The Impact of Board Connections on M&As

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Using hand-collected SEC filing data on M&A deal negotiation and processing details, we examine the impact of board connections on the process and efficiency of corporate M&As. We find that targets with well-connected boards are more likely to be approached by potential acquirers, introduce more competing bidders during deal negotiations, and be ultimately acquired by connected acquirers. Moreover, well-connected targets are less likely to rely on financial advisors to source potential acquirers. The combined acquirer-target announcement abnormal returns are higher for deals involving more connected targets, and all the deal surplus accrues to the targets. These targets are also paid with significantly higher premiums. Overall, the evidence suggests that board connections help facilitate a value-enhancing deal process for targets in the market for corporate control.

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Abstract

Using hand-collected SEC filing data on M&A deal negotiation and processing details, we examine the impact of board connections on the process and efficiency of corporate M&As. We find that targets with well-connected boards are more likely to be approached by potential acquirers, introduce more competing bidders during deal negotiations, and be ultimately acquired by connected acquirers. Moreover, well-connected targets are less likely to rely on financial advisors to source potential acquirers. The combined acquirer-target announcement abnormal returns are higher for deals involving more connected targets, and all the deal surplus accrues to the targets. These targets are also paid with significantly higher premiums. Overall, the evidence suggests that board connections help facilitate a value-enhancing deal process for targets in the market for corporate control.

1. Introduction

There is no consensus on how board connections affect the firms' takeover decisions. Some studies show that the board connections are beneficial to the acquirer shareholders in that connections allow firms to have better access to information (Cohen, Frazzini, and Malloy 2008; Schonlau and Singh, 2009; Gompers and Xuan, 2009; Cai and Sevilir, 2012), to learn from their network partners' experiences (Beckman and Haunschild, 2002), and to become more active in the market for control (Stuart and Yim, 2010; Renneboog and Zhao, 2014). On the other hand, connections may lead to flaws in decision-making and lead to value destruction. For example, Ishii and Xuan (2014) find that the existence of social ties between acquirers and targets are associated with negative market reactions, higher target board retention rates, higher probability of acquirer CEO receiving deal related bonus, and poorer post-deal performance.

One way to resolve the discrepancy is to examine the merger's searching and negotiation process. However, most of the above studies focus exclusively on merger outcomes[1] because of the lack of organized data on merger process. Investigating the merger process is crucial because it allows us to observe how a deal process evolves and how such a process facilitates improvement in economic efficiency. Starting from Boone and Mulherin (2007), researchers begin to investigate the private negotiation process, but mostly focus on comparing the auction to negotiations and the initiator of the deal[2]. To our knowledge, there is no study examining factors that affect deal process and efficiency.

In this paper, we study the impacts of board connections on M&A deals by focusing on the merger process, from the first date of the private negotiation to the consummate of the deal. We focus on the target firms because the information provided by the proxy statement is only based on the takeover targets[3]. The identities of the potential acquirers and the whole searching process for acquirers are not revealed.

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[1] Most of the studies focus on the deal outcomes such as market reactions to deal announcements (Cohen, Frazzini, and Malloy 2008; Schonlau and Singh, 2009; Cai and Sevilir, 2012; Ishii and Xuan, 2014; Stuart and Yim, 2010; Renneboog and Zhao, 2014), post-deal operating and stock performance (Ishii and Xuan, 2014), as well as factors that link with the deal outcomes (Renneboog and Zhao, 2014; Cai and Sevilir, 2012).

[2] Some research study how the deal started (Masulis and Simsir, 2015; Aktas, Bodt, Bollaert, and Roll 2016). They examine whether deal outcomes of target initiated deal different from that of acquirer initiated deals (Oler and Smith, 2008; Masulis and Simsir, 2015). Another trend of study focus on how a target sell its firm (Schlingemann and Wu, 2015; Anilowshi, Macias, and Sanchez, 2008; Boone and Mulherin, 2007).

[3] Definitions of each private takeover process variables are shown in Appendix B.

Based on the proposition that connections can increase one's access to information, we posit that targets with well-connected boards are able to facilitate more efficient searching processes and achieve superior economic deal outcomes. Several studies have shown that CEO and directors may use their connections to gain personal benefit[4]. However, their incentive might be different when their roles shift from acquirers to targets. No study focuses on the target board connections and our study fills the gap in the literature.

To begin with, we test how board connections affect the firms' merger likelihood. We calculated the board connections from *BoardEx* database and collected information about the deals private negotiation process from target proxy statement. Then we match the data to the *SDC* database by company names. We find that firms with well-connected boards are more likely to become takeover targets or acquirers. These findings are consistent with the information hypothesis that firms with more connections possess higher merger opportunities.

Then, we test the impacts of board connections on the deal process. We keep those deals of which the target proxy statement can be obtained from *SEC EDGAR* database. For a sample of 848 M&A deals from the Year 2002 to Year 2014, we find that targets with well-connected boards are associated with efficient selling processes and superior deal outcomes. Specifically, targets with more connections are more likely to be involved in acquirer initiated deals, contact more potential acquirers in the private auction process, and be acquired by connected acquirers.

In the next set of tests, we investigate whether the use of financial advisors can substitute the effect of board connections on obtaining superior outcomes. For example, Bowers and Miller (1990) find that financial advisors help acquirers identify better targets. It is possible that firms can compensate for the lack of board connections by employing financial advisors in the searching process. We first conduct tests on the relationship between board connections and the use of financial advisors in the process of searching for potential acquirers. Then, we test whether the use of financial advisors to introduce potential acquirers are associated with superior deal outcomes. Our results show that well-connected targets are less likely to use financial advisors in the process of searching for potential acquirers and contact the announced acquirer. In addition, we investigate whether the use of financial advisors is beneficial to targets. We find that the use of financial

[4]See, for example, El-Khatib, Fogel, and Jandik (2015), Barnea and Guedj (2009), Ishii and Xuan (2014).

advisors to contact the announced acquirers is associated with lower premium and target market returns. What is more, among targets which hire financial advisors during the M&A process, the financial advisor fees are significantly higher for those deal that announced acquirers are contacted by financial advisors than other deals. All of our results indicate that financial advisors cannot be used as substitutions of board connections.

In addition, our results show that targets with more connections are associated with better deal outcomes. The combined acquirer-target abnormal returns to the merger announcement are higher for deals in which targets have more connections, but all the abnormal returns accrue to the targets. What is more, the premiums are higher for deals with well-connected targets. This number is not only statistically significant but also economically sizeable. Targets get 4% higher in premiums with 1 standard deviation increase of target board connections.

Since we include all type of connections in our test, it is possible that our results are mainly driven by one type of the connections. To test this possibility, we segment all the target board connections into three types by the way the connections are acquired. The three types of connections are: connections gained through directors' work experience, social activities, and educational experience. Our results indicate that work and education connections are associated with more efficient searching process and superior deal outcomes. Although social connections are correlated with enhanced deal outcomes, they do not consistently lead to more efficient searching process.

So far we have shown that board connections are valuable to the targets. However, there are alternative explanations to our findings. For example, we cannot discriminate the effect of directors' experiences from that of connections. Past experiences of the directors can affect firm's acquisition behaviour while these experiences also allow directors to build their connections (Custodio and Metzger, 2013; Huang, Jiang, Lie, and Yang, 2014; Mcdonald, Westphal, Graebner, 2008). To rule out this alternative explanation, we use the number of years the directors sit on quoted board positions as a proxy of the directors' experience. We find that connections of those directors with fewer experiences are also associated with better deal process and outcomes. These findings are at odds with the alternative explanation that our results are driven by directors' experience instead of directors' connections. Our results are robust when we use the directors' age as an indicator of the directors' experience.

Another concern is that our results may spuriously reflect the correlation between directors' innate ability and connections. It is highly possible that more capable directors conduct deals more efficiently and are also better connected. If that were the case, the connections would be simply a proxy of the directors' innate skill. To assess this possibility, we use the directors' education background to measure his ability. We find that the connections of directors without top school education background also contribute to the efficiency of the deal process, which is inconsistent with the innate ability hypothesis.

Our last set of tests examine whether targets intentionally build their connections before the merger negotiation to complete the deal efficiently. However, as our baseline results suggested, well-connected target are more likely to be involved in acquirer initiated deals. This result does not support the build-up-connection argument. In addition, instead of using current board connections, we use the target board connections two years before the deal announcement and get similar results. These results are at odds with the build-up-connection explanation.

Overall, we conclude that the board connections are valuable to the firms when they become takeover targets. Specifically, board connections allow the targets to be exposed to more merger opportunities. In additions, these connections help the target identify better merger counterparts and reduce the use of financial advisors in the searching process, which is associated with higher cost. All these efficient merger processes lead to superior merger outcomes. Namely, the targets get higher premiums and better market reactions.

Our study contributes to several strands of literature. First, we contribute to the literature about board connections and firm decision-making. Some studies focus on board inner connections. Relatedly, Hwang and Kim (2009) provide evidence that a proportion of independent boards are substantively not independent while Schmidt (2015) studies the social ties between the CEO and board member and finds that CEO-board connection has both benefits and costs to the firm. Other researchers focus on the board outside connections and show that these connections have impacts on the corporate activities. For example, studies show that network can affect the firms (funds) operating performance (Cohen, Frazzini, and Malloy, 2008; Hochberg, Ljungqvist, and Lu, 2007) and stock price (Akbas, Meschke, Wintoki, 2016; Akbas, Hann, Polat, and Subasi, 2017), while Fracassi and Tate (2012) and Fracassi (2016) find evidence that networks are influential to the firms' governance and financial policies. Engelberg, Gao, and Parson (2012) show that firms with

bank connections enjoy lower interest rates. We contribute to the literature by focusing on the board connections and the target firms' merger activities. Consistent with the literature, we find that board connections can affect the corporate M&A decisions.

Our findings also provide novel insights into the factors that affect the success of the mergers. The evidence in general shows that CEO characteristics (Malmendier and Tate, 2008; Billet and Qian 2008; Ahern and Dittmar 2012; Yim 2013), firm characteristics (Aktas, Bodt, Bollaert, and Roll, 2009 and 2011), and acquirer target social ties (Ishii and Xuan, 2014; Cai and Sevilir, 2012) have impact on the merger outcomes. As far as we know this paper is the first study that investigates the effects of target board connections on deal outcomes. Our results prove the importance of target board connections to the deal successfulness.

Last but not least, we also contribute to the literature about the private negotiation process. Since Boone and Mulherin (2007), many studies focus on the private negotiation process of mergers. For example, these studies show that the probabilities of firms to initiate a deal are affected by their financial constraints and economic conditions (Masulis and Simsir, 2015), CEO ownership and compensation structure (Fidrmuc and Xia, 2017), and CEO narcissism (Aktas, Bodt, Bollaet, and Roll, 2016). In additions, other researchers find that the selling method (auction or negotiation) can affect the deal outcomes (Boone and Mulherin, 2007; Anilowshi, Macias, and Sanchez, 2008; Schlingemann and Wu, 2015). However, less is known about the factors that affect the merger negotiation process. Our paper contributes to the literature by showing that board connections have impacts on the merger process.

The structure of this paper proceeds as follow. Section 2 discusses related literature and Section 3 details our data collection process. Section 4 reports our results and in Section 5 we discuss alternative explanations. Section 6 concludes.

2. Literature Review

2.1 Private Takeover Process

One strand of literature on private takeover process focuses on the initiating party of the deals. Masulis and Simsir (2015) find that targets that are economically weak, subject to financial constraints, and experience negative economy-wide shocks are more likely to initiate M&A deals. Consistent with this study, Fidrmuc and Xia (2017) find that firms with higher CEO ownership,

golden parachutes, and stock option granted to the CEO are more likely to initiate the deal. Aktas et al. (2016) find that acquirers with higher CEO narcissism are more likely conduct acquirer initiated deals. While Chen and Wang (2015) find that the targets' private information about its stand-alone value, and the bidder's private information about its valuation on the target firm are the key factors in determining the time of initiation. In addition, studies have shown that the deal outcomes of target initiated deal are different from that of acquirer initiated deals. For example, Masulis and Simsir (2015) find that for target initiated deals, the takeover premium, target abnormal returns and deal value to EBITDA multiples are lower. Moreover, Oler and Smith (2008) find that firms that make take-me-over announcement are more likely to underperform their peers.

Another trend of study on the private takeover process examines how targets navigate the merger process. Boone and Mulherin (2007) is the first study that uses information from private negotiation to determine whether the selling process is auction or negotiation. Several studies show that these two selling methods do not yield significantly different deal outcomes (Boone and Mulherin, 2007, 2008, and 2009). Chira and Volkov (2015) suggest that one of the reasons that auction selling process does not outperform negotiation is due to the existent of auction failure cost. They find that auction failure are associated with lower final premiums and higher acquirer returns. Xie (2010) find that the selling process is affected by how the deal initiated. They show that target initiated deals are more likely to use auction while acquirer initiated deals are more likely to negotiate one-to-one.

However, none of these studies focus on the firm characteristics that could affect the deal selling process. In this paper, we contribute to the literature by examining how target board connections affect the deal selling process.

2.2 Board Connections and Acquisition Decisions

Numerous studies have shown that board connection can affect the performance of a firm/fund (Cohen Frazzini, and Malloy 2008; Hochberg et al, 2007), corporate governance (Fracassi and Tate, 2012), and decisions (Fracassi, 2008).

When it comes to merger and acquisitions, researchers have different views on how external board connections affect firm performance in M&A. On the one hand, board connection allows firms to get more M&A related information (Cohen Frazzini, and Malloy 2008; Ishii and Xuan,

2014; Schonlau and Singh, 2009) and experience (Beckman and Haunschild, 2002; Stuart and Yim, 2010). For example, Cai and Sevilir (2012) find that acquirers with first-degree connection to the target are able to get a lower premium while acquirers with second-degree connected to the target are more likely to achieve a higher post-deal performance. In addition, they find that when acquirer and target have a common director, acquirer announcement returns are significantly higher than those of deals without such connection. Instead of focusing on the target-acquirer ties, Schonlau and Singh (2009) study the board connection of acquiring firms and their acquisition performance. They find that central boards are more likely obtain higher post-merger abnormal return. Renneboog and Zhao (2014) study how board networks affect the takeover process and find that well-connected firms (central firms) are more likely to become bidders and they are able to complete the deal in a shorter time. The experiences associated with director's connection are also valuable to firms. Stuart and Yim (2010) find that companies which have directors with private equity deal exposure are more likely to receive private equity offers

On the other hand, board connection might cause decision bias. Ishii and Xuan (2014) find that M&A are more likely to take place between firms with social ties. The acquirer-target connection ties have significant negative effect on the acquirer and combined announcement returns. In addition, the existence of social ties is associated with higher target board retention rate, higher probability of acquirer CEO receiving deal related bonus and poorer post-deal performance.

All the literature mentioned above focus on the acquirer-target social ties or the acquirer board connections. However, little is known about the impacts of target board connections in the M&A process.

3. Data Source and Sample Description

3.1 Data Source

Our sample includes M&A transactions for U.S. targets between 1 January 2002 and 31 December 2014 in Securities Data Corporation's (SDC) U.S. M&A Database. We exclude those deals that target and acquirer firms are not publicly traded. In addition, we require the percentage of shares acquired by the bidder is more than 50% of the target total shares outstanding and the deal status is either 'withdrawn' or 'completed'. Then we restrict our sample to those deals which target merger negotiation information is available from the U.S. Securities and Exchange

Commission (SEC) website. We further delete those deals which have missing firm and deal characteristics. Finally, we require that the target's board connection information can be obtained from BoardEx database[5]. Since some of the Companies in BoardEx are assigned to more than one company ID, we manually clean this data to make sure that each firm corresponds to a unique ID. Detailed sample selection process are reported in Appendix A. Our final sample consists of 848 M&A deals with both public targets and acquirers.

The variable of interest in our study is the firm's board connection. For each director/CEO[6], we acquire all the connections that started before the year of the M&A announcement from *BoardEx* database. Unlike previous studies that only focus on social connections, work connections (Cai and Sevilir, 2012; Ishii and Xuan, 2014[7]), and education connections (Cohen et al, 2008; Ishii and Xuan, 2014), we included all the connections that gained through work experience, social experience, and educational experience. Then we sum the total number of connection of all directors to get the firm's connection size. Duplicate connections are removed. Finally, we standardize the total connections by the sample mean and standard deviations. Summary statistics of board connections are presented in Table 1.

For each firm, we also construct alternative indicators that evaluate different types of connections. Specifically, we segment all the connections by whether they are gain through the director's work experiences (Work Connections), social activities (Social Connections), or educational experiences (Education Connections). In addition to segment the channels that the connections are gain, we also group the connections by the types of director characteristics. Related to the alternative explanations, we separate those connections of experienced directors from those of less experienced directors and those connections of directors with top-school education background from those without.

Information about the deals private negotiation process are collected from *SEC EDGAR* database. Merger process information can be obtained from the 'merger background' section of target firm's proxy statement (specifically, Form DEF 14 or Form S-4). The merger background

[5] We match the *BoardEx* database to *SDC* database by using company names.
[6] We include the connections of Directors, CEOs, Presidents, as well as Chairmen. Our results are robust if we include those Executives' connections.
[7] Though labeled as 'social', the way Ishii and Xuan (2014) measure the 'social ties' is by using directors' work and education experience.

section provides information about pre-announcement merger negotiation. From this section, we collected the which part initiate the deal, the first date of the private negotiation process, the number of potential acquirers contacted, whether the target use of financial advisor during the searching process, and how those potential acquirers were contacted. In addition, for each deal that uses financial advisor during the searching process, we also documented whether the announced acquirer is contacted by financial advisors. The announced acquirer is defined as the acquirer that make public merger announcement with the target.

Relevant deal characteristics are obtained from *SDC* database, target and acquirer firm characteristics are collected from *Compustat* database and stock information are collected from *CRSP* database. Detailed definitions of all variables can be found in Appendix B.

3.2 Descriptive Statistics

Table 1 reports the sample mean, median, and standard deviation of the board connections. In our sample, the mean (median) of connection size is 2,485 (1782). Of all the connections, around 57% of the firm's connections are gained from the director's work experience, 9% of the connections are built through social activities while 34% of the connections are built through past education experience. Around 24% of the total connections are brought into the firms by experienced directors while 11% of the total connections belong to directors that graduate from top schools. In addition, on average, the target firms' connection size increased dramatically 2 years before the merger announcement. This finding might correlate with the alternative explanation that target firms build up their connections in order to facilitate efficient merger process and achieve superior deal outcomes. We will address this concern in Section 5.

[Insert Table 1 here]

In this study, we focus on how board connections are correlated with the merger negotiation and outcomes. However, the deal process and outcomes are also associated with firm characteristics (e.g. size and operating performance) and deal characteristics (e.g. payment method and tender offer). Therefore, in all the following empirical models we control firm characteristics. In addition, we control for deal characteristics in those tests of deal outcomes.

[Insert Table 2 here]

Table 2 reports the summary statistics of target and acquirer characteristics (Panel A), deal negotiation process (Panel B), and deal outcomes (Panel C). As reported in Panel A, all of our firm characteristics are comparable to that of studies that use similar sample selection process (Cai and Sevilir, 2012). On average, acquirer firms are larger than the target firms, have higher Tobin's Q, and better operating performance.

Panel B describes the variables related to the deal negotiation process. In our sample, about half of the deals are initiated by acquirers. We classify a deal as acquirer initiated deal if the target selling process was started by one of the potential acquirers (not necessarily the announced acquirer). The total number of potential acquirers participate in the private auction process is highly skewed, with a mean of 12 and median of 3. This is due to around 40% of the deals in our sample only negotiate with one acquirer. 32% of the target finally public announced the merger decision with a connected acquirer. This number is higher than those documented in previous research (10.60% in Ishii and Xuan (2014); 9.4% in Renneboog and Zhao (2014); and 9.4% in Cai and Sevilir (2012)). One of the reasons is that our definition of connections is broader, connections gained through work, social and educational experiences are all included while previous research only includes one of these three types of connections. 43% of the targets use financial advisors in helping them to search for potential acquirers and 27% of the announced acquirers were first contacted by target financial advisors.

Panel C of Table 2 reports the deal premium, market reaction and the total fees paid to financial advisors. Consistent with previous studies, targets earn positive announcement returns while acquirers don't. For those 598 deals that the financial advisor fees can be obtained from *SDC* database, the average dollar paid per thousands of transaction value is 10.

4. Results

In this section, we discuss whether the board connections affect the firms' merger probabilities of becoming targets as well as acquirers. Then we analyse how the deal private negotiation processes are influenced by the target board connections. Next, we examine whether the merger outcomes are different for well-connected targets. In the last part of this section, we test if the impacts of different types of connections vary.

4.1 Board Connections and Merger Likelihood

To measure how the board connections affect the firms' merger likelihood, we calculate the board connections of all the firms from *BoardEx* database. Then we match the board connections data to *SDC* database by firm names. We obtain the firm characteristics from *COMPUSTAT* database and *CRSP* database. Our final sample for this test includes 48878 firm-year data points without missing control variables.

[Insert Table 3 here]

Table 3 presents the regression results for the tests of the correlation between merger likelihood and board connections. Column (1) of Table 3 reports the firms' probability of becoming takeover targets while column (2) reports the probability of becoming acquirers. The dependent variable Y of column (1) and column (2) are dummy variables that equal to 1 if the firm has been a takeover target or acquirer in the specific year. We include year and firm Fama-French 12 industry fixed effects in the tests to absorb the unobservable factors.

As reported in Table 3, firms with well-connected boards are more likely to become takeover targets as well as acquirers. These results are in line with the previous literature that shows when acquirer and target are connected, their probability of conducting M&A is higher (Ishii and Xuan, 2010; Renneboog and Zhao, 2013; Rousseau and Stroup, 2015). According to the proposition that connections help disseminate information, firms with larger connection size are better at gather information and identify suitable targets/acquirers when they have intentions to conduct merger transactions. In addition, they are more likely to be identified as merger counterparts when other firms plan to engage in merger activities. Consistent with this analysis, our results suggest that well-connected firms have higher probabilities of being involved in M&A transactions.

4.2 Board Connections and Merger Process

One of our main conjectures is that targets with well-connected boards can facilitate an efficient merger negotiation process. To test this prediction, we identify different characteristics of the deal process and test how they are correlated with the target board connections. We estimate the correlation with the following model:

$$Merger\ process_i = \alpha_i + \beta_1 \times Target\ board\ connections_i +$$
$$+\beta_2 Controls_i + \theta_{year} + \theta_{FF5} + \varepsilon_i \quad (1)$$

$Merger\ process$ stands for different process characteristics of deal i. In this study, we focus on the deal initiator, the number of potential acquirers contacted, whether the announced acquirer is connected, and the use of financial advisor in searching for potential acquirers. The variable $'Target\ board\ connections'$ is defined in Section 3. $Controls_i$ stands for the control variables included in Table 2 Panel A and Panel C. θ_{year} and θ_{FF5} represent the deal year and target Fama-French 5 industry fixed effects, respectively.

Table 4 presents how target board connections affect the deal process. The OLS estimates of the coefficients of interest in equation (1) are reported, as well as t-statistics based on two-way clustered standard errors by industry and year. The dependent variables of column (1-3) are 1) indicator of the party that initiates the merger deal, 2) the total number of potential acquirers contacted in the merger negotiation period, and 3) indicator of the acquirer-target connections ties.

[Insert Table 4 here]

The results of column (1) of Table 4 shows that targets with larger connection size are more likely to be involved in acquirer initiated deals. This finding is consistent with the information hypothesis that connections can help firm disseminate their information. Therefore, when selecting counterparts, acquirers are more likely to obtain information of those well-connected firms and start negotiation with them. The estimated effects of connections are statistically significant.

Column (2) of Table 4 reports the correlation between target board connections and the total number of potential acquirers contacted in the whole negotiation process. Our results show that targets with well-connected boards are more likely to approach more potential acquirer in their negotiation period. Having more potential acquirers is beneficial to the target shareholder since with higher level of competition, bidders may overbid (Levitt and List, 2006; Kagel and Levin, 1986). The evidence indicates that on average, an increase of one standard deviation of target board connections is associated with one more potential acquirer.

Another concern is that whether the potential acquirer contacted are due to the targets board connections. It is possible that some unobserved variables are associated with both board connections and the total number of potential acquirer contacted. To rule out this spurious effect, we test whether the well-connected targets are more likely to reach a merger agreement with the connected acquirers. Column (3) of Table 4 presents that on average, targets with larger board

connection size have higher probabilities to merge with connected counterparts. This result is consistent with the proposition that target use their connections to facilitate efficient negotiation process.

Next, we examine whether the use of financial advisors can substitute the board connections. Studies have shown that financial advisors are important in completing complex deals and they can help the acquirer get higher market returns (Servaes and Zenner, 1996; Golubov, Petmezas, and Travlos, 2012). However, the incentive for financial advisor might conflict with that of target firms (Allen, Jagtiani, Peristiani, and Saunders, 2004; Becher and Juergens, 2009; Agrawal, Cooper, Lian, Wang, 2013). Table 5 presents the association between board connections and the use of financial advisors to search for potential acquirers. Panel A of Table 5 reports the correlation between board connections and the use of financial advisors in the process of searching for potential acquirers. Panel B of Table 5 presents the association between the deal outcomes and the use of financial advisors.

[Insert Table 5 here]

To begin with, we test whether the use of financial advisors different between those well-connected targets and those less-connected firms. As the result presented in column (1) of Panel A, well-connected targets are less likely to use financial advisors in searching for potential acquirers. In addition, column (2) of Panel A shows that the announced acquirers are less likely to be approached by the financial advisor for targets with larger connection size. That is to say, for well-connected targets, they either contact the announced acquirer themselves or the announced acquirer initiate the deal negotiation. However, this result could be due to the facts that well-connected targets are less likely to use financial advisor in the searching process. Thus, the result in column (2) to simply driven by the results of column (1). To address this issue, we conduct subsample tests that only includes those deals that targets had used financial advisors in their searching process. Column (3) reports the result of subsample tests. Consistent with the results of column (2), the announced acquirers are less likely to be first connected by financial advisors for deals with well-connected targets.

A natural question to ask is that whether contacting potential acquirers directly are associated with superior deal outcomes than searching for potential acquirers by using financial advisors. With a lot of experiences, financial advisors may be better at identifying appropriate acquirers. On

the other hand, financial advisors have different incentives and might not act in the best interests of the targets. Panel B of Table 5 reports the results of whether the use of financial advisors in searching for potential acquirers are associated with better deal outcomes.

First, we test whether the advisor fees are higher for those financial advisors that help in the process of introducing more potential acquirers. As reported in column (1), for a sample 598 deals that the financial advisor fee can be obtained, we find that targets pay one dollar more per thousand of transaction value when they use the financial advisor in the searching process. Since the average transaction value is 2,120 million, this number is not only statistically significant but also economically sizable. To rule out the possibility that targets use financial advisor in the searching process pay high advisor fees because they engage high reputation advisors, we also controlled the target advisors' reputation. The result shows that advisors reputation is not the reason of higher advisor fee, though top advisors do charge more.

Next, we focus on the deal outcomes. Column (2) of Panel B shows that targets get lower premiums when the announced acquirers are connected by their financial advisors. In addition, results from column (3-4) of Panel B indicate that the market returns are lower compared to the market returns of deals that announced acquirers are not introduced by financial advisors. However, the full sample tests might not provide a clear comparison because some connected deals still use financial advisors to approach the announced acquirer while others unconnected deals do not. To exclude the mixed effects, we conduct a set of subsample tests that only include those connected deals without the use of financial advisors in contact the announced acquirer or unconnected deals that engage financial advisors. Column (5-7) of Panel B shows that our results are robust in the subsample tests.

Overall, the results in Table 5 show that board connections can help the targets facilitate cost-efficient searching processes which financial advisors cannot substitute.

4.3 Board Connections and Merger Outcomes

In this section, we study how the target board connections affect the deal outcomes. We focus on the market reactions and the deal premiums. We use the trading days from -252 to -42 relative to the announcement date to calculate the market model:

$$R_{it} = a_i + \beta_i \times R_{mt} + \varepsilon_{it} \qquad t = -252, .., -42, \tag{2}$$

Where R_{it} and R_m are the stock returns of firm i on day t and the CRSP value-weighted market stock returns on day t, respectively. We require the firms to have at least 180 trading days and 843 deals are included in this set of tests. Then we calculate the 3-day (-1, 1) and 23-day (-21, 1) abnormal returns. We include the 23-day abnormal returns to address the stock runup effects documented by Schwert (1996). Table 6 presents the correlation between board connections and deal outcomes.

[Insert Table 6 here]

Column (1-2) show that targets get higher market reactions when their boards possess higher connections. Two mechanisms can lead to the superior target market performances. Targets can get better performance either though identify counterparts that generate higher synergy or negotiation for larger shares of the total gain. Column (5-6) show that target-acquirer combined returns are significantly higher for deals with well-connected targets. These results are consistent with the conjecture that target board connections help facilitate better negotiations between the two parties, which lead to deals with higher synergy. In addition, we also find evidence that supports the proposition that well-connected targets get larger shares of the total gain. Column (3) and column (4) of Table 6 show that all the combined market gains accrue to the target firms. There is no significant difference of acquirer returns for deals with well-connected targets and deals with less connected targets. What is more, column (7) of Table 6 shows that targets get higher premiums when their connection size are larger. Overall, all these findings suggest that well-connected targets can identify acquirers with higher synergy and gain a larger share of the total synergy.

4.4 Types of Board Connections

Previous results use the target boards' total connections. One concern is that our results were mainly driven by one type of connections. In this section, we test the influence of different types of connections by segment all the connections into three groups by the channels the connections build through. The three types of connections are connections that build via 1) work experience (Target Work Connections); 2) social activities (Target Social Connections); and 3) education experience (Target Education Connections).

Though studies have shown that all three types of connections can help disseminate information (Cohen, Frazzini, and Malloy, 2008; Gompers and Xuan, 2008; Stuart and Yim, 2010; Fracassi and Tate, 2012), the impacts of the enhanced information flow are different. For example, work connections can help reduce information asymmetry while connections build through social activities and education experience connected people with common interests and similar backgrounds. Table 7 to 9 presents the results of variation of impacts of different types of connections.

[Insert Table 7 here]

Table 7 shows the results of the impacts of different types of connections in the deal process. The main independent variables of Panel A, Panel B, and Panel C are target firm's work connections, social connections, and education connections, respectively. The findings suggest that work connections and education connections are associated with an efficient searching process. However, Social connections are not significantly correlated with the total number of potential acquirers' contacted in the merger process. Targets with higher social connections are not more likely to merge with connected parties.

[Insert Table 8 here]

Table 8 presents the correlation between different types of board connections and the use of financial advisor in searching for potential acquirers. As suggested by Table 8, Education connections are negatively correlated with the use of financial advisor in searching for potential advisors.

[Insert Table 9 here]

Though different types of connections have different impacts on the merger process, all of them are correlated with positive market reactions. Table 9 reports the results of deal outcomes. The results indicate that for different types of connections, the higher market reactions are gained through different mechanisms. Work and social connections can help firms in identify counterparts with higher synergy while social and education connections associated with higher premiums.

5. Alternative Explanations

Our results so far indicate that board connections are valuable to the target firms. However, one of the concern is that whether the value does generate from target firm's connections. Our main hypothesis is that board connections can help the firms facilitate efficient merger process which leads to superior deal outcomes. However, it is possible that our results are confounded by other factors that correlated with both board connections and the deal process. For example, directors' experience and abilities might also contribute to the well-organized merger process. What's more, these directors with lots of experiences and high abilities are more likely to possess larger connection size. In this Section, we discuss alternative explanations and tests whether our main results are due to the effects of connections.

5.1 Connections or Experiences?

To begin, we test whether the directors' experiences contribute to the efficient merger process and superior merger outcomes. Directors' experiences, such as past M&A experiences and industry experiences, also help the directors evaluate the synergy of the merger and negotiate for a larger shares of the synergy. In additions, directors can build their connections through these experiences. Therefore, directors with more industry and past M&A experiences are more likely to be those directors that possess larger connection size.

We use the number of years that the directors have served on board positions as a proxy of the directors' experiences[8]. This proxy is used because it is more germane to those experiences that can contribute to well-organized deal process and better deal outcomes. We obtain this information from *BoardEx* database. We include all the board positions that before the merger announcement year. Then, we segment all the directors into two groups by the sample median. If our results are driven by the directors' experiences rather than their connections, we are expected to observe those connections that belong to directors with shorter board positions are not associated with efficient deal process and superior deal outcomes. Table 10 to Table 12 present the sets of results to test this alternative explanation.

[Insert Table 10 here]

Table 10 reports the relation between connections of different directors' experience and M&A process. The main independent variables of Panel A and Panel B are targets board

[8] We also use directors' age as a proxy of the directors' experiences and the results are similar.

connections of experienced and inexperienced directors. Panel B of Table 10 shows that connections of less experienced directors also help the target in getting acquirer initiated deals and merged with connected acquirers.

Next, we test whether connections of less experienced directors can affect the targets' use of financial advisor in the searching process. As reported by Table 11, we find that connections of less experienced directors are more significantly correlated with the reduction of use of financial advisor in the searching process. In addition, our results show that connections of experienced directors are not correlated with the use of financial advisor, which is at odds with experience explanation.

[Insert Table 11 here]

The evidence in Table 12 shows the associations of different directors' experience and deal outcomes. In general, the results of less experienced directors' connections are consistent the results of total connections. The only difference is that the 3-day market returns are not significantly correlated with connections of less experienced directors. However, the 23-day abnormal returns are significantly higher. In addition, our results indicate that both connections of experienced and less experienced directors are associated with higher combined returns. What is more, connections of less experienced directors also benefit the target shareholders by negotiating for a higher deal premiums.

[Insert Table 12 here]

Overall, all the results of Table 10 to Table 12 show that both connections that belong to experienced directors and less experienced directors are valuable to the targets. These findings are at odds with the experience explanation.

5.2 Connections or Ability?

Similar to the directors' experiences explanation, we cannot discriminate whether our main results are due to the effect of connections or the directors' ability. It is possible that directors with high innate skills are more likely to build their connections. Moreover, directors with high innate skills can facilitate the well-organized deal process and argue for better deal terms. Therefore, our

results might simply reflect the correlation between connections and ability. To assess this possibility, we investigate whether our results depend on the directors' innate ability.

In this part, we use the directors' education background as an indicator of the directors' innate skill. Arguably, directors graduated from top-ranked school are more likely to possess higher learning ability which can benefit the merger process. We obtain the directors' education background from *BoardEx* database. Top institutes are those ranked within 100 by QS university rankings in the year 2015. Table 13 to Table15 reports the results of this set of tests.

[Insert Table 13 here]

The evidence in Table 13 shows that connections of directors without top school education background also associated with efficient deal process. Furthermore, connections of directors without top school education are more likely to introduce more potential acquirers while connections of those with top school education backgrounds are not. Table 14 presents the results of use of financial advisor in the searching process. Though the evidence shows that connections of directors without top school education background do not reduce the firms' use of financial advisor in searching for potential acquirers, these connections reduce the probability that the announced acquirer are introduced by the targets' financial advisors.

[Insert Table 14 here]

Table 15 show that connections of directors who graduate from non-top school also correlated with superior deal process. Target market announcement returns and acquirer-target combined announcement returns are significantly positively correlated with connections of directors without top school education. What is more, the premiums are higher for those targets with more connections of directors without top school education.

[Insert Table 15 here]

To sum up, all the results reported in Table 13 to Table 15 are not consistent with the innate skill explanation.

5.3 Build-up-connections Explanation?

So far, our results show that firms with connections associated with efficient deal process and outcomes. One concern is that that firms intend to be taken over may build their connections

a few years before the merger negotiation. In that case, our results may reflect the ex-ante selection of directors by the targets. In this case, the correlate between connections and deal process are endogenous implies that firms with high willingness to sell rather than the effects of board connections.

As suggested by the results of Table 4, target board connections are positively correlated with the probability of being involved in acquirer initiated deals. However according to build-up-connections explanation, firms that increase their connection size before the merger negotiation are more likely to be those that actively seeking buyers. Therefore, our baseline results are not consistent with the ex-ante selection explanation.

We also conduct another set of tests to test the build-up-connections explanation. Instead of using the target board connections of the merger year, we run all the model specifications by using the targets connections 2 years before the merger announcement. Arguably, firms are less likely to prepare their merger longer than 2 years. Thus, target connections 2 years before the merger are less likely to be affected by the firms' intention to increase their connection size. Table 16 report the results of the analysis.

[Insert Table 16 here]

Generally, our results are robust when we use the target firms' connections 2 years before the merger announcement. However, some of the estimated effects are smaller compared to the results that use the connections of the merger announcement year. Specifically, connections 2 years before the merger announcement are less significantly correlated with a larger number of total potential acquirers and the use of financial advisors in the searching process. Other findings are robust and consistent with our baseline results. Overall, our results support the idea that board connections benefit the shareholders when the firm become taking over targets and these effects are not due to ex-ante selection.

6. Conclusion

Literature has shown that connections are important in disseminating information. With large connection size, firms have better access to information and can reduce information asymmetry in making corporate decisions. In this paper, we examine how board connections affect the merger process and deal outcomes. We conjecture that firms with larger connection size are more likely

to face ample M&A opportunities. In addition, we hypothesized that those connections can help firms navigate an efficient merger process, which leads to superior deal outcomes. We test our propositions with 848 M&A deals from 2002 to 2014.

Our results are consistent with our conjectures. We find that firms with larger connection size are active bidders and more likely to become takeover targets. In addition, our results show that targets with well-connected boards are more likely to be approached by potential acquirers, involved in a more competitive auction process, and acquired by connected acquirers. What is more, well-connected targets are less likely to employ financial advisors in the process of searching for potential advisors and evidence show that using financial advisors cannot substitute the effects of board connections. Last but not least, our findings indicate that board connections are associated with better deal outcomes. Well-connected targets obtain significantly higher acquirer-target combined announcement returns while all the abnormal returns accrue to the targets but not the acquirers. Well-connected targets also get higher premiums.

Inconsistent with the alternative explanations that our results are driven by target directors' experience and innate abilities, we find that the connections of directors with less experience and inferior education backgrounds also contribute to the efficiency of the merger. What is more, we do not find evidence that supports the hypothesis and targets build their connections before the merger negotiation.

Overall, our study shows that board connections benefit the firms by increasing merger likelihood, facilitating efficient merger process, and obtaining superior merger outcomes.

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Appendix A

	Sample Selection Criteria	Number of Deals
1	All the M&A deals for US target firms announced between Jan 2002 and Dec 2014	142948
2	Percentage of target shares that acquirer seeks to buy in the transaction is above 50%	4508
3	Acquirers and targets firm characteristics can be obtained from COMPUSTAT and CRSP database	1736
4	Keep deals that target proxy statement can be found in SEC EDGAR database	1242
5	Drop those deals with missing control variables	848

Appendix B

Variables Names	Variable Definitions
Panel A: Connections Variables	
Target Connections	Target Firm's board connections size. To calculate this variable, we sum the total number of connections of all the directors and CEO in a firm. Duplicate connections are removed. This variable includes all the connections that gained through work experience, social experience, and educational experience
Target Work Connections	Target Firm's board connections gained through work experience
Target Social Connections	Target Firm's board connections gained through social experience
Target Education Connections	Target Firm's board connections gained through educational experience
Target Connections of Experienced Directors	Target Firm's board connections that belong to experienced directors. Experienced directors are those with longer working experience on quoted boards than the sample mean
Target Connections of Less Experienced Directors	Target Firm's board connections that belong to less experienced directors. Less experienced directors are those with shorter working experience on quoted boards than the sample mean
Target Connections of Directors with Top School Education	Target Firm's board connections that belong to directors with top school education. Top institutes are those ranked within 100 by QS university rankings in the year 2015
Target Connections of Directors without Top School Education	Target Firm's board connections that belong to directors without top school education. Top institutes are those ranked within 100 by QS university rankings in the year 2015
Target Connections 2 Years Before the Merger Announcement	Target Firm's board connections size 2 years before the merger announcement
Panel B: Firm Characteristics	
Acquirer Size, Ln (Market Value of Equity)	Natural logarithm of the market value of acquirer equity 42 days before the merger announcement date. This variable is winsorized at 1st and 99st percentiles
Target size, Ln (Market Value of Equity)	Natural logarithm of the market value of target equity 42 days before the merger announcement date. This variable is winsorized at 1st and 99st percentiles
Acquirer Tobin's Q	Acquirer Tobin's Q. Calculated as (asset book value - equity book value + equity market value at fiscal yearend)/ (asset book value). This variable is winsorized at 1st and 99st percentiles
Target Tobin's Q	Target Tobin's Q. Calculated as (asset book value - equity book value + equity market value at fiscal yearend)/ (asset book value). This variable is winsorized at 1st and 99st percentiles
Acquirer ROA	Acquirer return on asset. Calculated as acquirer EBITDA divided by the acquirer book asset. This variable is winsorized at 1st and 99st percentiles
Target ROA	Target return on asset. Calculated as target EBITDA divided by the target book asset. This variable is winsorized at 1st and 99st percentiles

Panel C: Deal Process	
Acquirer Initiate Deal	This is a dummy variable equals to 1 if the deal is initiated by one of the potential acquirers. The initiator is not required to be the announced acquirer
Total Number of Acquirers Contacted	Total number of all the potential acquirers contacted in the whole M&A process
Acquirer-Target Connection	This is a dummy variable equals to 1 if the acquirer and target are connected
Use of Financial Advisor in Searching for Potential Acquirers	This is a dummy variable equals to 1 if the target employed financial advisors in the searching for potential acquirers
Announced Acquirer is Introduced by Financial Advisor	This is a dummy variable equals to 1 if the announced acquirer is contacted by target financial advisor
Panel D: Deal Performance	
Deal Premiums	Deal premium is defined as the offer price divided by the target stock prices 4 weeks before the merger announcement. This variable is collected from SDC database. This variable is winsorized at 1st and 99st percentiles
Target CAR (-1, 1)	Target 3-day cumulative abnormal return calculated using CRSP value-weighted market returns. This variable is winsorized at 1st and 99st percentiles
Target CAR(-21, 1)	Target 23-day cumulative abnormal return calculated using CRSP value-weighted market returns. This variable is winsorized at 1st and 99st percentiles
Acquirer CAR (-1, 1)	Acquirer 3-day cumulative abnormal return calculated using CRSP value-weighted market returns. This variable is winsorized at 1st and 99st percentiles
Acquirer CAR(-21, 1)	Acquirer 23-day cumulative abnormal return calculated using CRSP value-weighted market returns. This variable is winsorized at 1st and 99st percentiles
Combined CAR (-1, 1)	Target-acquirer combined 3-day cumulative abnormal return calculated using CRSP value-weighted market returns. This variable is winsorized at 1st and 99st percentiles
Combined CAR(-21, 1)	Target-acquirer combined 23-day cumulative abnormal return calculated using CRSP value-weighted market returns. This variable is winsorized at 1st and 99st percentiles
Target Advisor Fees	Financial advisor fees paid by the target per thousands of transaction value

Table 1 Summary Statistics: Board Connections

This table reports sample mean, median and standard deviation of board connections in a sample of 848 attempted M&A deals with publicly traded targets and bidders between January 1, 2002 and December 31, 2014. Detailed definitions of all variables are in Appendix B.

	(1) N	(2) Mean	(3) Median	(3) STD
Panel A: Connection Size				
Target Connections	848	2485.06	1782.00	2581.02
Target Work Connections	848	1420.21	957.00	1569.31
Target Social Connections	848	221.51	22.50	428.88
Target Education Connections	848	843.33	517.50	999.92
Target Connections of Experienced Directors	848	585.41	44.50	1046.01
Target Connections of Less Experienced Directors	848	1899.65	1358	2081.38
Target Connections of Directors with Top School Education	848	269.11	0.00	562.89
Target Connections of Directors without Top School Education	848	2215.95	1555.50	2306.37
Target Connections 2 Years Before the Merger Announcement	848	1845.19	1279	1971.30
Panel B: Standardized Connections				
Target Connections	848	0.14	-0.14	1.03
Target Work Connections	848	0.13	-0.17	1.03
Target Social Connections	848	0.07	-0.42	1.06
Target Education Connections	848	0.13	-0.21	1.05
Target Connections of Experienced Directors	848	0.09	-0.46	1.06
Target Connections of Less Experienced Directors	848	0.13	-0.14	1.04
Target Connections of Directors with Top School Education	848	0.07	-0.44	1.07
Target Connections of Directors without Top School Education	848	0.14	-0.15	1.03
Target Connections 2 Years Before the Merger Announcement	848	0.14	-0.15	1.03

Table 2 Summary Statistics: Firm and Deal Characteristics

This table reports sample mean, median and standard deviation of firm and deal characteristics. Panels A reports the summary statistics of firm control variables while Panel B and C report sample statistics of deal process and deal outcomes, respectively. Detailed definitions of all variables are in Appendix B.

	(1)	(2)	(3)	(3)
	N	Mean	Median	STD
Panel A: Firm Characteristics				
Acquirer Size, Ln (Market Value of Equity)	848	7.93	7.78	2.04
Target size, Ln (Market Value of Equity)	848	5.65	5.51	1.81
Acquirer Tobin's Q	848	1.80	1.40	1.09
Target Tobin's Q	848	1.71	1.29	1.13
Acquirer ROA	848	0.11	0.10	0.13
Target ROA	848	0.05	0.05	0.18
Panel B: Deal Process				
Acquirer Initiate Deal	848	0.51	1.00	0.50
Total Number of Acquirers Contacted	838	11.78	3.00	24.70
Acquirer-Target Connection	848	0.32	0.00	0.47
Use of Financial Advisor in Searching for Potential Acquirers	848	0.43	0.00	0.50
Announced Acquirer is Introduced by Financial Advisor	848	0.27	0.00	0.44
Panel C: Deal Outcomes				
Deal Premiums	843	37.69	30.72	35.30
Target CAR (-1, 1)	843	24.65	20.17	23.10
Target CAR(-21, 1)	843	27.73	24.18	25.99
Acquirer CAR (-1, 1)	843	-1.06	-0.66	6.33
Acquirer CAR(-21, 1)	843	-1.21	-1.15	10.13
Combined CAR (-1, 1)	843	2.87	1.47	6.94
Combined CAR(-21, 1)	843	2.90	2.03	9.84
Target Advisor Fees	598	10.02	9.49	7.38

Table 3 Board connections and merger likelihood

This table reports Logit regression estimates for the relation between board connections and probability of conducting M&A deals. The sample includes 48878 firm-year data points for which the board's connection size can be measured. The observed outcome variable Y of column (1) to (2) are indicators for merger probabilities. Specifically, the dependent variable Y of column (1) and column (2) equals to 1 if the firm has been a takeover target or acquirer in the specific year. Firm connections are calculated as the total number of all the connections of its directors. We remove duplicated connections and standardize the connections by the sample mean and sample standard deviation. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 12 Industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1) Target	(2) Acquirer
Connections	0.121**	0.104**
	(2.28)	(2.25)
Firm Size	-0.152***	0.247***
	(-3.85)	(6.11)
Tobin's Q	-0.117***	-0.049*
	(-6.26)	(-1.80)
ROA	0.302*	0.914***
	(1.87)	(2.99)
Constant	-0.334	-6.449***
	(-0.44)	(-8.38)
Year FE	Yes	Yes
Industry FE	Yes	Yes
N	48878	48878
pseudo R^2	0.0209	0.0735

Table 4 Board connections and merger process

This table reports estimates for the relation between board connections and M&A process. The sample includes 848 M&A deals which the merger process information can be acquired from SEC filings. The dependent variable of column (1) equals to 1 if the deal was initiated by the acquirer and 0 Otherwise. The dependent variable of column (2) is the total number of potential acquirers contacted in the merger negotiation period. The dependent variable of column (3) is an indicator of the acquirer-target connections ties. It equals to 1 if the acquirer and target are connected before the merger negotiation starts. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)
	Acquirer Initiate Deal	Total Number of Acquirers Contacted	Acquirer-Target Connection
Target Connections	0.268***	0.968*	0.143***
	(3.29)	(1.83)	(5.82)
Target Size	0.070***	-3.157***	0.017**
	(4.31)	(-4.71)	(2.44)
Target Tobin's Q	0.012	-1.085	0.010
	(0.17)	(-1.44)	(0.64)
Target ROA	1.288***	-1.642	-0.087
	(7.32)	(-0.22)	(-1.30)
Constant	0.732***	27.863***	0.169***
	(4.70)	(7.61)	(3.30)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	848	838	848
R^2/pseudo R^2	0.083	0.081	0.214

Table 5 Board Connections and the Use of Financial Advisors to Search for Potential Acquirers

This table reports estimates for the relation between board connections and the use of financial advisors. The sample includes 848 M&A deals which the merger process information can be acquired from SEC filings. Panel A of Table 5 reports the correlation between board connections and the use of financial advisor in the process of searching for potential acquirers. Panel B of Table 5 reports the deal outcomes depends on the use of financial advisors to contact announced acquirers. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

Panel A: Use of Financial Advisor to Search for Potential Acquirers

	(1)	(2)	(3)
	Use of Financial Advisor to Search for Potential Acquirers	Announced Acquirer was First Contacted by Financial Advisor	Announced Acquirer was First Contacted by Financial Advisor
	Full Sample		Deals That Use of Financial Advisor to Search for potential acquirers
Target Connections	-0.161*	-0.230***	-0.376**
	(-1.95)	(-4.39)	(-2.24)
Target Size	-0.225**	-0.183***	0.033
	(-2.47)	(-3.02)	(0.35)
Target Tobin's Q	-0.054	-0.233***	-0.162***
	(-1.21)	(-3.96)	(-3.72)
Target ROA	-0.044	-0.788**	-1.555**
	(-0.13)	(-2.41)	(-2.29)
Constant	0.227	-0.722*	-0.679*
	(0.33)	(-1.66)	(-1.74)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	848	848	363
R^2/pseudo R^2	0.066	0.094	0.121

Panel B: Deal Outcomes and the Use of Financial Advisor to First Contact Announced Acquirer

	Full Sample				Sub Sample		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Target Advisor Fee	Premium	Target CAR (-1, 1)	Target CAR (-21, 1)	Premium	Target CAR (-1, 1)	Target CAR (-21, 1)
Announced Acquirer was First Contacted by Financial Advisor	1.062***	-6.017**	-2.732**	-2.671***	-10.576***	-4.289***	-5.269***
	(7.77)	(-3.61)	(-2.60)	(-2.68)	(-3.03)	(-3.36)	(-7.12)
Top Advisor Dummy	3.298***						
	(2.92)						
Cash Deal		0.793	3.126***	2.939*	8.568*	3.803	4.094*
		(0.42)	(11.73)	(1.69)	(1.80)	(1.30)	(1.90)
Tender Offer		19.181**	2.822	4.317	18.630*	3.348	11.170*
		(2.53)	(0.46)	(0.52)	(1.79)	(0.68)	(1.94)

Acquirer Size	0.306	2.617**	3.039***	3.428***	2.211**	2.200**	2.809***
	(1.46)	(2.51)	(4.82)	(2.93)	(2.57)	(2.20)	(2.80)
Target Size	-2.759***	-8.197***	-6.130***	-7.184***	-8.861***	-6.134***	-7.790***
	(-5.23)	(-7.57)	(-12.20)	(-4.84)	(-4.67)	(-8.60)	(-5.74)
Acquirer Tobin's Q	-0.137	0.007	1.244*	0.817*	2.239**	2.554**	0.969
	(-0.62)	(0.01)	(1.74)	(1.77)	(2.27)	(2.21)	(1.04)
Target Tobin's Q	0.326	-2.546**	-1.093***	-2.065***	-1.550	-0.992	-1.519
	(1.13)	(-2.08)	(-6.66)	(-2.91)	(-0.62)	(-1.27)	(-1.16)
Acquirer ROA	1.057	29.132**	7.472**	16.356**	33.242***	20.613***	37.968***
	(0.47)	(2.27)	(2.20)	(2.09)	(5.53)	(3.68)	(2.74)
Target ROA	-7.123**	-5.203**	-1.568	-2.501	-17.488***	-6.555	-11.120***
	(-2.54)	(-2.16)	(-1.65)	(-0.47)	(-2.63)	(-1.12)	(-2.86)
Constant	19.707***	70.074***	30.353***	40.560***	60.772***	37.035***	43.714***
	(11.68)	(8.02)	(6.12)	(6.65)	(12.87)	(3.64)	(6.52)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	598	843	843	843	381	382	382
R^2/pseudo R^2	0.404	0.216	0.208	0.227	0.260	0.252	0.273

Table 6 Board Connections and Deal Outcomes

This table reports OLS estimates for the relation between board connections and the deal outcomes. The sample includes 843 M&A deals which the market reaction of target and acquirer can be measured. The dependent variables of column (1- 6) are the target, acquirer, and combined 3-day (-1, 1) and 23-day (-21, 1) cumulative abnormal returns, respectively. Column (7) represents the association between target board connections and deal premiums, which measure as the offer price divided by target stock price as of 4 weeks before the announcement date. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Target CAR		Acquirer CAR		Combined CAR		Premiums
	(-1, 1)	(-21, 1)	(-1, 1)	(-21, 1)	(-1, 1)	(-21, 1)	
Target Connections	1.977**	3.649***	0.162	0.324	0.528***	0.603**	4.238***
	(2.03)	(3.69)	(0.89)	(1.26)	(3.52)	(2.42)	(6.12)
Cash Deal	2.853***	2.588	1.820***	1.652**	0.441	0.282	0.872
	(6.64)	(1.43)	(3.72)	(2.08)	(0.83)	(0.58)	(0.51)
Tender Offer	2.569	3.636	0.890	2.605*	0.823	1.778	18.502**
	(0.40)	(0.41)	(1.16)	(1.89)	(0.57)	(0.71)	(2.18)
Acquirer Size	3.027***	3.433***	0.323***	0.109	-0.900***	-1.098***	2.618***
	(4.60)	(2.99)	(2.89)	(0.42)	(-4.42)	(-3.99)	(2.83)
Target Size	-6.633***	-8.237***	-0.524**	-0.530	0.213	0.237	-9.374***
	(-9.85)	(-5.05)	(-2.07)	(-0.82)	(0.65)	(0.39)	(-9.61)
Acquirer Tobin's Q	1.220*	0.713	-0.347	-0.487	0.887***	0.794***	-0.047
	(1.73)	(1.64)	(-1.15)	(-1.24)	(2.67)	(3.84)	(-0.07)
Target Tobin's Q	-0.936***	-1.833***	-0.529	-0.320	-1.252***	-1.124***	-1.985*
	(-10.17)	(-3.00)	(-1.63)	(-1.01)	(-6.17)	(-3.64)	(-1.91)
Acquirer ROA	7.656**	16.556**	6.782	15.142***	4.568	10.777***	30.281**
	(2.31)	(2.22)	(1.42)	(3.43)	(1.59)	(3.73)	(2.37)
Target ROA	-0.157	-0.188	-1.279	-6.758**	-0.282	-5.154***	-0.591
	(-0.12)	(-0.04)	(-0.99)	(-2.57)	(-0.43)	(-2.78)	(-0.10)
Constant	32.975***	46.338***	0.451	1.132	10.779***	11.987***	75.183***
	(6.97)	(5.79)	(0.37)	(0.39)	(13.32)	(4.22)	(8.52)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	843	843	843	843	843	843	843
R^2/pseudo R^2	0.210	0.238	0.129	0.087	0.168	0.130	0.219

Table 7 Types of Connections and Deal Initiation

This table reports estimates for the relationship between different types of board connections and M&A process. The sample includes 848 M&A deals which the merger process information can be acquired from SEC filings. The main independent variables of Panel A, Panel B, and Panel C are target firm's work connections, social connections, and education connections, respectively. The dependent variable of column (1) equals to 1 if the deal was initiated by the acquirer and 0 Otherwise. Column (2) reports the association of types of board connections and the total number of potential acquirers contacted in the merger negotiation period. The dependent variable of column (3) is an indicator of the acquirer-target connections ties. It equals to 1 if the acquirer and target are connected before the merger negotiation starts and 0 Otherwise. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1) Acquirer Initiated Deal	(2) Total Number of Acquirers Contacted	(3) Acquirer-Target Connection
	Panel A: Work Connections		
Target Work Connections	0.217***	1.573***	0.139***
	(3.42)	(3.61)	(5.85)
R^2/pseudo R^2	0.081	0.083	0.212
	Panel B: Social Connections		
Target Social Connections	0.196**	-0.359	0.029
	(1.97)	(-0.79)	(1.51)
R^2/pseudo R^2	0.081	0.080	0.159
	Panel C: Education Connections		
Target Education Connections	0.168**	0.155***	0.103***
	(2.04)	(3.48)	(5.13)
R^2/pseudo R^2	0.079	0.080	0.194
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	848	838	848

Table 8 Types of Board Connections and the Use of Financial Advisors to Search for Potential Acquirers

This table reports Logit regression estimates for the relationship between different types of board connections and financial advisor. The sample includes 848 M&A deals which the merger process information can be acquired from SEC filings. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)
	Use of Financial Advisor in Searching for Potential Acquirers	Announced Acquirer is Introduced by Financial Advisor	Announced Acquirer is Introduced by Financial Advisor
	Full Sample		Deals That Use of Financial Advisor in Searching process
Panel A: Work Connections			
Target Work Connections	-0.129	-0.120**	-0.144
	(-1.26)	(-2.22)	(-0.89)
R^2/pseudo R^2	0.065	0.091	0.114
Panel B: Social Connections			
Target Social Connections	-0.045	-0.074	-0.178*
	(-0.54)	(-1.31)	(-1.65)
R^2/pseudo R^2	0.064	0.097	0.128
Panel C: Education Connections			
Target Education Connections	-0.144*	-0.292***	-0.424**
	(-1.78)	(-5.12)	(-2.49)
R^2/pseudo R^2	0.066	0.1030	0.1484
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	848	848	363

Table 9 Types of Board Connections and Deal Outcomes

This table reports OLS estimates for the relation between types of board connections and the deal outcomes. The sample includes 843 M&A deals which the market reaction of target and acquirer can be measured. The dependent variables of column (1- 6) are the target, acquirer, and combined 3-day (-1, 1) and 23-day (-21, 1) cumulative abnormal returns, respectively. Column (7) represents the association between target board connections and deal premiums, which measure as the offer price divided by target stock price as of 4 weeks before the announcement date. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Target CAR		Acquirer CAR		Combined CAR		Premiums
	(-1, 1)	(-21, 1)	(-1, 1)	(-21, 1)	(-1, 1)	(-21, 1)	
Panel A: Work Connections							
Target Work Connections	1.531*	3.448***	0.081	0.238	0.531***	0.660***	0.126
	(1.66)	(2.77)	(0.80)	(0.71)	(13.39)	(4.37)	(0.35)
R^2/pseudo R^2	0.208	0.237	0.129	0.087	0.169	0.131	0.128
Panel B: Social Connections							
Target Social Connections	1.361*	1.401**	0.429***	0.507	0.600**	0.532	2.200**
	(1.73)	(2.20)	(2.70)	(1.54)	(2.37)	(1.56)	(2.40)
R^2/pseudo R^2	0.209	0.228	0.133	0.089	0.172	0.131	0.214
Panel C: Education Connections							
Target Education Connections	1.444***	2.423***	0.013	0.116	0.102	0.126	2.671*
	(2.61)	(3.03)	(0.06)	(0.38)	(0.47)	(0.35)	(1.94)
R^2/pseudo R^2	0.209	0.232	0.128	0.086	0.165	0.128	0.215
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	843	843	843	843	843	843	843

Table 10 Connections or Experience? Directors' Experience and Deal Process

This table reports estimates for the relation between connections of different directors' experience and M&A process. The sample includes 848 M&A deals which the merger process information can be acquired from SEC filings. The main independent variables of Panel A and Panel B are targets board connections of experienced and inexperienced directors. The dependent variable of column (1) equals to 1 if the deal was initiated by the acquirer and 0 Otherwise. Column (2) reports the association of types of board connections and the total number of potential acquirers contacted in the merger negotiation period. The dependent variable of column (3) is an indicator of the acquirer-target connections ties. It equals to 1 if the acquirer and target are connected before the merger negotiation starts and 0 Otherwise. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1) Acquirer Initiated Deal	(2) Total Number of Acquirers Contacted	(3) Acquirer-Target Connection
Panel A: Connections of Experienced Directors			
Target Connections of Experienced Directors	0.118**	0.216	0.063*
	(2.52)	(0.53)	(1.82)
R^2/pseudo R^2	0.083	0.096	0.187
Panel B: Connections of Less Experienced Directors			
Target Connections of Less Experienced Directors	0.227**	0.987	0.127***
	(2.34)	(1.53)	(9.30)
R^2/pseudo R^2	0.087	0.097	0.222
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	848	838	848

Table 11 Connections or Experience? Directors' Experience and the Use of Financial Advisors to Search for Potential Acquirers

This table reports Logit regression estimates for the relation between connections of different directors' experience and the use of financial advisor in the searching process. The sample includes 848 M&A deals which the merger process information can be acquired from SEC filings. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)
	Use of Financial Advisor in Searching for Potential Acquirers	Announced Acquirer is Introduced by Financial Advisor	Announced Acquirer is Introduced by Financial Advisor
	Full Sample		Deals That Use of Financial Advisor in Searching process
Panel A: Connections of Experienced Directors			
Target Connections of Experienced Directors	-0.023	-0.153**	-0.127
	(-0.25)	(-2.20)	(-1.44)
R^2/pseudo R^2	0.076	0.099	0.135
Panel B: Connections of Less Experienced Directors			
Target Connections of Less Experienced Directors	-0.168*	-0.166**	-0.353*
	(-1.82)	(-2.38)	(-1.70)
R^2/pseudo R^2	0.079	0.099	0.142
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	848	848	363

Table 12 Connections or Experience? Directors' Experience and Deal Outcomes

This table reports OLS estimates for the relation between connections of different directors' experience and the deal outcomes. The sample includes 843 M&A deals which the market reaction of target and acquirer can be measured. The dependent variables of column (1- 6) are the target, acquirer, and combined 3-day (-1, 1) and 23-day (-21, 1) cumulative abnormal returns, respectively. Column (7) represents the association between target board connections and deal premiums, which measure as the offer price divided by target stock price as of 4 weeks before the announcement date. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Target CAR		Acquirer CAR		Combined CAR		Premiums
	(-1, 1)	(-21, 1)	(-1, 1)	(-21, 1)	(-1, 1)	(-21, 1)	
Panel A: Connections of Experienced Directors							
Target Connections of Experienced Directors	1.626***	2.042***	0.225	0.586	0.398***	0.533**	2.949**
	(3.38)	(3.51)	(1.31)	(1.62)	(3.47)	(2.12)	(2.12)
R^2/pseudo R^2	0.210	0.231	0.129	0.089	0.168	0.130	0.216
Panel B: Connections of Less Experienced Directors							
Target Connections of Less Experienced Directors	1.281	2.950***	0.049	0.020	0.364**	0.368*	3.061***
	(1.42)	(4.04)	(0.20)	(0.06)	(2.29)	(1.65)	(3.75)
R^2/pseudo R^2	1.281	0.234	0.049	0.086	0.364**	0.129	0.215
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	843	843	843	843	843	843	843

Table 13 Connections or Skill? Directors' Education Backgrounds and Deal Process

This table reports estimates for the relation between connections of different directors' education background and M&A process. The sample includes 848 M&A deals which the merger process information can be acquired from SEC filings. The main independent variables of Panel A and Panel B are targets board connections of directors with or without education backgrounds. The dependent variable of column (1) equals to 1 if the deal was initiated by the acquirer and 0 Otherwise. Column (2) reports the association of types of board connections and the total number of potential acquirers contacted in the merger negotiation period. The dependent variable of column (3) is an indicator of the acquirer-target connections ties. It equals to 1 if the acquirer and target are connected before the merger negotiation starts and 0 Otherwise. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1) Acquirer Initiated Deal	(2) Total Number of Acquirers Contacted	(3) Acquirer-Target Connection
Panel A: Connections of Experienced Directors			
Connections of Directors with Top School Education	0.188***	-0.531	0.049**
	(2.79)	(-0.64)	(2.53)
R^2/pseudo R^2	0.080	0.080	0.166
Panel B: Connections of Less Experienced Directors			
Connections of Directors without Top School Education	0.225***	1.203***	0.135***
	(3.03)	(2.80)	(5.62)
R^2/pseudo R^2	0.0862	0.097	0.227
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	848	838	848

Table 14 Connections or Skill? Directors' Education Backgrounds and the Use of Financial Advisors to Search for Potential Acquirers

This table reports Logit regression estimates for the relation between connections of different directors' education background and the use of financial advisor in the searching process. The sample includes 848 M&A deals which the merger process information can be acquired from SEC filings. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)
	Use of Financial Advisor in Searching for Potential Acquirers	Announced Acquirer is Introduced by Financial Advisor	Announced Acquirer is Introduced by Financial Advisor
	Full Sample		Deals That Use of Financial Advisor in Searching process
Panel A: Connections of Experienced Directors			
Connections of Directors with Top School Education	-0.194***	-0.309***	-0.399***
	(-9.60)	(-2.72)	(-2.68)
R^2/pseudo R^2	0.081	0.102	0.143
Panel B: Connections of Less Experienced Directors			
Connections of Directors without Top School Education	-0.112	-0.167***	-0.287**
	(-1.36)	(-7.17)	(-2.01)
R^2/pseudo R^2	0.077	0.099	0.139
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	848	848	363

Table 15 Connections or Skill? Directors' Education Backgrounds and Deal Outcomes

This table reports OLS estimates for the relation between connections of directors with different educational backgrounds and the deal outcomes. The sample includes 843 M&A deals which the market reaction of target and acquirer can be measured. The dependent variables of column (1- 6) are the target, acquirer, and combined 3-day (-1, 1) and 23-day (-21, 1) cumulative abnormal returns, respectively. Column (7) represents the association between target board connections and deal premiums, which measure as the offer price divided by target stock price as of 4 weeks before the announcement date. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Target CAR		Acquirer CAR		Combined CAR		Premiums
	(-1, 1)	(-21, 1)	(-1, 1)	(-21, 1)	(-1, 1)	(-21, 1)	
Panel A: Connections of Experienced Directors							
Connections of Directors with Top School Education	1.294*	1.507*	0.344**	0.371***	0.422***	0.544***	0.809
	(1.90)	(1.65)	(2.17)	(3.15)	(3.30)	(5.13)	(0.76)
R^2/pseudo R^2	0.208	0.228	0.131	0.087	0.168	0.131	0.211
Panel B: Connections of Less Experienced Directors							
Connections of Directors without Top School Education	1.669*	3.365***	0.060	0.227	0.421***	0.460**	4.219***
	(1.79)	(3.71)	(0.33)	(0.97)	(3.44)	(2.44)	(3.78)
R^2/pseudo R^2	0.209	0.236	0.128	0.087	0.167	0.129	0.220
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	843	843	843	843	843	843	843

Table 16 Build-up Connections? Board Connections 2 Years Before the Merger Announcement

This table whether targets buildup their connections before the merger negotiation starts. The sample includes 848 M&A deals which the merger process information can be acquired from SEC filings. Panel A, B, and C report the correlation between target deal connections 2 years before the merger announcement and the deal process, use of financial advisor in the searching process, and deal outcomes, respectively. Detailed definitions of all variables are in Appendix B. All specifications include calendar year and Fama-French 5 industry fixed effects. Standard errors are adjusted for industry and year clustering. Corresponding t-statistics are in parentheses. ***, **, and * indicate statistical significance at 1%, 5%, and 10% level, respectively.

Panel A: Board Connection 2 Years Before the Merger Announcement and Merger Process

	(1)	(2)	(3)
	Acquirer Initiate Deal	Total Number of Acquirers Contacted	Acquirer-Target Connection
Target Connections 2 Years Before the Merger Announcement	0.165*	0.671	0.133***
	(1.65)	(1.62)	(5.70)
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	848	838	848
R^2/pseudo R^2	0.079	0.080	0.209

Panel B: Board Connections 2 Years Before the Merger Announcement and the Use of Financial Advisors to Search for Potential Acquirers

	(1)	(2)	(3)
	Use of Financial Advisor in Searching for Potential Acquirers	Announced Acquirer is Introduced by Financial Advisor	Announced Acquirer is Introduced by Financial Advisor
	Full Sample		Deals That Use of Financial Advisor in Searching
Target Connections 2 Years Before the Merger Announcement	-0.089	-0.123**	-0.232
	(-1.40)	(-2.03)	(-1.34)
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	838	848	363
R^2/pseudo R^2	0.064	0.091	0.117

Panel C: Board Connections 2 Year Before the Merger Announcement and Deal Outcomes

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Target		Acquirer		Combined		Premium
	(-1, 1)	(-21, 1)	(-1, 1)	(-21, 1)	(-1, 1)	(-21, 1)	
Target Connections 2 Years Before the Merger Announcement	1.958*	3.032**	0.359*	0.617**	0.699***	0.809***	2.970**
	(1.90)	(2.60)	(1.81)	(2.14)	(3.09)	(2.95)	(2.28)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	843	843	843	843	843	843	843
R^2/pseudo R^2	0.210	0.234	0.131	0.089	0.172	0.132	0.215