.000)	0.580 (0.000)	--
% Board Independent		-0.661 (0.088)	-2.414 (0.000)
Board Size		0.118 (0.564)	-0.073 (0.726)
Pseudo R ²	0.111	0.114	0.055
Model p-value	0.000	0.000	0.001
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

	Total	PE	Priv Op	Public	
				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

	Total	PE	Priv Op	Public	
				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

	Total	PE	Priv Op	Public	
				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

	Total	PE	Priv Op	Public	
				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 (0.000)	1.455 (0.000)
Target Size	-0.128 (0.000)	-0.127 (0.000)
Special Committee	0.490 (0.000)	0.363 (0.003)
R&D Ratio	-0.090 (0.881)	0.216 (0.726)
Cash	0.574 (0.000)	0.438 (0.000)
Private Bidder	--	0.479 (0.000)
Pseudo R ²	0.081	0.094
Model <i>p</i> -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

	Total	PE	Priv Op	Public	
				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

	Total	PE	Priv Op	Public	
				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

	Total	PE	Priv Op	Public	
				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

	Total	PE	Priv Op	Public	
				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 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 if 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	0.543 (0.000)	0.502 (0.000)
Special Committee	-0.0018 (0.511)	-0.026 (0.340)
Target Size	-0.023 (0.002)	-0.025 (0.001)
% Board Independent	-0.012 (0.897)	-0.010 (0.909)
Board Size	0.012 (0.759)	0.039 (0.350)
CEO Tenure	-0.004 (0.677)	-0.003 (0.802)
O&D Own	-0.127 (0.038)	-0.118 (0.055)
Family	0.093 (0.002)	0.088 (0.003)
Parent/Bidder	0.002 (0.977)	-0.007 (0.887)
CEO Gets Job	-0.010 (0.639)	-0.004 (0.863)
% Board Seats	-0.038 (0.627)	0.039 (0.647)
Rollover Participation	-0.091 (0.054)	-0.114 (0.022)
R&D/Assets		0.162 (0.245)
Strategic Bidder		0.017 (0.480)
Stock Payment		-0.058 (0.019)
Adjusted R ²	0.023	0.044
Model <i>p</i> -value	0.002	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)	20.23% (N=108)	-0.011%	0.050	-0.20