

The Effect of Director Expertise on Acquisition Performance

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Abstract

Corporate boards contribute to firm value by providing oversight and advice during major strategic decisions such as acquisitions. This study posits that boards' effectiveness in evaluating these strategic events can be enhanced by directors' prior experience in acquisitions. I find that outside directors' prior involvement in acquisitions is associated with a significant increase in acquisition announcement returns. Further analysis identifies two potential channels for this effect. First, firms with higher board acquisition expertise are better at target selection: they choose targets with higher synergies and are more likely to avoid large loss acquisitions. Second, firms with higher board acquisition expertise negotiate more effectively, by securing higher relative gains. Overall, the results demonstrate that outside directors with relevant experience can improve the quality of a firm's strategic decision-making.

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1. Introduction

Boards of directors play a crucial role in corporate control and decision-making. In a survey of directors by Demb and Neubauer (1992), seventy-five percent report involvement in setting strategy, while forty-five percent of directors indicate involvement in oversight of management. When asked how they spend their time in board meetings, directors report that they spend more time on discussion of acquisitions than on any other strategic issue (Korn/Ferry International, 1999). This is hardly surprising, given that acquisitions are among the most significant investment projects that firms undertake, often enabling firms to drastically increase their size in a matter of months. On average, acquisitions generate a zero abnormal return for acquiring shareholders at the announcement, however, some acquisitions severely destroy shareholder value.¹ Moeller, Schlingemann, and Stulz (2005) show that, in a few large loss deals in the late 1990s, acquiring shareholders lost a total of \$397 billion, or, on average, \$2.31 per dollar spent on acquisition. In addition to these large effects on shareholder value, acquisitions also have a great impact on the economy as a whole. Over the past two decades, the value of acquisitions announced by U.S. acquirers, on average, was about 10 percent of GDP and nine percent of total stock market capitalization.

Given the significance of acquisitions and the important role played by the boards in these strategic events, this paper examines whether outside directors' prior acquisition experience enhances board effectiveness and improves the quality of a firm's acquisitions. Through prior acquisitions, directors gain first-hand experience and accumulate valuable insights about negotiation strategies, legal and regulatory issues surrounding acquisitions, latest industry developments, synergies assessment, and post-acquisition integration of an acquired firm. In this paper, I conjecture that such experience will lead to better acquisition performance for firms on

¹ See e.g. survey by Betton, Eckbo, and Thornburn (2008).

which boards these experienced directors serve. Recent press releases on director appointments demonstrate that directors' acquisition experience is perceived as valuable: From IA Global Inc.'s President upon appointment of a director: "We are pleased to have Masazumi Ishii join the board of directors. He brings extensive experience in mergers and acquisitions..."; Rayonier Corp's chairman and CEO's commenting on the appointment of a director James H. Miller states: "His broad experience in acquisitions, energy markets and public policy will be a valuable addition to our board."² In a recent study that demonstrates the importance of acquisition experience, Harford and Schonlau (2012) find that CEOs and directors participating in acquisitions hold more directorships in the future.

This paper examines the relationship between board acquisition experience and subsequent firm acquisition performance. Board acquisition experience is measured using two metrics. First, I use a count of all acquisitions in other firms in which outside directors were previously involved. Second, I use the percent of outside directors with acquisition expertise.³ Using a broad sample of firms conducting acquisitions from 1996 to 2011, I find that firms with higher levels of boards' acquisition experience earn higher acquisition announcement returns. This effect is statistically and economically significant: a one standard deviation increase in the number of board's prior acquisitions increases average acquisition announcement returns by about 1.7 times and translates into a \$51 million gain in shareholder value based on average bidder market capitalization.

Having documented that higher board acquisition experience leads to higher acquisition announcement returns, this study seeks to identify the mechanisms through which board acquisition experience affects acquisition performance. First, I examine the role of outside

² See *PR Newswire*, 19 July 2006; *Business Wire*, 3 October, 2011.

³ The findings are robust to alternative specifications of the board acquisition experience measure, as further discussed in section 6.1.

directors' prior acquisition experience in target selection, and then I explore the role of experienced directors in deal negotiations.

Selecting an appropriate target is arguably one of the most important decisions acquiring firms make. Yet, as acknowledged by Bao and Edmans (2011), CEOs do not make acquisitions very often and typically lack relevant experience. Prior literature also shows that overconfident CEOs may make value-destroying acquisitions, because they overestimate potential synergies and overpay for the targets (Malmendier and Tate (2008), Roll (1986)). Having outside directors with acquisition experience can mitigate CEOs' inexperience and overconfidence. Experienced directors can assess synergies more accurately and are more likely to probe and challenge overoptimistic assumptions about growth and cost-savings proposed by management. Firms with higher levels of board experience, therefore, will be more selective in their acquisition decisions and will tend to choose targets with which the bidder has higher synergies. Experienced directors may also better recognize the long-term implications and potential risks of the proposed acquisition, thus helping managers avoid acquisitions which generate particularly negative market reactions or which result in extremely large losses for the shareholders.

To examine the effect of board experience in target selection, I first test whether firms with experienced directors are less likely to make problematic acquisitions. I find that firms with greater board acquisition experience are likely to avoid bids with especially negative market reactions, as well as bids generating extremely large dollar losses. Second, I test the relationship between board acquisition experience and value-weighted combined target and acquirer announcement returns, which represent the market's assessment of the total merger gains. I find that board acquisition experience is positively associated with the combined announcement returns, suggesting that experienced directors assist the CEO to select better targets. A one

standard deviation increase in the number of board's prior acquisitions increases the mean combined acquisition announcement return by 41%.

A second venue through which an experienced board can aid in better acquisition performance is at the negotiation stage. As suggested by studies in the negotiations literature, more experienced negotiators can earn higher profits and are more likely to achieve preferred outcomes than those less experienced. Experienced negotiators make lower offers, use less concessionary negotiation strategies, and are better able to anticipate other party's behavior.⁴ Thus, I propose that firms with experienced directors can negotiate acquisitions better by securing a larger fraction of the merger gains. The results, in fact, show that experienced directors are better negotiators: firms with higher board acquisition experience secure a larger share of takeover gains. A one standard deviation increase in the number of board's prior acquisitions increases the mean acquirer's relative gain by 17%.

The empirical evidence presented thus far demonstrates that the acquisition experience of outside directors enhances the quality of firms' strategic decisions. However, a potential concern of the analysis is that the positive association found between board experience and acquisition performance could be driven by non-random director-firm matching. For example, unobservable bidder traits could simultaneously determine the presence of directors with acquisition experience and higher acquisition announcement returns. I address this concern in two ways. First, I restrict my analysis to outside directors who have no acquisition experience prior to joining the board, but gain acquisition experience afterwards. Clearly, such directors are not recruited for their acquisition expertise – they garner such expertise after joining the board. Using this alternative measure of board acquisition experience, I also find a positive effect of

⁴ E.g. Thompson (1990a; 1990b), Bazerman, Maglioni, and Neale (1985), Neale and Northcraft (1986), Neale, Huber, and Northcraft (1987), Montgomery and Benedict (1989).

board expertise on acquisition performance. Second, I find that board acquisition expertise has a stronger effect on acquisition performance in firms with lower levels of CEO acquisition experience. This suggests that board expertise is especially valuable when it is needed most, providing further evidence that the results are not driven by selection.

This paper expands our knowledge about the role of outside directors in strategic decision-making and is related to the large corporate governance literature on the board of directors (see for example survey by Adams, Hermalin, and Weisbach (2010)). In particular, this study is related to the emerging literature focusing on how outside directors with specific expertise, such as knowledge of foreign operations, financial and industry expertise, can add firm value (e.g. Daniel, McConnell, and Naveen (2011), Xie, Davidson, and DaDalt (2003), Dass, Kini, Nanda, Onal, and Wang (2011), Faleye, Hoitash, and Hoitash (2012)). However, rather than focusing on overall firm performance, which depends on a wide array of organizational and environmental factors, this study examines a specific situation in which the role played by directors is especially likely to be consequential. In this respect, this paper complements a study by Huang, Jiang, Lie and Yang (2011), which finds that directors with investment bank experience affect positively a firm's acquisition experience. In this paper I show that directors, who transfer acquisition knowledge across companies, enable the acquiring firm to conduct better acquisitions and avoid problematic ones.

This paper is also related to studies examining the link between the negotiation process and merger outcomes (e.g. Ahern (2012), Hotchkiss, Qian, and Song (2005), Boone and Mulherin (2007), Aktas, de Bodt, and Roll (2010)). By examining the role of boards' prior experience in the negotiation process, I show that board experience enables the acquirer to capture a greater share of the acquisition gains.

The remainder of this paper is organized as follows: Section 2 provides descriptive statistics of the sample, describes measures of board acquisition experience and discusses construction of the explanatory variables. Section 3 presents empirical evidence on the relationship between boards' acquisition experience and acquisition performance. Section 4 addresses the non-random director-firm matching. Section 5 explores the channels through which boards' acquisition experience contribute to better acquisition performance, by focusing on target selection and deal negotiations. Section 6 discusses robustness tests and Section 7 concludes.

2. Data and Descriptive Statistics

2.1. Sample Description

The sample includes all acquisitions announced by Standard and Poor's (S&P) 1500 firms between January 1, 1996 and December 31, 2011.⁵ Acquisitions are identified using Thomson One's Mergers and Acquisitions database. The sample includes completed acquisitions of private, public and subsidiary targets and excludes buybacks, recapitalizations and exchange offers. Consistent with prior studies, I require that the acquirer obtains at least 51% of the target shares (e.g. Fuller, Netter, and Stegemoller (2002), Masulis, Wang, and Xie (2007), Moeller et al. (2005), Malmendier and Tate (2008)). Furthermore, to ensure that the board is likely to be involved in the acquisition decision, the sample includes only acquisitions that represent at least 1% of the acquirer's market value, measured at the fiscal year end before the announcement.⁶ Following previous studies on outside directors, I exclude financial firms (SIC codes 6000-6999) and utilities (SIC codes 4000-4999), as these firms tend to have different corporate governance structures than non-regulated firms (Engel, Hayes, and Wang (2010), Yermack (2004)).

⁵ The sample is restricted to S&P 1500 firms, as IRRC/Risk Metrics Directors database, which is used to obtain information about the board of directors, as described further, covers only S&P 1500 firms.

⁶ The results are robust, if a 5% cut-off is used instead.

To obtain information on board size, board independence, directors' age, tenure, and other directorships, I use the IRRC/Risk Metrics Directors database, which covers S&P 1500 firms. This database is also used to obtain data on CEO tenure, as well as the CEO's and other inside directors' other prior and current directorships. While the IRRC/Risk Metrics database starts coverage in 1996, it provides information about the start date for directors, even if the start date is before the year IRRC/Risk Metrics begins to cover the firm. To identify employment histories of outside and inside directors, I use the Execucomp database, which similarly covers S&P 1500 firms.

I require that bidders have available stock prices in the Center for Research in Security Prices (CRSP) database, accounting information in Compustat, and information on anti-takeover provisions in Risk Metrics Governance database. The data availability requirements lead to a final sample of 1,894 acquisitions completed by 890 firms.

2.2. Measures of Acquisition Experience

To capture acquisition experience of outside directors at the individual level, I use the cumulative number of prior acquisitions in which a director participated as a manager or a director of *another* firm in the past ten years.⁷ I focus on directors' experience in acquisitions made by *other* firms to isolate director experience from that of the CEO and the firm conducting the acquisition in question. In particular, for each director at a given firm and at a given year, I identify other S&P 1500 firms in which the director currently or previously served on the board. I then identify all prior acquisitions conducted by these firms during the director's tenure, using ThomsonOne's Mergers database. Similarly, using the Execucomp database, I identify firms that

⁷ For robustness, the analysis is repeated without time restriction on past acquisition experience. The results are unchanged. I also examined how discounting the acquisition experience influences my results, by applying linear, quadratic and square root discounting. The results remain very similar.

have currently or previously employed the director and obtain all prior acquisitions conducted by these firms during the director's employment from ThomsonOne's Mergers database.⁸

I use two measures to aggregate director-level experience. The first measure, entitled "*number of board's prior acquisitions*", sums the number of acquisitions in which outside directors previously participated as managers or directors of other firms. Panel A of Table 1 shows that the mean (median) number of board's prior acquisitions is 10.0 (7.0). The mean (median) number of prior acquisitions made by CEOs is 3.78 (3.00), and the mean (median) number of acquisitions made by firms is 2.76 (2.00).

Although cumulative count of boards prior acquisitions represents a simple and intuitive measure, it does not distinguish between boards in which acquisition experience is spread among several directors and boards in which acquisition experience is concentrated in just a few directors. For example, a board with five outside directors, who are each involved in two acquisitions will have the same number of prior acquisitions as a board with two directors, who are each involved in five prior acquisitions. For directors who have previously participated in acquisitions of other firms the median number of acquisitions is three. Thus, I construct a second measure, called "*percent of acquisition experts*", measured as the number of outside directors with more than three prior acquisitions divided by the total number of outside directors.⁹ As can be seen from Panel A of Table 1, the mean (median) percentage of acquisition experts is 13% (11%). Most of the acquisitions (87%) have at least one director with prior acquisition experience and slightly more than half of acquisitions (57%) have at least one acquisition expert.

⁸ Execucomp database provides information on the compensation of up to nine top executives of S&P1500 firms, as well as the year in which a person has joined the firm.

⁹ For robustness, I also use five acquisitions (i.e. top quartile number of acquisitions for directors with acquisition experience), the results remain very similar.

2.3. Control Variables

Prior literature has shown that bidder characteristics and deal types affect acquisition announcement returns ((e.g. Fuller et al. (2002), Moeller, Schlingemann, and Stulz (2004), Asquith, Bruner, and Mullins (1983), Jensen (1986), Lang, Stulz, and Walkling (1991), Shleifer and Vishny (2003)). Thus, to control for bidder characteristics, I include firm size, M/B, leverage, free cash flow, and stock run-up. The controls for deal characteristics include method of payment, target's public status, relative deal size, industry relatedness of the acquisition, deal attitude, and whether the bidder and the target are both from high tech industries.

Prior literature has also shown that firms with higher anti-takeover provisions experience lower acquisition announcement returns (Masulis et al. (2007)). Thus, I include the E-index created by Bebchuk, Cohen, and Ferrell (2009), which is a more parsimonious version of the anti-takeover index created by Gompers, Ishii, and Metrick (2003). This index is based on the six provisions considered to be most important from a legal standpoint and which are shown to have a stronger association with firm value and bidder returns, than the G-index (Bebchuk et al. (2009), Masulis et al. (2007)).¹⁰ To further control for differences in the corporate governance of acquiring firms, I include board size, CEO tenure, CEO/Chairman duality, and board independence, as these variables have been shown to influence how effectively a board functions (e.g. Yermack (1996) Weisbach (1988), Brickley, Coles, and Terry (1994), Byrd and Hickman (1992)).

To capture the CEO's and other inside directors' acquisition experience, I include the number of prior acquisitions in which the CEO and inside directors were involved as a current or previous manager or a director. Additionally, to capture the firm's acquisition experience, I

¹⁰ The index is constructed as a sum of six anti-takeover provisions. Higher values of the index indicate more anti-takeover provisions (Bebchuk et al. (2009))

include the number of acquisitions completed by the firm.¹¹ Similar to the measures of board acquisition experience, I restrict the CEO's, other insiders' and a firm's acquisition experience to the past ten years.¹²

Another factor that can potentially influence acquisition performance is managerial quality, as high quality CEOs can make more profitable acquisitions (Morck, Shleifer, and Vishny (1990)). Thus, I follow Morck et al. (1990) and proxy for bidder CEO quality by industry-adjusted operating performance over the three years prior to the acquisition announcement.

Furthermore, it is possible that directors with acquisition experience are also better qualified more generally, due to their professional experience or personal characteristics. To isolate the effects of directors' acquisition experience from the general director quality, I include median director age, median director tenure, and the percent of busy directors (i.e. directors serving on three or more boards). To account for potentially unobserved variation, all regressions include year and industry dummies, where industries are classified using the 12 industry classification scheme of Fama and French.¹³ Detailed definitions of all variables are in the Appendix.

Panel B of Table 1 presents summary statistics of the control variables. As Risk Metrics covers S&P 1500 firms, sample firms are relatively large. For example, the mean (median) book value of total assets is \$5.40 (\$1.61) billion, while the mean (median) market value of equity is

¹¹ As the number of CEOs' prior acquisitions is highly correlated with the number of a firm's prior acquisitions, as a robustness check, I orthogonalize firm experience with respect to CEO experience, and use the orthogonalized variable instead. The results remain very similar.

¹² The results are similar if no restriction is placed on the CEO's, other insiders' and a firm's experience.

¹³ The results are robust to alternative definitions of industry, such as 48 Fama French industries (1997). The results are reported based on 12 Fama French industries, due to a significant loss of observations in logistic regressions, if 48 Fama-French industry classification is used instead. The Fama-French industries are defined on French's website, (http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html).

\$8.49 (\$2.04) billion. The mean (median) firm has a market-to-book ratio of 2.17 (1.72), and leverage of 12% (9%).

Turning to deal characteristics, about a third of the acquisitions represent those of public targets. The mean (median) relative deal size for the overall sample is 13% (6%). Forty-eight percent of deals are all-cash, 29% are diversifying acquisitions, and 23% of are high-tech. Both firm and deal characteristics are comparable with those reported by Masulis et al. (2007), who examine a sample of acquisitions made by S&P 1500 firms over the period 1990 to 2003.

Panel C of Table 1 reports that acquisitions generated positive announcement returns on average. The mean (median) five-day acquisitions announcement return is 0.35% (0.40%), which is significantly different from zero at a 5% (1%) level. The mean (median) combined value-weighted bidder-target acquisitions announcement return is 1.69% (1.23%), and both are significantly different from zero at a 1% level. For each dollar of the combined pre-merger market equity of the acquirer and target, the acquirers gain about 4.28 cents less than targets on average. This is slightly higher than 3.5 cents reported by Ahern (2012), who analyzes a sample of public targets over the period from 1980 to 2008.

Panel A of Table 2 provides a correlation matrix that shows that both measures of acquisition experience are highly correlated with firm size. For example, the correlation between the cumulative number of a board's acquisitions and firm size is 0.36. However, at least part of this correlation is mechanical and can be attributed to the variable construction, as bigger firms also have larger boards, and thus a greater cumulative number of acquisitions. The second measure, the percent of acquisition experts, is similarly significantly correlated with size, albeit to a lesser degree – the correlation between percent of acquisition experts and size is 0.20. The positive correlation by the measures of acquisition experience and size can be explained by the

fact that directors with greater experience would be asked to serve on more boards and also on the boards of more prestigious firms (Fama and Jensen (1983)). In fact, as can be seen in Panel B of Table 2, both measures of acquisition experience are positively correlated with board busyness and median director age, further confirming the need to control for the board's general experience in the regression analysis.¹⁴

3. Board acquisition experience and acquisition performance

3.1. Short-run announcement returns

Boards of directors play an important role in monitoring and advising during acquisitions (e.g. Byrd and Hickman (1992), Subrahmanyam, Rangan, and Rosenstein (1997), Schonlau and Singh (2009), Schmidt (2009)). In fact, directors have a fiduciary duty to review acquisitions put forth by management or financial advisors to assure that shareholders' interests are served (Koontz (1967), Weiss (1991)). Directors have to decide whether the proposed acquisition will strengthen a company's operations, market position, and growth potential, and how it will impact the financial standing of the firm. The board must also review analyses prepared by management and financial advisors about how much value a deal will add and verify key assumptions inherent in the analysis.

By taking part in acquisitions, directors develop a better understanding of the acquisition context and accumulate knowledge about the acquisition process that can be very important to other firms. Prior involvement in acquisitions, as argued by McDonald, Westphal, and Graebner (2008), enhances directors' ability to cope with challenges that are endemic to acquisition

¹⁴ The correlation coefficients on the director level between acquisition experience and director's busyness and age are similar to those reported in Panel B of Table 2. Specifically, the coefficients of correlation between the number of a director's prior acquisitions and a busy director dummy and director age are 0.36 and 0.15, respectively. Similarly, the correlation between an acquisition expert dummy and a busy director dummy and director age are 0.29 and 0.12, respectively.

decisions, e.g. information overload, time constraints and the ability to recognize the long-term strategic implications of the potential acquisitions. Similarly, Kroll, Walters, and Wright (2008) argue that directors with acquisition expertise not only can be better monitors, but can also be more useful advisors to top managers. In fact, Harford and Schonlau (2012) find that directors with prior acquisition experience are invited to serve on more boards in the future, demonstrating that firms clearly value directors' prior acquisition experience. As boards can make better decisions when directors have relatively high levels of relevant knowledge and expertise (e.g. see Kerr and Tindale (2004)), I propose that the quality of boards' decision-making is improved with directors' acquisition experience.

To test the relationship between board acquisition experience and acquisition performance, I rely on acquisition announcement returns, which reflect investors' responses to the acquisition, based on present expectations about the future cash flows of a combined firm. In particular, the dependent variable in Table 3 is the acquirer's cumulative abnormal returns (CARs) computed over the five-day window $[-2, 2]$ ¹⁵ using a standard market adjusted return model.¹⁶ The independent variables of interest are the measures of board acquisition experience. In Model 1 board acquisition experience is measured as the cumulative number of the outside directors' prior acquisitions ("number of board's prior acquisitions"). As can be seen from the table, the coefficient on the number of board's prior acquisitions is positive and significant at 1% level, indicating that outside directors' acquisition experience is associated with better short-run acquisition performance. The relationship is economically significant, a one standard deviation

¹⁵ Prior literature has shown that using five-day window captures most of the announcement effect, without introducing substantial noise (Fuller et al. (2002), Masulis et al. (2007)). For robustness I re-estimate the tests using three-day window. The results remain very similar.

¹⁶ Abnormal return is calculated as the difference between a firm's return and the value-weighted market (CRSP) index return. Brown and Warner (1980) show that for short-window event studies, weighting the market return by the firm's stock beta does not significantly improve the power of the test, given the estimation error for beta and the small size of the daily expected return on the market index.

increase in the number of board's prior acquisitions increases average acquirer announcement returns by about 1.7 times, and translates into a \$51 million gain in shareholder value (based on the average bidder market capitalization). In Model 2, acquisition experience is measured as the percent of outside directors with more than three prior acquisitions ("percent of acquisition experts"). This measure, similarly, is positive and significant at 5%. A one standard deviation increase in the percent of acquisition experts increases acquirer announcement returns by 0.51%, which is large relative to the mean five day announcement return of 0.36%. Hence, the effect of outside directors' acquisition experience on acquirer abnormal announcement returns is both economically and statistically significant. This result shows that the experience brought by outside directors can enhance the quality of a firm's strategic decisions.¹⁷ It complements existing studies on the role of CEOs' industry experience, investment bankers, as well as director connections on acquisition performance (e.g. Custodio and Metzger (2010), Bao and Edmands (2011), Huang et al.(2011), Schonlau and Singh (2009)).

The results reported in Table 3 suggest that boards' prior experience in acquisition increases acquisition announcement returns, however, an interesting question is whether the performance of the past acquisitions, in which directors were involved, matters.¹⁸ While directors can learn from both low and high performing acquisitions (Beckman and Hauschild (2002), and the experienced gained even from value-destroying acquisitions can be valuable (Harford and Schonlau (2012)), it is possible that directors who were involved in more successful acquisitions make more constructive contributions to a firm's acquisition decisions. To test this proposition, in Model 3 of Table 3, I calculate the total cumulative abnormal returns from the announcements

¹⁷ This result is also consistent with research in strategic management that suggests that organizations, as well as individuals, learn from internal and external acquisition experiences (e.g. Meyer-Doyle (2012), Hauschild (1993, 1994), McDonald et al. (2008), Kroll et al. (2008)).

¹⁸ At the individual director level, most of the directors have participated in acquisitions that generated both positive and negative announcement returns.

of directors' all prior acquisitions. As can be seen from the table, the coefficient on the total cumulative abnormal returns is positive and significant at 5% level, suggesting that directors which were involved in better performing acquisitions can provide particularly beneficial advice and monitor the CEO better.

Similar to Masulis et al. (2007) and Harford et al. (2011), I find that CEO quality has a significant and positive association with acquisition announcement returns, supporting the idea that managerial quality can affect acquisition outcomes. Additionally, I find that the CEO's and other inside directors' acquisition experience increases acquisition announcement returns. Other control variables are consistent with prior literature. I find that larger firms, firms combining the positions of the CEO and chairman of the board, and firms with larger boards experience lower acquisition announcement returns. Acquisitions of public targets are negatively associated with the announcement returns, while acquisitions of subsidiaries and cash deals generate positive announcement returns (e.g. Masulis et al. (2007), Moeller et al. (2004) Yermack (1996)). Finally, longer tenure of directors and CEOs is associated positively with announcement returns, reflecting the value of the experience with the firm.

3.2. Acquisition Experts vs. Non-Experts

Earlier results suggest that board acquisition experience is positively associated with acquisition announcement returns. A valuable question, however, is how much acquisition expertise do directors need. In this sub-section, I examine whether the amount of acquisition experience is important in explaining acquisition announcement returns. In particular, I ask whether is it better to have several directors who have limited acquisition experience or a few directors who have a large amount of acquisition experience? Having multiple directors with acquisition experience can encourage more directors to participate in discussions about the

acquisition, as the knowledge developed through prior experiences enables individuals to participate more actively in acquisition decisions (Kroll et al. (2008)). Having more directors participating in the acquisition discussion and heterogeneity of directors' experiences might lead to better decision-making. On the other hand, as argued by Haleblan and Finkelstein (1999) because acquisitions are complex events, it might require multiple acquisitions to accumulate acquisition-specific expertise to draw correct generalizations and inferences. Furthermore, since directors with relevant prior experience have more influence on the board (Westphal and Milton (2000)), directors with greater accumulated acquisition knowledge are likely to have greater impact on acquisition decisions.

As the median number of acquisitions for directors who previously participated in acquisitions is three, I introduce two new measures. The first measure counts the number of acquisitions performed by directors who have been involved in more than three prior acquisitions ("acquisition experts") and the second one sums the number of acquisitions performed by directors who were involved in three or fewer acquisitions ("non-experts").¹⁹ Model 1 in Table 4 shows that the experience of acquisition experts is positively associated with acquisition announcement returns, while the experience of non-experts is not. Similarly, in Model 2, I create two variables: the fraction of outside directors with more than three acquisitions ("percent of expert directors") and the fraction of outside directors with three or fewer prior acquisitions ("percent of non-expert directors"). In this specification, I continue to find that the coefficient on the percent of expert directors is significant, while the coefficient on the percent on non-expert directors is not. These results suggest that the positive association between board acquisition experience and announcement returns is mainly driven by the experience of acquisition experts.

¹⁹ For robustness, I also use five (i.e. top quartile number of acquisitions) acquisitions as a cut-off, the results remain very similar.

A natural question that follows is how many experts does the board need? Is having one acquisition expert enough? To examine these questions in Model 3, I introduce four dummy variables that equal 1 if the board has one, two, three or more acquisition experts accordingly. As can be seen from Table 4, firms that have only one acquisition expert do not experience an increase in the acquisition announcement returns, however, firms with two or more acquisition experts on the boards make acquisitions that are perceived more favorably by the market. This result suggests that boards with at least two acquisition experts can exert enough influence over acquisition decisions.

4. Non-random firm-director matching

Prior literature has emphasized the endogenous nature of board composition (Hermalin and Weisbach (1998, 2003); Adams et al. (2010)). A plausible scenario could be that firms with good unobserved acquisition opportunities might recruit directors with more acquisition experience as a part of their optimal board structure. Such selection on unobservables would result in omitted factors that simultaneously determine the presence of directors with acquisition experience and better acquisition performance. I address this selection issue by focusing on directors who are less likely to be recruited because of acquisition experience and analyzing subsamples in which board experience is more relevant.

4.1. Directors without Prior Acquisition Experience

One way to address a possibility that firms with better acquisition opportunities attract more experienced directors is to identify directors who did not have any acquisition experience prior to joining the board, but who participated in acquisitions of other firms after joining the

board. Obviously, this type of directors is not recruited because of the acquisition experience, yet these directors accumulate acquisition experience in other firms after they joined the board. Thus, I construct an alternative measure of board experience, which counts only acquisitions in which directors with no experience prior to joining the firm participated after joining the firm. For example a director A joins Firm A in year t and has no prior acquisition experience. However, in year $t+1$ director A participates in an acquisition made by Firm B, where the director serves as a manager or a director. When Firm A makes an acquisition in year $t+2$, this measure will only include acquisition experience of director A at firm B. Panel A of Table 5 re-estimates the relationship between acquisition announcement returns and board acquisition experience, using this alternative measure. As can be seen from Panel A of Table 5 when I use this restricted measure of board experience I continue to find that board acquisition experience is associated with better announcement returns, providing another piece of evidence that the results are not driven by selection.

4.2. CEO advising needs

Another way to evaluate whether selection is driving the results, is to analyze subsamples in which board experience would be more valuable. I conjecture that the experience of the board of directors in making acquisitions would be especially helpful for firms in which CEOs have lower levels of acquisition experience. However, if the results are driven by selection, there should be no difference in the effect of board acquisition experience across the subsamples. Thus, I analyze the effect of board experience on acquisition announcement returns separately for subsamples of firms with high and low CEO acquisition experience. Firms are considered as having a CEO with high acquisition experience if the number of acquisitions in

which CEO participated as a manager or a director is above the median; otherwise firms are considered to have low levels of CEO acquisition experience. Results are presented in Panel B of Table 5. The coefficient on board acquisition expertise is positive and significant in both subsamples; however, it is significant only in the sub-sample of firms in which the CEO has lower levels of acquisitions experience (Models 1 and 2). Using a Chow test, I confirm that the coefficients are different across the two sub-samples at 10% level (p-value of 0.09 for the difference between Models 1 and 3 and p-value of 0.08 for Models 2 and 4). This result suggests that board experience serves as a complement to the CEO's skill set and that board acquisition experience matters more where it is more valuable.

In sum, the results in this section provide evidence that the positive association between board acquisition experience and acquisition performance is not driven by the endogenous director-firm matching and board acquisition experience significantly enhances the ability of a company to create value in an acquisition. The next section examines why firms with higher board acquisition experience have higher acquisition announcement returns.

5. Why do firms with higher levels of board acquisition experience have higher returns?

This section analyzes potential channels through which boards' acquisition experience can influence a firm's acquisition performance. First, it focuses on target selection, by examining how outside directors' acquisition experience is related to the likelihood of engaging in an especially bad deal and the total value created by the merger. Second, it explores the role of outside directors' experience in deal negotiations, by focusing on the relative share of merger gains.

5.1. Target Selection

5.1.1. Probability of undertaking a bad quality deal

Moeller et al. (2005) document that in the merger wave of the late 1990s, acquiring-firm shareholders experienced significant wealth destruction due to a small number of acquisitions with extremely large losses. They find that shareholders of these firms lost an average of \$2.31 per dollar spent on the acquisition. As argued by Malmendier and Tate (2008), CEO overconfidence can explain some of these losses, since overconfident CEOs overestimate their ability to generate returns and undertake value-destroying mergers. As further suggested by Malmendier and Tate (2008), CEO overconfidence can be counterbalanced by a more active involvement of independent directors in acquisition assessment and selection. As experienced directors are more likely to be actively involved in acquisitions (Kroll et al. (2008)) they are more likely to mitigate CEOs' overconfidence. Experienced directors can better recognize long-term implications and assess risks that acquisitions might entail, as they possess more extensive and more efficiently organized knowledge about acquisitions (McDonald et al. (2008)). Given how big potential losses from acquisitions can be, the ability of the experienced directors to prevent managers from engaging in bad quality deals can be very valuable.

I test whether board experience reduces the probability of undertaking value-destroying acquisitions using two measures of bid quality. First, I create a bad bid dummy, which is equal to one if acquisition announcement returns are in the lowest quintile. The results of a logistic regression, in which the dependent variable is the bad quality dummy, are presented in the Models 1 and 2 of Table 6.

As Table 6 shows, firms with higher board acquisition experience are less likely to make an acquisition that generates low announcement returns, indicating that experienced directors are

more effective in restraining CEOs from making low quality acquisitions. Control variables suggest that more powerful CEOs, as indicated by CEO/Chairman duality, are more likely to pursue acquisitions with lower announcement returns. Similarly, acquisitions of targets which are typically harder to integrate, such as relatively larger targets and public targets, increase the probability of generating lower announcement returns. The number of firm's prior acquisitions also increases the odds of making an acquisition with lower announcement returns, which suggests that firms exhaust a pool of potential value-increasing acquisition after a while. On the other hand, acquisition of subsidiaries and acquisitions made by CEOs with more experience with the firm are less likely to generate lower acquisition returns.

As a second measure of deal quality, I follow Moeller et al. (2005) to define a bad deal as the one in which shareholders have lost more than one billion in constant 2011 dollars (i.e. large loss deals). Dollar returns are calculated as the market value of publicly traded equity at the close of event day +1 minus the market value on the close of event day -2. Models 3 and 4 in Table 6 present a logistic regression, in which the dependent variable equals one if it is a large loss deal. In Model 3, the coefficient on the number of boards' prior acquisitions variable has an insignificantly negative effect on the probability of making a large loss deal. However, the coefficient on the percent of acquisition experts variable in Model 4 is negative and statistically significant at 5% level. This result suggests that acquisition experts have a superior ability to identify and avoid large loss deals, thus preventing shareholders from huge wealth losses. Consistent with Moeller et al. (2005), I find that several firm characteristics can explain the incidence of large loss deals. For example, firms that engage in large loss deals are big, have higher free cash flows, stock price run-up and market-to-book ratios, but lower leverage. Not surprisingly, large loss deals represent relatively larger transactions.

5.1.2. Synergies

Earlier results suggest that experienced directors can prevent managers from engaging in clearly bad acquisitions. Another possible explanation of why firms with higher board acquisition experience may earn higher acquisition announcement returns is because more experienced directors are able to select targets with a better strategic fit. While acquisitions are typically initiated by management or financial advisors, directors who are actively involved in the acquisition market may be better positioned to propose prospective high-surplus targets, reducing potentially large search costs (Bruner (2004)). More importantly, as directors learn from their prior experiences and mistakes, they can evaluate acquisitions proposed by the management or investment banks more critically and challenge overoptimistic assumptions about potential synergies. Due to their prior experience directors can be more selective in their acquisition decisions and choose targets with which the bidder has higher synergies, leading to greater shareholder wealth.

A commonly used metric to measure synergies created by the merger is combined value-weighted abnormal announcement returns of the bidder and the target (Harford, Humphery-Jenner, and Powell (2011), Lin, Officer, and Zou (2011)). Thus, I next examine the relationship between board acquisition experience and combined value-weighted abnormal announcement returns. Following prior literature to combine the announcement returns of the acquirer and target I use weights based on their market values fifty trading days prior to the acquisition announcement. Results are presented in Table 7.²⁰ Since this table analyzes announcement returns of both bidder and target, the regressions include additional controls for the target firm's characteristics.

²⁰ Re-estimating earlier results using a subsample of public targets, I confirm that positive association between board acquisition experience measures and acquisition announcement returns holds in this subsample as well.

I find that higher levels of board acquisition experience have a positive effect on combined acquisition announcement returns, suggesting that acquirers with higher board experience tend to select targets with which the acquiring firms have higher synergies. The results are also economically significant. A one-standard-deviation increase in the number of board's prior acquisitions (percent of acquisition experts) is associated with 0.70% (0.61%) higher combined acquisition announcement returns, which represents 41% (36%) of the mean combined acquisition announcement return. Consistent with the disciplining role of leverage, higher leverage is positively associated with merger synergies. Additionally, firms with higher median director age, longer CEO tenure and cash deals are positively associated with merger synergies, while larger boards and boards with more powerful CEOs, as measured by CEO/Chairman duality, are significantly negatively related to combined acquisition announcement returns.

Overall, the results in this section suggest that outside directors with prior acquisition experience can encourage a more thoughtful target selection, by choosing targets with which the acquirer has higher synergies and by avoiding particularly bad deals. Next, I turn to examine the role of outside directors' experience in deal negotiations.

5.2. Deal negotiations

Board acquisition experience might not only assist directors to better evaluate potential targets but it may also enable directors to negotiate better terms. Prior literature suggests that experienced negotiators better anticipate the other party's behavior, they make higher initial demands, and they are able to claim more resources than less experienced negotiators (e.g. Thomson (1990a; 1990b); Neale et al. (1986)). Therefore, directors who have previously

participated in deal negotiations can assist the CEO to achieve more favorable negotiated outcomes. This section examines whether firms with higher levels of board acquisition expertise can secure a larger share of merger gains.

To measure the relative gains from acquisition, I compute bidder's abnormal dollar returns by first estimating abnormal percentage returns in a five-day window surrounding the merger announcement, and then multiplying the abnormal percentage returns by the bidder's market value of equity on the prior day (Malatesta (1983) and Moeller et al. (2004)).²¹ Summing the daily dollar returns over the five-day window generates cumulative abnormal dollar returns.²² Target's abnormal dollar returns are computed in a similar manner. As the announcement returns can be negative, I construct a measure of relative gains to the acquirer, as the difference in the dollar announcement returns of the acquirer and target, scaled by the sum of the acquirer's and target's market cap 50 trading days before the merger announcement, similar to Ahern (2012).

Table 8 presents the results in which the dependent variable is the relative gain to the acquirer, as defined above. Similar to prior tables, Models 1 and 2 report results for the two measures of board acquisition experience: cumulative number of board's prior acquisitions and the percent of acquisition experts. Because this table analyzes the gains to the acquirer relative to the target, the regressions also include additional controls for target characteristics. The results in Models 1 and 2 indicate that the acquirer's gains relative to the target increase with acquirer's board's acquisition experience, suggesting that directors with greater experience are able to secure a larger fraction of merger synergies relative to firms with lower levels of board

²¹ I use dollar-based returns, since percentage returns are not very useful in evaluating proportional wealth gains because they do not account for firm size. Since acquiring firms are generally much bigger than targets, the same percentage return changes the wealth of the acquiring-firm shareholders more than it does the wealth of the target-firm shareholders. Instead, as argued by Malatesta (1983), dollar-denominated abnormal wealth gains are better to measure takeover related gains.

²² As a robustness check, I estimate dollar returns over a wider window (i.e. from five days before to five days after the acquisition announcement date), to capture the bulk of the target pre-offer runup, which typically occurs within ten days of the bid. The results remain the same.

acquisition expertise. Specifically, the point estimates imply that one standard deviation increase in the number of board's prior acquisitions (the fraction of acquisition experts) increases the share of relative gain to the acquirer to 5.03% (4.98%), a 17% (16%) increase over the mean of 4.28%. These results suggest that firms with more experienced directors enjoy a bargaining advantage in takeovers and receive larger relative gains. Control variables highlight the importance of size in negotiations: larger targets reduce the acquirer's share of the gains, while larger acquirers secure a greater portion of the gains. In addition, higher target leverage reduces the target's bargaining power and is significantly related to larger acquirer gains.

Overall, the results suggest that boards with prior acquisition experience are able to positively affect firm acquisition experience by selecting better targets and conducting more effective negotiations.

6. Robustness

6.1. Board Acquisition Experience Measures

To ensure that the results presented earlier are not driven by the way the measures used in the main analysis are defined, I examine the robustness of the findings to alternative definitions of board acquisition experience. As board acquisition experience measures are shown to be positively and significantly correlated with firm size, I first construct measures which purge the possible effect of size. In particular, as an alternative measure I use the residuals from the cross-sectional regressions that include firm size as an exogenous variable. Specifically, I regress the number of board's prior acquisitions on log size and squared log size to account for any potential non-linearity. To neutralize the size effect from the second measure of acquisition experience, percent of acquisition experts, which is bounded by zero and one, I follow the methodology used

by Nagel (2005). Specifically, I first perform a logit transformation of the variable and then regress the transformed variable on the log of firm size and squared log of firm size.²³ I use the residuals from these regressions as my new explanatory variables. Untabulated results show that all findings are robust to these measures. Alternatively to account for size, I scale the number of boards' prior acquisitions by firm size and obtain very similar results.

Additionally, I construct an average number of acquisitions per person, by dividing the number of boards' prior acquisitions by board size and confirm that the results remain robust.

6.2. Serial acquirers

Some acquirers make multiple acquisitions during the sample period. Measuring acquirer announcement returns for these serial acquirers can be difficult because pre-announcement market prices may already reflect the value expected from repeated acquisitions. At the same time because repeat acquirers possess a lot of organizational acquisition experience themselves, they might have less need for boards acquisition expertise. Thus serial acquirers might have lower demand for board acquisition experience and also lower announcement returns. To address this concern I re-estimate all regressions by including a dummy for serial acquirers. In particular, I define an acquirer as serial, if a firm made at least three acquisitions during the sample period.²⁴ In addition, I repeat the analysis on the sample that excludes serial acquirers. Both approaches produce results similar to those reported in earlier tables.

²³ The logit transformation is performed as follows: $\text{Logit}(\text{percent of acquisitions experts}) = \log(\text{percent of acquisitions experts} / (1 - \text{percent of acquisitions experts}))$. To accommodate cases in which percent of acquisition experts is zero I replace zeros with 0.0001.

²⁴ Alternatively, I define an acquirer as serial, if a firm made at least two or at least five acquisitions during the sample period.

6.3. Investment banks

Prior literature has found that investment banks affect acquisition returns (Bao and Edmans (2011); Kale, Kini, and Ryan (2003)). Similarly, Huang et al. (2011) suggest that when investment bankers serve on the boards of directors firms experience better acquisition performance. If firms that attract better investment banks (and/or investment bank directors), also attract directors with acquisition experience, then the positive relationship between board experience and announcement returns could be contributed to the investment banks (and/or investment bank directors). I address this concern in two ways. First, I construct a measure of investment bank reputation and include it in the regressions. Specifically, I start by determining the total annual dollar volume of all corporate takeovers in the Thomson One database and compute each investment banks' annual share for each year from 1993-2010. For each acquisition I create a dummy variable, which is equal to one for the ten (twenty-five) biggest investment banks, as measured by their market share in the three years prior to the acquisition. Using this measure of investment bank effect, the coefficients on board acquisition expertise remain positive and significant. Second, I re-estimate all regressions by including investment bank fixed effects and obtain very similar results.

7. Conclusion

Directors have a fiduciary duty to participate in all major firm decisions and are viewed as important managerial monitors and advisors. Thus, prior literature has examined how various board characteristics affect board effectiveness and firm performance. This paper extends this literature by examining how directors' prior acquisition experience enhances firm value via acquisitions. It argues that firms with higher levels of board acquisition expertise will make better acquisition decisions.

Indeed, I find that board acquisition experience has a positive and significant association with acquisition announcement returns, suggesting that prior experience enables directors to better monitor and advise the CEO. The economic magnitude of the effect of board experience on acquisition announcement returns is substantial. Further analysis identifies two channels through which board acquisition experience facilitates better acquisition performance. First, more experienced directors are able to select targets with which acquiring firms have higher synergies and prevent managers from engaging in deals that destroy shareholder value. Second, boards' prior acquisition experience enables firms to negotiate deals more effectively, as measured by the increased relative share of acquirers' gains.

This paper demonstrates that directors' knowledge and prior experience is valuable and has a significant impact on firm acquisition performance. While this article has exclusively focused on the board experience of the acquiring firms, a natural question concerns the role of the targets' board acquisition experience. For instance, how does a target's board experience affect its bargaining power? Is experienced board more likely to encourage competitive bidding when selling the firm? How does a target's board experience interact with an acquirer's board experience? Another question that this paper suggests is related to the effect of board experience on CEOs' risk-aversion. Risk-averse CEOs may avoid undertaking risky, yet potentially profitable acquisitions, as CEOs face considerable risk of being fired following an unsuccessful bid. Does the board experience reduce the estimated risk of an acquisition, by helping the CEO evaluate potential synergies more accurately? Are experienced directors less likely to fire the CEO following a bad bid? These questions are left for future research.

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Table 1. Summary Statistics

Panel A presents summary statistics of board, firm and CEO acquisition experience. Outside directors are considered acquisition experts if they participated in more than three acquisitions before. Panel B presents summary statistics of firm and deal characteristics. Panel C presents summary statistics of acquisition performance. Based on a sample of 1,894 acquisitions over the period 1996-2011. Variable definitions are in the Appendix.

	Mean	St. Dev.	25 th percentile	Median	75 th percentile
Panel A: Acquisition Experience					
Number of outside directors' prior acquisitions	10.03	9.97	2.00	7.00	15.00
Percent of acquisition experts	0.13	0.15	0.00	0.11	0.20
Number of inside directors' prior acquisitions	3.78	3.25	1.00	3.00	5.00
Number of firm's prior acquisitions	2.76	2.76	1.00	2.00	4.00
Panel B: Control Variables					
<i>Firm characteristics (in billions)</i>					
Firm size	5.40	13.40	0.71	1.61	4.29
MV equity	8.49	23.22	0.80	2.04	5.60
MV assets	11.56	29.46	1.24	2.94	8.24
M/B	2.17	1.81	1.36	1.72	2.37
Leverage	0.12	0.11	0.03	0.09	0.18
Free cash flows	0.05	0.09	0.03	0.06	0.09
Stock price run-up	0.11	0.66	-0.20	0.02	0.28
CEO tenure	6.84	7.02	2.00	5.00	9.00
Board independence	0.69	0.17	0.57	0.71	0.82
Board size	9.30	2.33	8.00	9.00	11.00
E-index	2.41	1.29	1.00	2.00	3.00
% of busy directors	0.07	0.12	0.00	0.00	0.11
Median director age	61.09	5.07	58.00	61.50	64.50
Median director tenure	6.90	4.00	4.00	6.00	9.00
<i>Deal characteristics (in billions)</i>					
Public target	0.31	0.46	0.00	0.00	1.00
Subsidiary target	0.33	0.47	0.00	0.00	1.00
Private target	0.36	0.48	0.00	0.00	1.00
Relative deal size	0.13	0.19	0.02	0.06	0.14
Cash deal	0.48	0.50	0.00	0.00	1.00
Diversifying acquisition	0.29	0.45	0.00	0.00	1.00
High-tech deal	0.23	0.42	0.00	0.00	0.00
Hostile deal	0.01	0.08	0.00	0.00	0.00
Panel C: Acquisition Performance					
Acquirer five-day CAR in %	0.35	7.23	-2.95	0.40	3.82
Combined value-weighted acquirer and target five-day CAR in %	1.69	7.23	-1.97	1.23	5.32
Acquirer's relative gain in %	-4.28	7.64	-8.67	-3.32	0.08

Table 2. Correlation Matrix

Panel A: Correlation of Board Experience Measures with Firm Characteristics

This panel presents correlations matrix of measures of outside directors' acquisition experience with firm characteristics. Outside directors are considered acquisition experts if they participated in more than three acquisitions before. Based on a sample of 1,894 acquisitions over the period 1996-2011. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively.

	Number of outside directors' prior acquisitions	Percent of acquisition experts	Firm size	M/B	Free cash flows	Leverage	Stock price run-up
Number of outside directors' prior acquisitions	1	0.81***	0.36***	0.06***	0.13***	-0.08***	-0.02
Percent of acquisition experts		1	0.20***	0.11***	0.12***	-0.12***	0.04*
Firm size			1	-0.01	0.06**	-0.02	-0.01
M/B				1	0.12***	-0.34***	0.50***
Free cash flows					1	-0.27***	0.01
Leverage						1	-0.14***
Stock price run-up							1

Panel B: Correlation of Board Experience Measures with Board Characteristics

This panel presents correlations matrix of measures of outside directors' acquisition experience with board characteristics. Outside directors are considered acquisition experts if they participated in more than three acquisitions before. Based on a sample of 1,894 acquisitions over the period 1996-2011. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively.

	Number of outside directors' prior acquisitions	Percent of acquisition experts	Percent of busy directors	Median director age	Median director tenure
Number of outside directors' prior acquisitions	1	0.81***	0.47***	0.14***	-0.02
Percent of acquisition experts		1	0.39***	0.10***	-0.03
Percent of busy directors			1	0.07***	-0.02
Median director age				1	0.30***
Median director tenure					1

Table 3. Short-run Acquisition Performance – Baseline Analysis

This table tests the relationship between board acquisition experience and acquisition announcement returns. It presents estimates from ordinary least squares estimation, based on a sample of 1,894 acquisitions over the period 1996-2011. The dependent variable in Models 1 and 2 is the acquirer's five-day cumulative abnormal return in percentage points. In Model 1 outside directors' acquisition experience is measured as a cumulative number of other firms' acquisitions in which outside directors were involved as a manager or as a director. In Model 2 outside directors' acquisition experience is measured by the percent of acquisition experts, i.e. outside directors with more than three prior acquisitions. In Model 3 outside directors' acquisition experience is measured as the sum of all prior five-day acquisition announcement returns, in which outside directors were previously involved as a manager or as a director. All regressions include a constant. In parentheses are standard errors adjusted for heteroskedasticity (White, 1980) and clustered by firm. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively. All regressions control for year and industry fixed effects, whose coefficients are suppressed.

	<i>Model 1:</i> CAR [-2:2]	<i>Model 2:</i> CAR [-2:2]	<i>Model 3:</i> CAR [-2:2]
<i>Outside Directors Acquisition Experience:</i>			
Number of outside directors' prior acquisitions	0.060*** (0.023)		
Percent of acquisition experts		3.496** (1.492)	
Cumulative CAR [-2:2] of prior acquisitions			1.802** (0.736)
<i>Inside Directors and Firm Acquisition Experience:</i>			
Number of inside directors' prior acquisitions	0.119** (0.048)	0.117** (0.048)	0.129*** (0.049)
Managerial quality	0.010*** (0.003)	0.010*** (0.003)	0.010*** (0.003)
Number of prior acquisitions by firm	-0.155** (0.077)	-0.161** (0.077)	-0.183** (0.077)
<i>Firm and Deal Characteristics:</i>			
Ln (Firm Size)	-0.405** (0.176)	-0.391** (0.172)	-0.275 (0.169)
M/B	-0.056 (0.276)	-0.054 (0.275)	-0.043 (0.278)
Free cash flows	-0.572 (2.273)	-0.644 (2.285)	-0.493 (2.299)
Leverage	2.131 (2.037)	2.178 (2.042)	1.690 (2.075)
Stock price run-up	-0.338 (0.412)	-0.368 (0.412)	-0.394 (0.420)
High-tech deal	-0.102 (0.538)	-0.120 (0.537)	-0.030 (0.540)

Relative deal size	-1.408 (1.431)	-1.392 (1.432)	-1.460 (1.435)
Diversifying acquisition	-0.379 (0.345)	-0.369 (0.345)	-0.349 (0.344)
Hostile deal	0.556 (1.310)	0.556 (1.324)	0.601 (1.345)
Public target	-1.255** (0.498)	-1.238** (0.497)	-1.288*** (0.493)
Subsidiary target	0.993** (0.391)	0.991** (0.389)	0.929** (0.386)
Cash deal	0.901*** (0.348)	0.887** (0.348)	0.904*** (0.348)
Stock deal	-0.831 (0.770)	-0.859 (0.771)	-0.903 (0.777)
<i>Governance and General Board Experience:</i>			
Ln (CEO tenure)	0.527** (0.215)	0.515** (0.216)	0.484** (0.218)
CEO/Chairman duality	-0.677* (0.386)	-0.676* (0.386)	-0.633 (0.387)
Board independence	-0.198 (1.248)	0.037 (1.251)	0.126 (1.249)
Board size	-0.220** (0.090)	-0.147* (0.088)	-0.169* (0.088)
E-index	-0.060 (0.149)	-0.073 (0.150)	-0.064 (0.149)
% of busy directors	-1.527 (1.817)	-1.247 (1.788)	0.435 (1.633)
Median director tenure	0.087* (0.047)	0.088* (0.047)	0.084* (0.046)
Median director age	0.029 (0.041)	0.026 (0.041)	0.031 (0.040)
Industry and year fixed effects	Yes	Yes	Yes
Observations	1,894	1,894	1,894
Adjusted R ²	0.09	0.09	0.09

Table 4. Short-run Acquisition Performance - Acquisition Experts vs. Non-Experts

This table tests the relationship between the experience of acquisition experts (i.e. directors with more than three prior acquisitions) and acquisition announcement returns. It presents estimates from ordinary least squares estimation, based on a sample of 1,894 acquisitions over the period 1996-2011. The dependent variable in Models 1 and 2 is the acquirer's five-day cumulative abnormal return in percentage points. In Model 1, number of outside directors' prior acquisitions by experts (non-experts) is the cumulative number of other firms' acquisition in which outside directors with more than three (three or fewer) prior acquisitions were involved. In Model 2 the percent of acquisition experts (non-experts), is the percent of outside directors who have participated in more than three (three or fewer) acquisitions before. All regressions include a constant. In parentheses are standard errors adjusted for heteroskedasticity (White, 1980) and clustered by firm. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively. All regressions control for year and industry fixed effects, whose coefficients are suppressed.

	<i>Model 1:</i> CAR [-2:2]	<i>Model 2:</i> CAR [-2:2]	<i>Model 2:</i> CAR [-2:2]
<i>Outside Directors Acquisition Experience:</i>			
Number of outside directors' prior acquisitions by experts (directors with >3 prior acquisitions)	0.064*** (0.024)		
Number of outside directors' prior acquisitions by non-experts (directors with 1-3 prior acquisitions)	0.017 (0.059)		
Percent of experts (directors with >3 prior acquisitions)		3.340** (1.510)	
Percent of non-experts (directors with 1-3 prior acquisitions)		-0.805 (0.977)	
Number of experts=1			0.603 (0.434)
Number of experts=2			0.778* (0.468)
Number of experts=3			1.759** (0.732)
Number of experts>3			2.712*** (1.014)
<i>Inside Directors and Firm Acquisition Experience:</i>			
Number of inside directors' prior acquisitions	0.119** (0.048)	0.119** (0.048)	0.120** (0.048)
Managerial quality	0.010*** (0.003)	0.011*** (0.003)	0.010*** (0.003)
Number of prior acquisitions by firm	-0.156** (0.077)	-0.163** (0.077)	-0.156** (0.077)
<i>Firm and Deal Characteristics:</i>			
Ln (Firm Size)	-0.394** (0.176)	-0.370** (0.174)	-0.411** (0.174)
M/B	-0.054 (0.277)	-0.048 (0.276)	-0.058 (0.276)

Free cash flows	-0.583 (2.274)	-0.669 (2.278)	-0.713 (2.277)
Leverage	2.149 (2.040)	2.159 (2.041)	2.133 (2.052)
Stock price run-up	-0.349 (0.414)	-0.387 (0.417)	-0.343 (0.412)
High-tech deal	-0.103 (0.538)	-0.127 (0.537)	-0.108 (0.531)
Relative deal size	-1.408 (1.433)	-1.392 (1.434)	-1.383 (1.429)
Diversifying acquisition	-0.372 (0.345)	-0.356 (0.347)	-0.382 (0.345)
Hostile deal	0.548 (1.307)	0.562 (1.325)	0.456 (1.263)
Public target	-1.257** (0.498)	-1.240** (0.497)	-1.257** (0.498)
Subsidiary target	0.995** (0.391)	0.985** (0.389)	0.966** (0.391)
Cash deal	0.906*** (0.348)	0.899*** (0.347)	0.878** (0.349)
Stock deal	-0.826 (0.770)	-0.848 (0.771)	-0.880 (0.777)
<i>Governance and General Board Experience:</i>			
Ln (CEO tenure)	0.518** (0.216)	0.503** (0.218)	0.530** (0.216)
CEO/Chairman duality	-0.666* (0.387)	-0.666* (0.387)	-0.704* (0.386)
Board independence	-0.066 (1.279)	0.188 (1.271)	-0.127 (1.265)
Board size	-0.205** (0.092)	-0.145 (0.088)	-0.205** (0.087)
E-index	-0.056 (0.149)	-0.071 (0.150)	-0.075 (0.151)
% of busy directors	-1.409 (1.808)	-0.976 (1.816)	-1.573 (1.792)
Median director tenure	0.087* (0.047)	0.087* (0.047)	0.086* (0.047)
Median director age	0.027 (0.041)	0.025 (0.041)	0.027 (0.041)
Industry and year fixed effects	Yes	Yes	Yes
Observations	1,894	1,894	1,894
Adjusted R ²	0.09	0.09	0.09

Table 5. Short-run Acquisition Performance, Endogenous Director-Firm Matching

Panel A: Experience Gained After Joining the Board

This panel tests the relationship between acquisition experience directors gain in other firms after joining the board and acquisition announcement returns. It presents estimates from ordinary least squares estimation, based on a sample of 1,894 acquisitions over the period 1996-2011. The dependent variable is the acquirer's five-day cumulative abnormal return in percentage points. Number of outside directors' prior acquisitions – Directors with no experience prior to joining the board represents a cumulative count of other firms' acquisitions, in which outside directors, who had no experience prior to joining the board, participated after joining the board. Number of outside directors' prior acquisitions – Directors with experience prior to joining the board represents a cumulative count of other firms' acquisitions, in which outside directors, who had acquisition experience prior to joining the board, participated before or after joining the board. All regressions include a constant. In parentheses are standard errors adjusted for heteroskedasticity (White, 1980) and clustered by firm. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively. All regressions control for year and industry fixed effects, whose coefficients are suppressed. Variable definitions are in the Appendix.

	<i>Model 1:</i> CAR [-2:2]
<i>Outside Directors Acquisition Experience:</i>	
Number of outside directors' prior acquisitions – Directors with no experience prior to joining the board	0.060** (0.028)
Number of outside directors' prior acquisitions – Directors with experience prior to joining the board	0.064** (0.031)
<i>Inside Directors and Firm Acquisition Experience:</i>	
Number of inside directors' prior acquisitions	0.121** (0.049)
Managerial quality	0.010*** (0.003)
Number of prior acquisitions by firm	-0.161** (0.078)
<i>Firm and Deal Characteristics:</i>	
Ln (Firm Size)	-0.423** (0.180)
M/B	-0.198 (0.295)
Free cash flows	-0.447 (2.274)
Leverage	2.201 (2.013)
Stock price run-up	0.135 (0.181)

High-tech deal	-0.094 (0.537)
Relative deal size	-1.525 (1.442)
Diversifying acquisition	-0.391 (0.347)
Hostile deal	0.647 (1.312)
Public target	-1.222** (0.498)
Subsidiary target	1.008*** (0.389)
Cash deal	0.922*** (0.348)
Stock deal	-0.853 (0.766)
<i>Governance and General Board Experience:</i>	
Ln (CEO tenure)	0.523** (0.216)
CEO/Chairman duality	-0.157 (1.255)
Board independence	-0.681* (0.387)
Board size	-0.216** (0.091)
E-index	-0.063 (0.149)
% of busy directors	-1.402 (1.823)
Median director tenure	0.093* (0.049)
Median director age	0.028 (0.040)
Industry and year fixed effects	Yes
Observations	1,894
Adjusted R ²	0.09

Table 5. Short-run Acquisition Performance, Endogenous Director-Firm Matching (continued)

Panel B: Board Acquisition Experience and CEO Advising Needs

This panel tests whether the impact of board acquisition experience on acquisition announcement returns varies with CEO advising needs. It presents estimates from ordinary least squares estimation, based on a sample of 1,894 acquisitions over the period 1996-2011. The dependent variable is the acquirer's five-day cumulative abnormal return in percentage points. Models 1 and 2 include acquisitions made by firms in which the number of the CEO's prior acquisitions is at or below the median. Models 3 and 4 include acquisitions made by firms in which the number of the CEO's prior acquisitions is above the median. In Models 1 and 3 outside directors' acquisition experience is measured as a cumulative number of other firms' acquisitions in which outside directors were involved as a manager or as a director. In Models 2 and 4 outside directors' acquisition experience is measured by the percent of acquisition experts, i.e. outside directors with more than three prior acquisitions. All regressions include a constant. In parentheses are standard errors adjusted for heteroskedasticity (White, 1980) and clustered by firm. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively. All regressions control for year and industry fixed effects, whose coefficients are suppressed. Variable definitions are in the Appendix.

	<i>Low CEO Experience</i>		<i>High CEO Experience</i>	
	<i>Model 1:</i> CAR [-2:2]	<i>Model 2:</i> CAR [-2:2]	<i>Model 3:</i> CAR [-2:2]	<i>Model 4:</i> CAR [-2:2]
<i>Outside Directors Acquisition Experience:</i>				
Number of outside directors' prior acquisitions	0.094*** (0.032)		0.022 (0.030)	
Percent of acquisition experts		5.814*** (1.911)		1.050 (2.188)
<i>Inside Directors and Firm Acquisition Experience:</i>				
Number of inside directors' prior acquisitions	0.113 (0.080)	0.102 (0.062)	0.102 (0.078)	0.102 (0.063)
Managerial quality	0.115** (0.054)	0.007*** (0.001)	0.113** (0.055)	0.007*** (0.001)
Number of prior acquisitions by firm	-0.197 (0.146)	-0.086 (0.093)	-0.198 (0.145)	-0.091 (0.093)
<i>Firm and Deal Characteristics:</i>				
Ln (Firm Size)	-0.496** (0.234)	-0.248 (0.242)	-0.480** (0.229)	-0.237 (0.243)
M/B	-0.466 (0.297)	0.438** (0.182)	-0.468 (0.299)	0.442** (0.182)
Free cash flows	-2.830 (2.383)	3.576 (3.810)	-2.862 (2.424)	3.496 (3.814)
Leverage	1.800 (2.430)	2.329 (2.752)	1.901 (2.436)	2.300 (2.756)

Stock price run-up	-0.231 (0.571)	-0.773 (0.577)	-0.231 (0.568)	-0.795 (0.581)
High-tech deal	0.145 (0.728)	-0.487 (0.867)	0.115 (0.729)	-0.493 (0.863)
Relative deal size	-0.195 (2.133)	-2.971 (1.830)	-0.144 (2.132)	-2.971 (1.828)
Diversifying acquisition	-0.403 (0.438)	-0.384 (0.532)	-0.391 (0.439)	-0.383 (0.531)
Hostile deal	0.942 (1.733)	0.324 (2.007)	1.011 (1.734)	0.308 (2.016)
Public target	-1.078* (0.626)	-1.721** (0.764)	-1.039* (0.621)	-1.717** (0.764)
Subsidiary target	0.978* (0.514)	1.156** (0.573)	0.988* (0.512)	1.151** (0.573)
Cash deal	0.844* (0.456)	0.781 (0.567)	0.815* (0.455)	0.775 (0.566)
Stock deal	-0.545 (0.924)	-1.375 (1.281)	-0.573 (0.925)	-1.397 (1.285)
<i>Governance and General Board Experience:</i>				
Ln (CEO tenure)	0.490* (0.280)	0.855** (0.385)	0.481* (0.280)	0.843** (0.385)
CEO/Chairman duality	-1.104** (0.513)	0.164 (0.641)	-1.125** (0.512)	0.171 (0.642)
Board independence	-0.235 (1.691)	-0.975 (1.876)	0.171 (1.712)	-0.902 (1.867)
Board size	-0.308** (0.124)	-0.095 (0.133)	-0.198 (0.122)	-0.068 (0.132)
E-index	-0.148 (0.188)	0.069 (0.218)	-0.172 (0.189)	0.062 (0.217)
% of busy directors	-0.653 (2.138)	-3.275 (2.928)	-0.253 (2.126)	-3.105 (2.807)
Median director tenure	0.162*** (0.061)	-0.059 (0.082)	0.166*** (0.061)	-0.059 (0.082)
Median director age	0.012 (0.050)	0.053 (0.075)	0.010 (0.050)	0.052 (0.077)
Industry and year fixed effects	Yes	Yes	Yes	Yes
Observations	1,132	1,132	762	762
Adjusted R ²	0.11	0.14	0.11	0.14

Table 6. Predicting a Bad Quality Deal

This table tests the relationship between board acquisition experience and probability of making a bad quality deal. It presents estimates from ordinary least squares estimation, based on a sample of 1,894 acquisitions over the period 1996-2011. The dependent variable in Models 1 and 2 is a dummy variable that equals one, if acquirer's acquisition announcement returns are in the lowest quintile, and zero otherwise. The dependent variable in Models 3 and 4 is a dummy variable that equals one, if it is a large loss deal, and zero otherwise. Large loss deal is a deal in which acquiring shareholders lost more than one billion dollars. Dollar returns are calculated by subtracting the market value of publicly traded equity at the close of event day +1 minus the market value on the close of event day -2. In Models 1 and 3 outside directors' acquisition experience is measured as a cumulative number of other firms' acquisitions in which outside directors were involved as a manager or as a director. In Models 2 and 4 outside directors' acquisition experience is measured by the percent of acquisition experts, i.e. outside directors with more than three prior acquisitions. All regressions include a constant. In parentheses are standard errors adjusted for heteroskedasticity (White, 1980) and clustered by firm. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively. All regressions control for year and industry fixed effects, whose coefficients are suppressed.

	<i>Dummy variable=1 if an acquisition is</i>			
	lowest CAR [-2:2] quintile	lowest CAR [-2:2] quintile	large loss deal	large loss deal
	<i>Model 1:</i>	<i>Model 2:</i>	<i>Model 3:</i>	<i>Model 4:</i>
<i>Outside Directors Acquisition Experience:</i>				
Number of outside directors' prior acquisitions	-0.021** (0.009)		-0.006 (0.021)	
Percent of acquisition experts		-0.884* (0.531)		-3.476** (1.751)
<i>Inside Directors and Firm Acquisition Experience:</i>				
Number of inside directors' prior acquisitions	-0.018 (0.020)	-0.017 (0.020)	0.046 (0.041)	0.053 (0.038)
Managerial quality	-0.015 (0.011)	-0.015 (0.011)	-0.005 (0.017)	-0.007 (0.017)
Number of prior acquisitions by firm	0.065** (0.028)	0.067** (0.028)	-0.073 (0.060)	-0.089 (0.061)
<i>Firm and Deal Characteristics:</i>				
Ln (Firm Size)	0.066 (0.068)	0.058 (0.068)	1.198*** (0.184)	1.237*** (0.188)
M/B	-0.008 (0.053)	-0.010 (0.052)	0.093 (0.065)	0.109* (0.059)
Free cash flows	0.244 (0.823)	0.255 (0.826)	5.458* (2.814)	5.770** (2.841)
Leverage	0.137 (0.710)	0.144 (0.712)	-8.293** (3.661)	-8.122** (3.601)
Stock price run-up	0.114 (0.102)	0.123 (0.102)	0.360** (0.180)	0.380** (0.180)

High-tech deal	0.061 (0.197)	0.065 (0.196)	-0.340 (0.428)	-0.397 (0.434)
Relative deal size	1.638*** (0.354)	1.632*** (0.353)	1.736*** (0.517)	1.715*** (0.522)
Diversifying acquisition	-0.030 (0.143)	-0.035 (0.142)	-0.342 (0.317)	-0.376 (0.330)
Hostile deal	-1.005 (0.750)	-1.004 (0.744)	0.255 (0.792)	0.428 (0.797)
Public target	0.545*** (0.171)	0.537*** (0.170)	0.759 (0.524)	0.813 (0.516)
Subsidiary target	-0.301* (0.168)	-0.299* (0.168)	-0.090 (0.579)	-0.153 (0.574)
Cash deal	-0.226* (0.137)	-0.223 (0.137)	-0.398 (0.392)	-0.407 (0.394)
Stock deal	0.278 (0.210)	0.282 (0.210)	0.386 (0.454)	0.324 (0.458)
<i>Governance and General Board Experience:</i>				
Ln (CEO tenure)	-0.308*** (0.082)	-0.303*** (0.083)	-0.016 (0.401)	0.036 (0.401)
CEO/Chairman duality	0.245* (0.140)	0.243* (0.141)	0.064 (0.455)	-0.033 (0.455)
Board independence	0.097 (0.405)	0.007 (0.401)	0.005 (1.212)	-0.291 (1.194)
Board size	-0.020 (0.035)	-0.045 (0.034)	0.091 (0.082)	0.069 (0.079)
E-index	-0.007 (0.051)	-0.004 (0.051)	-0.031 (0.128)	-0.018 (0.128)
% of busy directors	0.170 (0.731)	-0.017 (0.710)	0.621 (1.424)	1.321 (1.338)
Median director tenure	-0.023 (0.018)	-0.023 (0.018)	-0.007 (0.057)	-0.005 (0.057)
Median director age	-0.005 (0.015)	-0.004 (0.015)	-0.019 (0.055)	-0.017 (0.056)
Industry and year fixed effects	Yes	Yes	Yes	Yes
Observations	1,894	1,894	1,846	1,846
Pseudo R ²	0.12	0.12	0.46	0.46

Table 7. Synergies in Acquisitions of Public Targets

This table tests the relationship between board acquisition experience and combined acquisition announcement returns. It presents estimates from ordinary least squares estimation, based on a sample of 450 acquisitions of public targets over the period 1996-2011. The dependent variable in Models 1 and 2 is the combined acquirer and target five-day cumulative abnormal return in percentage points. The acquisition announcement returns are combined, using weights based on the market values fifty trading days prior to the acquisition announcement. In Model 1 outside directors' acquisition experience is measured as a cumulative number of other firms' acquisitions in which outside directors were involved as a manager or as a director. In Model 2 outside directors' acquisition experience is measured by the percent of acquisition experts, i.e. outside directors with more than three prior acquisitions. All regressions include a constant. In parentheses are standard errors adjusted for heteroskedasticity (White, 1980) and clustered by firm. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively. All regressions control for year and industry fixed effects, whose coefficients are suppressed.

	<i>Model 1:</i>	<i>Model 2:</i>
	Combined CAR [-2:2]	Combined CAR [-2:2]
<i>Outside Directors Acquisition Experience:</i>		
Number of outside directors' prior acquisitions	0.070* (0.042)	
Percent of acquisition experts		4.183* (2.304)
<i>Inside Directors and Firm Acquisition Experience:</i>		
Number of inside directors' prior acquisitions	0.141 (0.114)	0.136 (0.114)
Managerial quality	0.107 (0.137)	0.102 (0.140)
Number of prior acquisitions by firm	-0.238 (0.156)	-0.241 (0.156)
<i>Firm and Deal Characteristics:</i>		
Ln (Firm Size)	0.153 (0.466)	-0.103 (0.455)
Ln (Firm Size) - Target	-0.336 (0.450)	-0.295 (0.449)
M/B	0.026 (0.392)	0.020 (0.395)
M/B - Target	0.218 (0.232)	0.219 (0.233)
Free cash flows	-7.595 (6.140)	-7.890 (6.153)
Free cash flows - Target	6.100 (4.086)	6.283 (4.093)

Leverage	10.848** (4.402)	10.840** (4.423)
Leverage - Target	3.410 (3.092)	3.222 (3.106)
Stock price run-up	-0.722 (1.036)	-0.796 (1.047)
Stock price run-up - Target	0.220 (0.493)	0.276 (0.492)
High-tech deal	-0.309 (1.154)	-0.343 (1.158)
Relative deal size	2.931 (2.285)	2.933 (2.279)
Diversifying acquisition	-1.095 (0.850)	-1.086 (0.847)
Hostile deal	2.168 (2.127)	2.108 (2.128)
Cash deal	3.661*** (0.883)	3.698*** (0.875)
Stock deal	0.117 (1.089)	0.179 (1.095)
<i>Governance and General Board Experience:</i>		
Ln (CEO tenure)	0.838* (0.480)	0.850* (0.482)
CEO/Chairman duality	-1.354 (0.828)	-1.403* (0.826)
Board independence	2.423 (2.966)	2.581 (3.005)
Board size	-0.501** (0.197)	-0.413** (0.191)
E-index	0.028 (0.246)	0.038 (0.243)
% of busy directors	-4.756 (3.208)	-4.132 (3.050)
Median director tenure	-0.138 (0.111)	-0.141 (0.111)
Median director age	0.175** (0.088)	0.175** (0.089)
Industry and year fixed effects	Yes	Yes
Observations	450	450
Adjusted R ²	0.22	0.22

Table 8. Acquirer's Gain Relative to Target's Gain

This table tests the relationship between board acquisition experience and the share of acquirer's gain relative to the target's gain. It presents estimates from ordinary least squares estimation, based on a sample of 450 public targets acquired over the period 1996-2011. The dependent variable is acquirer's gain relative to the target's gain defined as acquirer five-day CAR minus target five-day CAR divided by the sum of acquirer and target market values 50 trading days before the merger announcement. In Model 1 outside directors' acquisition experience is measured as a cumulative number of other firms' acquisitions in which outside directors were involved as a manager or as a director. In Model 2 outside directors' acquisition experience is measured by the percent of acquisition experts, i.e. outside directors with more than three prior acquisitions. All regressions include a constant. In parentheses are standard errors adjusted for heteroskedasticity (White, 1980) and clustered by firm. *, **, *** denotes significance at 0.10, 0.05, 0.01 levels, respectively. All regressions control for year and industry fixed effects, whose coefficients are suppressed. Variable definitions are in the Appendix.

	<i>Model 1:</i> Acquirer's Relative Gains	<i>Model 2:</i> Acquirer's Relative Gains
<i>Outside Directors Acquisition Experience:</i>		
Number of outside directors' prior acquisitions	0.075** (0.037)	
Percent of acquisition experts		4.751** (2.465)
<i>Inside Directors and Firm Acquisition Experience:</i>		
Number of inside directors' prior acquisitions	0.189** (0.095)	0.183* (0.094)
Managerial quality	0.092 (0.096)	0.085 (0.099)
Number of prior acquisitions by firm	-0.166 (0.147)	-0.174 (0.147)
<i>Firm and Deal Characteristics:</i>		
Ln (Firm Size) – Acquirer	1.856*** (0.503)	1.842*** (0.502)
Ln (Firm Size) – Target	-1.952*** (0.443)	-1.900*** (0.445)
M/B – Acquirer	0.325 (0.363)	0.308 (0.365)
M/B – Target	-0.164 (0.220)	-0.162 (0.223)
Free cash flows – Acquirer	-0.967 (5.774)	-1.193 (5.779)
Free cash flows – Target	1.114 (3.358)	1.339 (3.387)

Leverage – Acquirer	2.502 (5.361)	2.406 (5.352)
Leverage – Target	6.175* (3.308)	5.955* (3.283)
Stock return – Acquirer	0.119 (1.067)	0.038 (1.078)
Stock return – Target	0.337 (0.524)	0.402 (0.521)
High-tech deal	1.374 (1.053)	1.324 (1.058)
Relative deal size	-1.701 (2.041)	-1.734 (2.053)
Diversifying acquisition	0.143 (0.870)	0.155 (0.865)
Hostile deal	0.968 (1.533)	0.881 (1.529)
Cash deal	0.832 (1.018)	0.865 (1.017)
Stock deal	0.221 (1.047)	0.288 (1.053)
<i>Governance and General Board Experience:</i>		
Ln (CEO tenure)	0.322 (0.485)	0.330 (0.485)
CEO/Chairman duality	-0.690 (0.824)	-0.737 (0.828)
Board independence	0.240 (3.215)	0.429 (3.247)
Board size	-0.313 (0.199)	-0.216 (0.188)
E-index	0.484 (0.319)	0.479 (0.317)
% of busy directors	-0.667 (3.473)	-0.122 (3.485)
Median director tenure	0.143 (0.124)	0.140 (0.124)
Median director age	-0.001 (0.098)	0.000 (0.098)
Industry and year fixed effects	Yes	Yes
Observations	450	450
Adjusted R ²	0.23	0.23

Appendix: Variable Definition

Variable	Definitions
Panel A: Board Acquisition Experience	
Number of board's prior acquisitions	Cumulative number of other firms' acquisitions in which outside directors were involved as a manager or as a director in the past ten years.
Percent of acquisition experts	Number of acquisition experts divided by the total number of outside directors. Directors are considered acquisition experts if they have participated in more than three acquisitions before.
Cumulative CAR [-2:2] of prior acquisitions	Sum of five day cumulative acquisition returns of all prior acquisitions, in which directors were involved in the past ten years.
Number of the inside directors prior acquisitions	Cumulative number of prior acquisitions in which the CEO and other inside directors were involved as a manager or as a director in the past ten years.
Number of firm's prior acquisitions	Number of acquisitions, conducted by the firm in the past ten years.
Panel B: Board characteristics and Governance variables	
E-index	Based on six antitakeover provisions, as constructed by Bebchuk et al. (2009).
CEO tenure	Number of years in the position of CEO.
CEO/Chairman duality	Dummy variable that equals one if the bidder CEO is also chairman of the board, and zero otherwise.
Managerial quality	$(EBITDA_{t-1} - EBITDA_{t-4}) / EBITDA_{t-4}$, adjusted for the industry median.
Board size	Number of directors on board.
Board independence	Percentage of directors who are unaffiliated with the firm beyond their directorship.
% of busy directors	Percent of directors who serve on three or more boards.
Median director tenure	Median tenure of outside directors on the board.
Median director age	Median age of outside directors on the board.
Panel C: Firm characteristics	
MV equity	Number of shares outstanding multiplied by the stock price at the fiscal year end.
MV assets	Book value of total assets minus book value of equity plus market value of equity.
Firm Size	Log of book value of total assets.
M/B	Market value of assets divided over book value of assets.
Leverage	Book value of debt divided over market value of total assets.
Free cash flows	Operating income before depreciation minus interest expense, income taxes, and capital expenditures, scaled by book value of total assets.
Stock price run-up	Bidder's buy-and-hold abnormal return (BHAR) during the period (-210,-11). The market index is the CRSP value-weighted return.

Panel D: Deal characteristics

CAR [-2, 2]	Five-day cumulative abnormal return (in percentage points) calculated using a standard market adjusted return model, where abnormal return is calculated as the difference between a firm return and the value-weighted market (CRSP) index return.
Public target	Dummy variable that equals one for public targets, and zero otherwise.
Private target	Dummy variable that equals one for private targets, and zero otherwise.
Subsidiary target	Dummy variable that equals one for subsidiary targets, and zero otherwise.
Cash deal	Dummy variable that equals one if financed only by cash and/or liabilities, and zero otherwise.
Stock deal	Dummy variable that equals one if financed by stock only, and zero otherwise.
Mixed deal	Deals that are not classified as cash or stock deals are classified as combination deals.
Diversifying acquisition	Dummy variable that equals one if bidder and target are not in the same FF industry, and zero otherwise.
Relative deal size	Deal value, as reported in ThomsonOne, divided by bidder's market value of assets.
High tech deal	Dummy variable that equals one if bidder and target are both from the high tech industries defined by Loughran and Ritter (2004), and zero otherwise.
Hostile deal	Dummy variable that equals one if deal attitude is indicated as hostile by ThomsonOne, and zero otherwise.
Relative gains to an acquirer	Acquirer five-day CAR minus target five-day CAR divided by the sum of acquirer and target market values 50 trading days before the merger announcement (Ahern, 2012).