Does Board Gender Diversity at Target Firms Influence Acquisition Outcomes? US Evidence

Natasha Burns The University of Texas at San Antonio Email: natasha.burns@utsa.edu Phone: +1 210-458-6838

Abeyratna Gunasekarage Monash University, Melbourne, Australia Email: abeyratna.gunasekarage@monash.edu Phone: +61399047249

Kristina Minnick Bentley University, Waltham Massachusetts, USA Email: kminnick@bentley.edu Phone: +7818912941

Syed Shams University of Southern Queensland, Springfield, Australia Email: syed.shams@unisq.edu.au Phone: +61734704551

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Abstract

We investigate the influence of gender diversity on the boards of target firms on acquisition outcomes. We find that firms with gender-diverse boards are significantly less likely to be acquisition targets implying that firms with gender diverse boards are associated with stronger governance and better firm performance, which may make them less attractive for takeover. We also show that target firms with gender-diverse boards negotiate higher acquisition premiums while extending the time required to complete deals. Our analyses reveal that while target firms with gender-diverse boards experience positive abnormal returns during acquisition announcements, acquiring firms tend to face lower returns when acquiring such targets. Moreover, when examining the long-term performance, we find that acquirers of gender-diverse targets underperform their peers who acquire male-only targets.

JEL classification: G34

Key words: Gender diversity at the target firm; Abnormal return; Acquisition premium; Time taken to complete the deal; Governance; Firm performance

1. Introduction

Gender diversity on corporate boards has become a focus in corporate governance, with growing recognition of its benefits in enhancing board performance and decision-making processes. Research shows that gender-diverse boards typically provide better oversight, improved risk management, and more comprehensive decision-making processes (Adams and Ferreira, 2009; Carter et al., 2003). Since strategic decision-making is a fundamental role of corporate boards, studies have examined how gender diversity affects significant corporate transactions like mergers and acquisitions (M&A), primarily focusing on the outcomes of acquiring firms' shareholders (Levi et al., 2014; Khdemati et al., 2023). However, while the impact of the gender diversity of the acquirer's board has been studied, there is limited understanding of how gender diversity at the target firm might shape acquisition outcomes. Target firms' boards play a crucial role in M&A processes, influencing deal negotiations, acquisition premiums, and the duration of deal completion. Boards of target firms, especially those with gender diversity, may adopt governance practices that protect shareholder interests more effectively and conduct more thorough due diligence, potentially leading to higher premiums, extended negotiation periods, and different market reactions upon announcement.

This study, therefore, shifts the focus to the impact of board gender diversity in target firms during M&A transactions. By examining how target board diversity influences acquisition premiums, deal completion times, and market responses, we aim to shed light on whether and how gender-diverse boards at target firms shape outcomes differently in acquisition scenarios. The existing evidence on gender-diverse boards' governance practices, such as their increased diligence and commitment to protecting shareholder interests (Terjesen et al., 2009; Post and Byron, 2015), suggests that target board gender diversity could play a role in influencing M&A outcomes in ways that benefit target shareholders. Additionally, the literature on corporate governance has increasingly highlighted the importance of board independence and executive oversight in influencing firm performance and governance quality (Fama and Jensen, 1983; Weisbach, 1988). Given these findings, it is plausible that genderdiverse boards, particularly those with a mix of independent and executive directors, bring a broader range of perspectives to the negotiation table in M&As, affecting both the terms of the deal and its eventual success. This study explores whether these governance attributes translate into tangible benefits for target firms during M&As and whether the presence of target female directors plays a role in shaping outcomes like acquisition premiums and abnormal returns.

Using a comprehensive dataset of publicly listed firms involved in M&A transactions between 1999 and 2022, we analyze the role of gender diversity on the boards of target firms across several dimensions. First, we examine the likelihood of firms with gender-diverse boards becoming acquisition targets, addressing existing research that suggests gender-diverse firms tend to be better governed (Adams et al 2015) and that well-governed firms are less likely to be targeted for acquisition. Second, we investigate whether gender-diverse target boards negotiate higher premiums and whether they affect deal completion times using a 2SLS analysis to address the selection problem. We find that firms with gender-diverse boards are significantly less likely to be acquisition targets. This supports the argument that such boards are associated with stronger governance and better firm performance, which may make them less attractive for takeover. Second, we show that target firms with gender-diverse boards negotiate higher acquisition premiums, supporting that these boards are more effective in securing favorable shareholder terms. Additionally, we find that gender-diverse boards extend the time required to complete deals, although the economic impact of this delay appears to be modest. This may be due to more rigorous due diligence processes, as suggested by prior studies on the effectiveness of gender-diverse boards in enhancing governance quality (Terjesen et al., 2009; Post and Byron, 2015).

Finally, we explore the impact of gender diversity on the market's reaction to acquisition announcements, particularly in terms of abnormal returns for both target and acquiring firms, to assess whether gender-diverse boards create or extract more value during M&A transactions. Our analysis reveals that while target firms with gender-diverse boards experience positive abnormal returns during acquisition announcements, acquiring firms tend to face lower returns when acquiring such targets. This suggests that gender-diverse target boards can extract more value from the acquirers. Moreover, when examining the long-term performance, we find that acquirers of gender-diverse targets underperform their peers who acquire male-only targets. This sustained underperformance indicates that the higher premiums paid and longer deal completion times associated with acquiring gender-diverse targets may have a lasting negative impact on acquirer performance. Therefore, gender-diverse boards not only extract more immediate value during negotiations but also influence the acquirers' returns well beyond the announcement period.

In addition to these core findings, our study delves into the specific characteristics of directors, such as whether they are executive or non-executive and independent or non-independent. This builds on previous research showing that independent directors have value-

enhancing effects on corporate boards. This distinction further allows us to understand how gender diversity influences M&A outcomes. Specifically, we find that non-executive and independent female directors are particularly effective in driving favorable outcomes during acquisitions. In contrast, executive or grey female directors appear to have a less significant impact.

By addressing these questions, our study contributes to a deeper understanding of the role of gender diversity in corporate governance, particularly in the high-stakes context of mergers and acquisitions. We build on the prior literature, which shows that gender-diverse boards enhance corporate oversight, governance quality, and shareholder value through increased diligence, broader perspectives, and improved risk management (Adams and Ferreira, 2009; Carter et al., 2003; Terjesen et al., 2009; Post and Byron, 2015). Our findings add to this body of knowledge by focusing on target firms, a previously underexplored area in M&A literature, and highlight how gender diversity in these boards influences negotiation outcomes and market reactions. Our results underscore the value that gender-diverse boards can bring to target firms, securing higher premiums and creating shareholder value.

2. Literature and hypotheses

2. a Background on Gender-Diversity Effects

Motivating our study of the effect of gender-diverse boards on decision-making, we draw on research by social and organizational psychologists on the study of groups and group processes. This includes social identity theory (Tajfel and Turner, 1979), which basically says individuals categorize themselves and others into groups (e.g., based on gender), and this influences their behavior and interactions. Group differences give rise to ingroup and outgroup competitive behaviour, where those in the ingroup are more likely to support each other's opinions and provide more resources while viewing the outgroup's opinions with more scrutiny (Hogg (2006) and Hogg and Terry (2000)). This is relevant for groups including the board of directors, whereby male-only board decision-making may be characterized by more groupthink, consensus, and acquiescence. Introducing gender diversity creates an outgroup dynamic where differing perspectives are more likely to be voiced and scrutinized. Female directors may bring different experiences and viewpoints, encouraging more debate and thorough vetting of decisions. Consequently, in contrast to male-only boards, gender-diverse board decision-making may have more thoughtful, less prototypical, and thorough vetting of ideas and decisions.

One of the early papers to explore how gender diversity affects the activities of firms, Adams and Ferreira (2009) provide evidence that female directors have better attendance records and are more likely to join monitoring committees, enhancing board effectiveness. Nielsen and Huse (2010) find that women on boards contribute to increased control and reduced levels of conflict. Ahern and Dittmar (2012) found that increased gender diversity on boards led to more careful decision-making processes. According to Chen et al. (2014), boards with more female representation tend to approach decision-making with heightened thoroughness. This dynamic can lead to more deliberate evaluations of strategic proposals from management, a check that may counterbalance the high confidence often observed in senior executives (Graham et al., 2013). Consequently, boards with diverse gender representation will likely apply stricter oversight and diligence before approving initiatives.

2. b Board Gender Diversity and Potential Target

The evidence from the growing research indicates that firms with gender-diverse boards tend to exhibit stronger overall governance practices. These enhanced governance practices can influence the likelihood of becoming an acquisition target since better-governed firms tend to be less attractive to potential acquirers (see Palepu (1986), Morck et al. (1989). Given that gender-diverse boards are often associated with stronger firm performance and governance, it is reasonable to hypothesize that:

H1: Companies with gender-diverse boards are less likely to receive acquisition bids than companies with male-only boards.

2. c. Board Gender Diversity and Deal Negotiations

Other research focuses on the effect of board gender diversity on strategic decisions like mergers and acquisitions. Concerning M&A, researchers show that the more careful decision-making processes associated with gender-diverse boards have positive outcomes for acquirers. For example, Huang and Kisgen (2013) show that female executives are less likely to make acquisitions and more likely to exercise caution in financial decision-making, potentially leading to better outcomes when they engage in M&A activities. Adding to Huang and Kisgen, Levi et al. (2014), Khdemati et al. (2023), and Shams (2023) show that firms with gender-diverse boards are less likely to make acquisition bids and pay lower bid premiums. Similarly, we expect targets with female directors to benefit from increased monitoring and diligence associated with gender-diverse boards in the form of higher premiums for targets. It can also lengthen the time needed to complete deals.

On the other hand, early research shows that males tend to negotiate more favorable terms than females, suggesting a negative effect of female board representation for target shareholders (Stuhlmacher and Walters, 2006). Kray et al. (2002) demonstrate that women perform better in negotiations when advocating for others rather than themselves. Moreover, growing research shows that gender effects in negotiation are related to contexts that make gender norms more salient or where there is greater ambiguity about what is to be negotiated (see Bowles, Thomason, Macias-Alonso, 2022). Because each of these is low in takeover negotiations, we expect gender effects to be more related to comprehensive decision-making associated with board gender diversity.

While the diligence and monitoring associated with board gender diversity may increase the time to complete the deal, it may also secure higher bid premiums for target shareholders. Further, more attention can also affect the payment method, making it more likely to be cash or, if equity, to be equity in acquiring firms that are more likely to have better postmerger performance. Therefore, we hypothesize:

H2a: The time taken to complete acquisition deals is longer for target firms with genderdiverse boards than for male-only boards.

H2b: Target firms with gender-diverse boards receive higher acquisition premiums than those with male-only boards.

2.d. Board Gender Diversity and Deal Outcomes

To the extent the market recognizes gender-diverse boards as a positive signal of governance quality, resulting in stronger due diligence, monitoring, and negotiating outcomes for targets, the stock market reaction to acquisition announcements should be stronger. Additionally, Gul et al. (2011) demonstrate that board gender diversity enhances stock price informativeness through increased public disclosure. This transparency allows for more accurate assessments of the target's value. Thus, the improved clarity provided by gender-diverse boards may drive stronger positive reactions to acquisition announcements.

H3: The announcement returns for target firms with gender-diverse boards are higher than those with male-only boards.

We also explore whether there are effects for the acquiring firm of gender-diverse targets. The impact of gender diversity on acquirers may be negative if the market perceives that the acquirer has to pay a high premium for the target.

H4: The announcement returns for acquirer firms targeting gender-diverse boards are lower than those targeting male-only boards.

2.e. Potential critical mass effects

The results for each of these hypotheses may be stronger when there is more than one female on the board, whereby one female may have more trouble finding purchase for her idea or viewpoint for discussion to take place, depending on the strength of the group dynamics. Nielsen & Huse (2010) Torchia et al., (2011) show that women exert more meaningful influence on board decisions when there is a certain level or critical mass of female representation. We therefore test if results are stronger for a critical mass of female board representation.

H4: Results are stronger when there is a critical mass of females on the board.

3. Sample and Methodology

3a. Data

We obtain acquisition announcements made by publicly listed U.S. firms acquiring public targets from 1999 to 2022 from the SDC M&A database. We focus on public-to-public acquisitions due to the lack of available board gender diversity and other governance and financial data for private firms and subsidiaries. Our sample consists of deals where the acquiring firm seeks to obtain at least 50% of the target's voting stock, with a minimum transaction value of \$10 million and the deal value exceeding 1% of the acquirer's total assets. We excluded specific deal types like exchange offers, LBOs, privatizations, spin-offs, self-tender offers, repurchases, and partial stock-stake purchases. We matched this acquisition data with three databases: BoardEx, from which we obtained board and governance details, including gender diversity; COMPUSTAT (for accounting data); and CRSP (for return measures). After winsorizing ratios at the 1st and 99th percentiles and removing observations with missing variables, we finalized a sample of 1,712 acquisitions undertaken by 1,582 unique firms.

Table 1 shows the sample distribution across years (Panel A) and industries (Panel B) for acquisition bids from 1999-2022. The table illustrates how M&A activity varies over time and across different sectors. Panel A presents the distribution of acquisitions by year, showing

that M&A activity experienced notable fluctuations throughout the sample period. The early 2000s saw a moderate level of acquisitions, with a steady increase from 1999 through 2006, where the number of bids peaked at 118, accounting for 6.89% of the total sample. This period coincides with the economic expansion before the Great Financial Crisis (GFC) 2007. Post-GFC, there was a decline in acquisition activity, with a notable drop during the crisis years of 2008-2010, reflecting the overall economic slowdown. In the years following the GFC, acquisition activity began to recover, with a resurgence in 2013 and 2014, where the total deal value reached a high of \$436.96 billion. The 2020-2022 period shows a decline in acquisitions and deal value, likely reflecting the economic uncertainty caused by the COVID-19 pandemic. For example, in 2020, there were only 45 acquisitions, with a total deal value of \$108.83 billion, significantly lower than in previous years. Despite these fluctuations, the overall average deal value for the sample remains substantial, with a mean of \$188.96 billion, indicating that M&A activity remains an important strategy for public firms, even during periods of economic uncertainty. Panel B categorizes the industry's acquisitions using the Standard Industrial Classification (SIC) codes. The data reveal that specific industries dominate M&A activity. Notably, the Electronic Equipment industry accounted for the largest proportion of acquisitions, with 43.75% of the total sample. The medical equipment industry follows with 20.62% of the total sample, with the non-metallic and industrial metal mining industry being the third largest, contributing 17.93% to the total sample. This industry distribution underscores the concentration of M&A activity in high-growth sectors, particularly technology and healthcare.

Table 2 compares the mean and median differences between gender-diverse and maleonly targets. Panel A presents statistics on board gender diversity, the primary variable of interest. Panels B and C display target and acquiring firms' board and financial characteristics, respectively. Panels D and E focus on deal and bid characteristics. The mean (median) percentage of female directors on gender-diverse target boards is 17% (14%), with an average board size of 9.64. Among gender-diverse targets, approximately 12% have only one female director, 88% have two or more female directors, and 12% have three or more female directors. Acquirers of gender-diverse targets also tend to have more gender-diverse boards, with a significantly higher mean percentage of female directors (71.45%) than acquirers of male-only targets (13.48%).

Panels B and C reveal that gender-diverse targets differ notably from male-only targets. Gender-diverse boards are larger and have more independent directors. These targets are also larger and carry more leverage, though profitability, as measured by return on assets, does not differ significantly. Acquirers of gender-diverse targets similarly have larger boards and are larger, more leveraged, and more profitable than those acquiring male-only targets. However, acquirers of gender-diverse targets have fewer independent directors. The two groups of targets show minimal differences in bid characteristics, except that male-only targets are more likely to receive hostile bids. In contrast, gender-diverse targets are likelier to have serial bidders as acquirers (Panel D).

Panel E reports the main test variables: bid premium, market reactions, and deal completion time. Gender-diverse targets command significantly higher bid premiums and take longer to complete deals than male-only targets. Additionally, the market reaction to acquisition announcements is stronger for gender-diverse targets, with a 3-day cumulative abnormal return (CAR) of 26.9%, compared to 22.9% for male-only targets. ¹ In contrast, the difference in the 3-day CAR for acquirers is insignificant, though the market response is generally negative for both acquirer groups.

3b. Methods

Our first hypothesis (H1) is that companies with gender-diverse boards are less likely to receive acquisition bids. To test this hypothesis, we use the universe of publicly listed firms that received an acquisition bid and those that did not and estimate the following logit model:

$$D_T ARGET_{i,t} = \propto_0 + \beta_1 (PFDIR_{i,t} \ Or \ DFDIR_{i,t}) + \sum \beta_i Controls_{i,t} + Year \ FE + Industry \ FE + \varepsilon_{i,t}$$
(1)

where, D_TARGET is an indicator variable that takes the value of one if a company received a bid (i.e., became a target for a possible acquirer) in a given year and zero otherwise. The primary explanatory variable is the gender diversity of the company board, represented by either the fraction of female directors on the board (*PFDIR*) or the indicator variable that captures the presence of female directors on the board (*DFDIR*). To support H1, we expect a negative and significant coefficient for β_1 .

We include several control variables in our model to account for factors that may influence the likelihood of a firm becoming an acquisition target. The definitions of all variables are in Appendix A. We control for board characteristics, including board size, CEO

¹ Cumulative Abnormal Returns are measured using a standard Brown and Warner event-study method.

duality, and percentage of independent directors. Board size (BSIZE) can impact a firm's attractiveness to acquirers, as larger boards may provide more diverse expertise but can also face coordination and decision-making challenges, making the firm more susceptible to acquisition (Coles et al., 2008). CEO-Chair duality (CEODUAL), where one individual serves as both CEO and board chair, is controlled due to its potential effects on board independence. Reduced independence in governance could either increase a firm's vulnerability to acquisition or signal strong leadership, which may influence acquirer interest (Rechner & Dalton, 1991). The fraction of independent directors (PINDDIR) is also included. Independent boards are generally seen as better at acting in shareholders' interests, potentially influencing the firm's stance on acquisition offers (Weisbach, 1988).

In addition to board characteristics, we include firm-specific controls of firm size, profitability, growth, leverage, cash holdings, and Tobin's Q, motivated by prior research. Firm size (SIZE) is included as larger firms are typically more challenging to acquire due to the higher transaction costs and resources required (Palepu, 1986). Profitability (ROA), measured by return on assets, is included because less profitable firms may be more likely to become targets for restructuring or turnaround strategies by acquirers (Morck et al., 1989). Growth (GROWTH) is also controlled, as firms with high growth prospects might be attractive to acquirers seeking expansion or innovation capabilities (Powell, 1997). Leverage (LEV) is included as it can affect acquisition attractiveness; highly leveraged firms might either deter acquirers or be seen as opportunities for financial restructuring (Israel, 1991). Cash holdings (CASH) are controlled because cash-rich firms may appeal to acquirers seeking liquidity, although such firms might also be considered strong performers, potentially deterring unwanted acquisitions (Harford, 1999). Finally, Tobin's Q (TOBINQ), a measure of market valuation relative to book value, is included as it captures whether a firm is perceived as overor under-valued, which can significantly impact acquisition attractiveness (Lang et al., 1989). These controls collectively help ensure that the effects of board gender diversity on acquisition likelihood are accurately isolated from other influential firm and governance characteristics.).

Our second hypothesis predicts that board gender diversity at target firms is associated with higher bid premiums (H2a) and longer completion time (H2b). To test these hypotheses, we estimate the following model in a 2SLS specification to correct for self-selection:

 $BIDPREMIUM_{i,t} or \ LOGDAYS_{i,t} = \beta_0 + \beta_1 TAR_PFDIR_{i,t-1} + \sum \beta_i Acquirer \ Controls_{i,t-1} + \sum \beta_i Target \ Controls_{i,t-1} + \sum \beta_i Bid \ Characteristics_{i,t} + \beta_i Lambda_i + +Year \ FE + \beta_i Lambda_i + \beta_i Lambda_i + +Year \ FE + \beta_i Lambda_i + +Year \ FE + \beta_i Lambda_i + \beta_i La$

correction where the first stage is Equation (1).

where, in separate regressions, the dependent variable is either the bid premium offered (*BIDPREMIUM*) or the natural logarithm of the number of days taken to complete the deal (*LOGDAYS*). The primary explanatory variable is the fraction of female directors on the target board (*TAR_PFDIR*), and a positive and significant coefficient for this variable supports H2. Selection bias occurs in our analysis of equation 2 because we only observe bid premiums and days for firms that receive an acquisition bid. To account for this, we conduct a Heckman

We include several control variables based on both governance and financial characteristics of the acquirer and target, as well as specific bid characteristics, following prior studies (Byrd and Hickman, 1992; Shivdasani, 1993; Cotter et al., 1997; Bange and Mazzeo, 2004; Chen et al., 2007; Levi et al., 2014; Shams et al., 2024). These variables ensure that we account for factors that could influence the bid premium and the time taken to complete a deal, helping us isolate the effect of board gender diversity. Governance characteristics directly impact decision-making processes and negotiation dynamics during an acquisition. For instance, board size (BDSIZE) is included because larger boards may slow decision-making, making it more challenging to reach consensus, which could lengthen the time to complete a deal while influencing the bid premium (Coles et al., 2008). Similarly, CEO duality (CEODUALITY)-where the CEO also serves as the board chair-can affect the power dynamics between the board and management, potentially reducing the board's independence and impacting both deal premiums and negotiation speed (Rechner & Dalton, 1991). The proportion of independent directors (PINDIR) is another governance characteristic, as more independent boards tend to evaluate acquisition offers rigorously, potentially negotiating better outcomes for shareholders, which could affect both the bid premium and the time required to close the deal (Cotter et al., 1997).

In addition to governance characteristics, we include financial characteristics that could influence the negotiation process. Firm size (SIZE) is included because larger firms may have more complex negotiations, which could impact both the premium and the time taken to finalize the deal (Moeller et al., 2004 Leverage (LEV), which reflects the capital structure of the firm, is important because highly leveraged firms may face different financial constraints during acquisitions, influencing the negotiation process and affecting both premium levels and

deal speed (Israel, 1991). Cash holdings (CASH) are also relevant, as cash-rich acquirers may be more capable of offering higher premiums. In contrast, cash-rich targets may be more attractive to bidders, which could affect deal premiums and speed (Harford, 1999). Return on assets (ROA), which measures profitability, is included to account for the firm's financial health; more profitable firms may be better positioned in negotiations, influencing both the premium and the time to complete the acquisition (Morck et al., 1989).

Finally, we control for several bid characteristics that could influence premiums and deal duration. All-cash offers (ALLCASH) are typically associated with higher premiums and faster deal completion because they simplify the transaction and reduce uncertainties (Travlos, 1987). In contrast, all-stock offers (ALLSTOCK) may be linked to lower premiums and longer completion times, as they often require additional regulatory approvals and shareholder votes (Travlos, 1987). Unrelated acquisitions (UNRELATED), or acquisitions where the target operates in a different industry from the acquirer, may involve more complexity and thus require more time to complete, possibly affecting the premium (Morck et al., 1990). Tender offers (TENDEROFFER), where the acquirer bypasses the target's board and directly makes an offer to shareholders, are often associated with higher premiums and quicker deal execution (Comment & Schwert, 1995). Hostile takeovers (HOSTILE), which involve resistance from the target's board, tend to command higher premiums but often take longer due to legal and strategic delays (Schwert, 2000). Lastly, serial acquirers (SERIAL), or firms with a history of multiple acquisitions, may have more experience navigating the acquisition process, potentially influencing both the speed and the premiums involved in the deal (Fuller et al., 2002).

Hypothesis 3 predicts a positive (negative) association between the fraction of female directors on the target's board and the abnormal return earned by targets (acquirers) during the announcement period of acquisition. We estimate the following regression to test this hypothesis:

$$TAR_CAR_3_{i,t} \text{ or } ACQ_CAR_3_{i,t} = \gamma_0 + \gamma_1 TAR_PFDIR_{i,t-1} + \sum \gamma_i Acquirer Controls_{i,t-1} + \sum \gamma_i Target Controls_{i,t-1} + \sum \gamma_i Bid Characteristics_{i,t} + \gamma_i Bid premium_i + \gamma_i Lambda_i + Year FE + Industry FE + \varepsilon_{i,t}$$
(3)

where, in separate regressions, the dependent variable is the three-day cumulative abnormal return earned by the target (TAR_CAR_3) or the acquirer (ACQ_CAR_3) during the

announcement period. We calculate returns using a standard Brown and Warner event-study methodology. The control variables are the same as those in Equation (2).

Table 3 presents the correlation matrix for the variables used in the study. Notably, the *percentage of target female directors* variable is positively and significantly correlated with all three test variables – bid premium, days taken to complete the deal, and targets' announcement period abnormal return – but insignificantly correlated with acquirers' announcement period abnormal return. The targets' gender diversity is also positively and significantly associated with some target governance and financial characteristics such as board size, board independence, firm size, and leverage, and with some bid characteristics such as unrelated acquisition dummy, tender offer dummy, and serial bidder dummy. This variable also has a positive and significant correlation with acquirer characteristics such as board size, firm size, and leverage. The correlations among control variables used in our regression models (explained in Section 3 below) are in the small- to medium-magnitude range, with the highest correlation of 0.5766 observed between acquirers' board size and market capitalization, signifying that multicollinearity is not likely a significant issue in the regression models (Gujarati and Porter, 2009).²

4. Analyses and results

4.1 Gender Diversity and the Likelihood of Receiving an Acquisition Bid

Table 4 presents the regression results for Equation (1), which estimates the likelihood of a firm receiving an acquisition bid based on its board's gender diversity. The sample includes firms that received bids and those that did not, resulting in 77,801 firm-year observations. In Model 1, the primary explanatory variable is the percentage of female directors on the board (PFDIR). In contrast, in Model 2, the variable is an indicator for board gender diversity (DFDIR), which takes the value of one if the board is gender diverse and zero otherwise. The results from both models show that gender diversity on a corporate board significantly reduces the likelihood of receiving an acquisition bid. Specifically, the coefficients for PFDIR (-0.6011 in Model 1) and DFDIR (-0.5001 in Model 2) are negative and statistically significant at the 1% level, indicating that companies with gender-diverse boards are less likely to become acquisition targets compared to those with male-only boards. These findings are consistent with our first hypothesis (H1), which predicted that firms with gender-diverse boards are less likely

² Gujarati and Porter (2009) suggest that multicollinearity problems occur when the correlation coefficients between variables exceed 0.80.

to receive acquisition bids. Furthermore, the economic significance of these results is highlighted by marginal effect analysis, which shows that a unit increase in the fraction of female directors (percentage/dummy female directors) on a corporate board decreases the probability of receiving an acquisition bid by 2.29% (2.46%), respectively.

In addition to board gender diversity, the control variables in Equation (1) provide further insights into factors influencing acquisition bids. Firms with higher leverage and stronger growth prospects are more likely to be targeted for takeovers, consistent with previous research. In contrast, firms with CEO duality, a higher fraction of independent directors, larger firm size, higher profitability, greater cash holdings, and higher market valuations (Tobin's Q) are less likely to receive bids. These results align with the literature on corporate governance and firm performance, suggesting that more financially stable and well-governed firms are less attractive as acquisition targets. These findings provide strong empirical support for H1, confirming that board gender diversity reduces the likelihood of a firm becoming an acquisition target.

4.2 Effect of Target Level Gender Diversity on Bid Premium and Due Diligence

We test H2, which predicts that gender diversity at the target firms will positively impact both the bid premium and the time taken to complete the deal, represented by Equation (2). Tables 5 and 6 report these analyses using a 2SLS Heckman selection correction. Because this analysis only includes public firms receiving a takeover bid, the sample size was reduced to 1,712. Model (1) consists of the primary explanatory variable—the fraction of female directors on the target board (*TAR_PFDIR*). Model (2) adds acquirer board gender diversity (ACQ_PFDIR) as an additional control variable, motivated by previous research showing that acquirer gender diversity has a significant negative influence on the bid premium paid to targets (Levi et al., 2014; Shams et al., 2024). In Model (3), we include an additional variable interacting target and acquirer gender diversity (TAR_PFDIR×ACQ_PFDIR) to account for differences in negotiating styles if both boards are gender diverse. Women's more collaborative style and greater diligence may affect how gender-diverse boards negotiate, affecting the premium and days to close.

Table 5 presents the regression results for Equation (2), which tests our second hypothesis (H2), predicting that gender diversity at the target firms positively impacts the bid premium paid during acquisition deals. The results from Table 5 support H2a, which posits a positive relationship between target board gender diversity and bid premium. Across all three

models, the fraction of female directors on the target board, TAR_PFDIR, generates positive and statistically significant coefficients, indicating that as the proportion of female directors on the target board increases, the bid premium paid to target firms also rises. Specifically, a one-standard-deviation increase in TAR_PFDIR is associated with a 39% (Model 1) and 40% (Model 2) increase relative to the average bid premium of 0.7480 in the total sample.³ These findings underscore the economic importance of gender diversity in boards, as target firms with more gender-diverse boards secure significantly higher acquisition premiums.

Including acquirer gender diversity (ACQ_PFDIR) in Model 2 does not yield significant results, suggesting that acquirer gender diversity does not influence the bid premium paid to public targets in our sample. This contrasts with prior studies that have found a negative association between acquirer gender diversity and bid premium, likely driven by samples that include private targets (we confirm this in unreported analysis). Model (3) incorporates the interaction between target and acquirer gender diversity (TAR_PFDIR \times ACQ_PFDIR), allowing us to examine whether the gender composition of both boards affects negotiation dynamics. The interaction term between target and acquirer gender diversity (TAR_PFDIR \times ACQ_PFDIR) is also insignificant, indicating that the gender composition of both boards does not significantly influence bid premiums in public firm acquisitions. This suggests that the presence of gender-diverse boards on both sides of the negotiation does not meaningfully alter the dynamics of the premium negotiation process in our context.

In Model (4), we introduce two categorical variables, TAR_DMYFDIR_2 and TAR_DMYFDIR_3, to capture the effects of having one or two female directors (TAR_DMYFDIR_2) or three or more female directors (TAR_DMYFDIR_3) on the target board. These variables are included based on the critical mass theory (Nielsen & Huse, 2010; Torchia et al., 2011), which suggests that women can exert more meaningful influence on board decisions when there is a certain level of female representation. This theory distinguishes between the symbolic appointment of women to corporate boards and having a substantial fraction of women, which enables them to play a significant role in corporate decision-making processes. More recent research supports the idea that, even without reaching a critical mass, women can have a substantial impact if male directors are open to or experienced in working with women (Boutchkova, Gonzalez, Main, & Sila, 2020). When examining the critical mass

³ The standard deviation of TAR_PFDIR is 0.1050. Therefore, the increase in bid premium associated with on standard deviation increase in TAR_PFDIR is as follows: Model 1: $3.7146 \times 0.1050 = 39\%$; Model 2: $3.8161 \times 0.1050 = 40\%$.

effect in Model (4), we find that only TAR DMYFDIR 3, representing boards with three or more female directors, has a positive and significant impact on bid premiums, consistent with the critical mass theory. This finding suggests that once a board reaches the threshold of having three or more women, these directors can exert greater influence during negotiations, resulting in higher premiums. In contrast, boards with fewer than three women (TAR DMYFDIR 2) do not significantly affect bid premiums. Hence, the advantages of gender diversity in driving higher evident when female representation premiums are more is more meaningful and consistent with the critical mass theory.

Regarding control variables, we observe that the financial characteristics of the bidders, notably leverage, positively and significantly affect bid premiums, indicating that highly leveraged bidders are willing to pay higher premiums. Additionally, all-cash and all-stock deals are associated with lower bid premiums, while tender offers and hostile takeovers lead to higher premiums. These results align with established literature on the influence of deal structure and negotiation dynamics on bid premiums. Overall, the findings in Table 5 strongly support H2a, confirming that gender diversity on the target board leads to higher bid premiums in acquisition deals. The lack of significance for acquirer gender diversity and the interaction terms, however, suggests that the target firm's board primarily drives the effect of gender diversity, and the presence of a critical mass of female directors further amplifies this effect.⁴

Table 6 presents the results for the time taken to complete acquisition deals, with the dependent variable being the natural logarithm of the number of days required to finalize the transaction. The models estimated in Table 6 mirror those in Table 5, except for the change in the dependent variable. The findings show that gender diversity at target firms is associated with a longer time to complete acquisition deals. The inverse mills ratio (LAMBDA), insignificant in the bid premium regressions of Table 5, is significant in the days taken to complete the acquisition regressions in Table 6. This indicates that sample selection affects the time taken to complete deals, but there is no evidence of sample selection bias in the bid premium analysis.

The variable TAR_PFDIR (the fraction of female directors on the target board) enters Models 1-3 with positive coefficients (0.7865, 0.8529, and 0.8318, respectively), all statistically significant at the 1% level. However, the acquirer gender diversity variable

⁴ In unreported results, we confirm this by regressing the bid premium on acquirers' gender diversity, and acquirers' governance and financial characteristics. We find that the acquirers' gender diversity variable is insignificant

(ACQ_PFDIR), included in Models 2 and 3, as well as the interaction term between the acquirer and target gender diversity (ACQ_PFDIR \times TAR_PFDIR) in Model 4, do not generate significant coefficients. This suggests that while target board gender diversity impacts the time taken to complete the deal, acquirer gender diversity does not play a significant role. Based on the coefficients in Models 1 and 2, a one-standard-deviation increase in TAR_PFDIR results in an approximate 8% increase in the duration.⁵ Similar to the results observed in Table 5 regarding bid premiums, Models 3 and 4 indicate that when target boards have at least three female directors, the due diligence process tends to be longer. Coupled with the results of Table 5 showing that a critical mass of female directors is also associated with higher bid premiums, the extension to complete the deal benefits target shareholders.

4.3 Effect of Target-Level Gender Diversity on Market Reaction

Hypothesis 3 proposes that the gender diversity of the target firm will be positively associated with the announcement reaction of the target. In contrast, it will be negatively associated with the acquirer's announcement reaction. We conduct two sets of tests by estimating Equation (3) to investigate this issue—the first set uses the target's 3-day announcement reaction as the dependent variable, and the second with the acquirer's 3-day announcement reaction.

Table 7 reports the results for the abnormal returns of the target firms' announcement period (TAR_CAR_3). As with the previous tables, we begin by estimating Equation (3) in Model (1), where the primary explanatory variable is the percentage of female directors on the target board (TAR_PFDIR). In Model (2), we add acquirer gender diversity (ACQ_PFDIR) as a control, and in Model (3), we include the interaction term between target and acquirer gender diversity (TAR_PFDIR × ACQ_PFDIR). Finally, in Model (4), we distinguish between target boards with one or two female directors (TAR_DMYFDIR_2) and those with three or more female directors (TAR_DMYFDIR_3) to assess the role of critical mass. In Models (1)-(3), the coefficients for TAR_PFDIR are consistently positive and statistically significant (0.1494, 0.1630, and 0.1858, respectively). This suggests that the gender diversity of the target firm's board positively impacts the abnormal returns earned during the announcement period of the acquisition. On the other hand, the ACQ_PFDIR variable in Models (2) and (3), as well as the

⁵ Given that the standard deviation of TAR_PFDIR is 0.1047 and the average number of days to complete a transaction is 121, the percentage increase in duration is calculated using the exponential function. For Model 1, the coefficient of TAR_PFDIR is 0.7865, and the calculation is $exp(0.1047 \times 0.7865) = 1.08$, indicating an approximate 8% increase in duration. For Model 2, with a coefficient of 0.8529, the calculation is $exp(0.1047 \times 0.7865) = 1.09$, $exp(0.1047 \times 0.8529) = 1.09$, corresponding to a 9% increase in the time taken to complete the deal.

interaction term between target and acquirer gender diversity in Model (3), yield insignificant coefficients. These findings imply that the abnormal returns earned by target firms are driven solely by the gender diversity of their boards and not influenced by the gender diversity of the acquiring firms. Using the coefficients from Model (1) and Model (2), we find that a one-standard-deviation increase in the percentage of female directors on the target board is associated with a 1.56% (Model 1) and 1.71% (Model 2) increase in abnormal returns during the announcement period.⁶

Additionally, Model (4) reveals that critical mass plays an important role in this relationship. Specifically, the positive impact of board gender diversity on target firm abnormal returns becomes significant only when the board has at least three female directors (TAR_DMYFDIR_3 has a positive and significant coefficient of 0.0663). This suggests that a critical mass of female directors is necessary to drive meaningful improvements in firm performance during the acquisition process.

Table 8 reports the regression estimates for Equation (3), where the dependent variable is the acquirer's abnormal return (ACQ CAR 3) over the 3-day announcement period. The results reveal interesting insights into the influence of target firms' board gender diversity on acquirers' announcement period abnormal returns. In Models (1) through (3), the variable representing the percentage of female directors on the target's board (TAR PFDIR) consistently produces negative and statistically significant coefficients (-0.0412, -0.0439, and -0.0397, respectively). In contrast, the acquirer board gender diversity variable (ACQ PFDIR) in Models (2) and (3), as well as the interaction term between target and acquirer gender diversity (TAR PFDIR × ACQ PFDIR) in Model (3), yield insignificant coefficients. These results suggest that acquirers' abnormal returns are more affected by the gender diversity of the target firm's board than their own. This finding is consistent with the earlier observation that target firms with gender-diverse boards tend to extract higher bid premiums from acquirers, which can negatively impact the acquirer's return. In Model (4), we further explore the effect of different levels of gender diversity on target boards by introducing two categorical variables (TAR DMYFDIR 2 and TAR DMYFDIR 3) representing target boards with two or fewer female directors and those with three or more female directors, respectively. Both variables

⁶ We also find that some firm level characteristics and bid characteristics have significant influences on the abnormal returns earned by targets. In particular, targets' board size and acquirers' firm size have positive influences on abnormal returns realised by targets while targets' firm size and profitability having negative influences. Bid characteristics such as cash only deals and tender offer bids are positively associated with targets' abnormal return while hostile bids and serial bidder status are negatively associated.

generate negative and significant coefficients, suggesting that any level of gender diversity on target boards negatively impacts acquirers' abnormal returns, with the effect becoming more pronounced as the number of female directors increases.

Regarding economic significance, the coefficients in Model (1) and Model (2) suggest that a one-standard deviation increase in the percentage of female directors on the target board decreases acquirers' abnormal returns by approximately 0.43% and 0.46%, respectively. These results support H3b, indicating that while gender diversity on target boards enhances value for the target's shareholders, it appears to come at the expense of the acquirer's shareholders during acquisition announcements.⁷

4.4 Roles of Executive versus Non-Executive and Independent Versus Non-Independent Female Directors

The board of directors can be classified into executive and non-executive directors. Executive directors provide internal insights into the firm, while non-executive directors offer a more independent perspective. Additionally, directors are categorized as independent and grey (non-independent) directors. Previous research suggests that independent directors are better monitors of management, reducing managerial opportunism and improving shareholder value (Weisbach, 1988). However, the effectiveness of outside directors has been questioned due to potential constraints such as limited time, less firm-specific expertise, and lack of access to critical information (Zahra and Pearce, 1989; Coughlan and Schmidt, 1985). Some studies have found no clear relationship between board independence and firm performance (Bhagat and Black, 2002; Bhagat and Bolton, 2008). To explore how these director classifications influence the relationship between board gender diversity and acquisition outcomes, we estimate a modified version of Equation (3). In this version, we replace the TAR PFDIR variable with (i) the percentages of executive (TAR_PFDIR_EXEC) and non-executive (TAR PFDIR NON EXEC) female directors on the target board and (ii) the percentages of independent (TAR PFDIR IND) and grey (TAR PFDIR GREY) female directors. We estimate four regressions where the dependent variables are BID PREMIUM and LOG(DAYS) in Models (1) and (2) and ACQ CAR 3 and TAR CAR 3 in Models (3) and (4), respectively. Only the results for the main variables of interest are reported in Table 9 for brevity.

⁷ We also find that acquirers' abnormal returns are negatively influenced by target characteristics such as size and cash holdings, while positively influenced by deal characteristics such as cash only and hostile bids.

In Models (1) and (2), which use bid premium and the number of days taken to complete the deal as the dependent variables, we observe that the percentage of non-executive female directors (TAR_PFDIR_NON_EXEC) in Panel A and the percentage of independent female directors (TAR_PFDIR_IND) in Panel B both generate positive and significant coefficients. In contrast, the executive female director variable (TAR_PFDIR_EXEC in Panel A) and the grey director variable (TAR_PFDIR_GREY in Panel B) do not show significance. These results suggest that non-executive and independent female directors drive positive outcomes in acquisition negotiations, whereas executive and grey female directors seem to have limited influence.

However, when we look at the results for acquirers' abnormal returns in Model (3), both executive and non-executive female directors in Panel A and independent and grey female directors in Panel B produce negative and significant coefficients. This indicates that, regardless of their classification, the presence of female directors on the target board tends to negatively impact the acquirer's abnormal returns. Finally, when examining the target firms' abnormal returns (Model 4), we do not find any significant relationship between the executive/non-executive or independent/non-independent classifications of female directors and the returns earned by their firms during the announcement period.

4.5 Other Target Characteristics

Table 10 presents the multivariate regression results for acquisition performance, premiums, and due diligence, segmented by various target firm characteristics. Each panel of the table splits the sample at the median value for a specific characteristic and estimates Equation (3) for bid premium, deal completion time (log of days), acquirer abnormal returns (ACQ_CAR_3), and target abnormal returns (TAR_CAR_3). The panels account for institutional ownership (Panel A), analyst following (Panel B), return volatility (Panel C), managerial ability (Panel D), and research & development (R&D) intensity (Panel E). All regressions include controls and year and industry-fixed effects, with robust standard errors.

Panel A distinguishes between high and low institutional ownership; for target firms with high institutional ownership, board gender diversity (TAR_PFDIR) is associated with a significantly higher bid premium (6.8374, p<0.01) and a longer time to complete the deal (1.2343, p<0.01). However, the acquirer's abnormal returns show a negative response (-0.0411, p<0.10). This suggests that institutional owners may advocate for higher premiums and

thorough due diligence, possibly leading to longer deal times and a negative reaction from acquirers. For firms with low institutional ownership, the effect of gender diversity is not significant for bid premium or target abnormal returns, but acquirers still face negative abnormal returns (-0.0559, p<0.05). This finding emphasizes the influence of institutional owners in leveraging target board diversity for higher premiums, even at the acquirer's expense.

Panel B examines the effect of analyst following on acquisition outcomes. For firms with high analyst coverage, gender diversity on target boards is associated with higher bid premiums (6.5667, p<0.05) but no significant impact on deal completion time. Interestingly, acquirer abnormal returns are negatively affected (-0.0717, p<0.01), indicating a less favorable market reaction. Conversely, the only significant result in firms with low analyst coverage is a longer deal time (0.9260, p<0.05). This suggests that while diversity impacts deal processes in less-covered firms, the financial outcomes are less pronounced.

Panel C segments target firms based on the standard deviation of their returns. In high-volatility firms, TAR_PFDIR has a positive and significant relationship with bid premium (3.9333, p<0.05) and deal completion time (1.1130, p<0.01) and a negative relationship with acquirer abnormal returns (-0.0539, p<0.05). This suggests that acquirers may be willing to offer higher premiums for volatile firms with diverse boards, though at the cost of their returns. In contrast, low-volatility firms show less pronounced effects, with significant positive impacts only on target abnormal returns (0.1756, p<0.05).

Panel D focuses on managerial ability. In firms with high managerial ability, gender diversity on target boards results in higher bid premiums (0.9108, p<0.05) and longer deal times (1.0427, p<0.05). However, the negative relationship between board gender diversity and acquirer abnormal returns is insignificant in high managerial ability firms but significant in low managerial ability firms (-0.1033, p<0.05). This indicates that high managerial ability may moderate the adverse effects of diversity on acquirer returns, while low managerial ability exacerbates them.

Panel E explores the impact of R&D intensity on acquisition outcomes. For high-R&D firms, gender diversity in target boards significantly increases bid premiums (5.8946, p<0.10) and deal completion time (1.0477, p<0.01). Acquirer abnormal returns suffer a strong negative impact (-0.0864, p<0.01), highlighting the costs of acquiring high-R&D firms with diverse

boards. In low-R&D firms, the effects of diversity are less pronounced, with a marginally significant positive effect on bid premium and no significant effects on acquirer or target returns. Overall, Table 10 shows that the impact of target board gender diversity on acquisition outcomes varies significantly based on firm characteristics like institutional ownership, analyst following, return volatility, managerial ability, and R&D intensity. In firms with high institutional ownership, volatility, managerial ability, and R&D intensity, gender diversity on target boards consistently leads to higher bid premiums and longer deal times while negatively affecting acquirers' abnormal returns. These results suggest that gender-diverse boards may extract more value during acquisitions but at a potential cost to the acquiring firm's shareholders.

4.6 Post-Acquisition Performance of Acquirers of Gender-Diverse Targets

The main conclusion from the analyses conducted is that acquirers pay higher premiums, take longer to complete deals, and realize negative abnormal returns during the announcement period when they acquire gender-diverse targets. Based on these findings, an open question emerges: in the long run, how does acquiring gender-diverse targets affect acquirer performance? To explore this, we regress acquirers' post-acquisition performance on a gender-diverse target acquirer indicator variable and other control variables. The following model is estimated:

$$PAPER_{i,year0 to year+3} = \propto_0 + \beta_1 (Gender \ diverse \ target \ acquirer \ _{i,t}) + \sum \beta_i Controls_{i,t-1} + Year \ FE + Industry \ FE \ + \varepsilon_{i,t}$$

$$(4)$$

where $PAPER_{i,year0 \ to \ year \ t+3}$ do the following variables represent the post-acquisition performance: (i) equally weighted monthly buy-and-hold return for the 36 months following the acquisition month (AVGRET(EW)); (ii) value-weighted monthly buy-and-hold return for the 36 months (AVGRET(VW)) following the acquisition month; and (iii) average change in return on assets in the three-year post-acquisition period (AVGCHROA). The '*Gender diverse target acquirer* takes the value of one if a bidder acquires a gender-diverse target and zero if the firm acquires a male-only target. The control variables are the same as those in Equation (2).

Table 11 presents the findings from this analysis. In all three estimated models, the gender-diverse target acquirer indicator yields negative coefficients (-0.0312 in Model 1, - 0.0510 in Model 2, and -0.0096 in Model 3), with two of these coefficients being statistically

significant at conventional levels. This suggests that, over the long run, acquirers of genderdiverse targets tend to underperform compared to those acquiring male-only targets. One possible explanation for this underperformance is the higher premiums paid by acquirers for gender-diverse targets. Paying a higher premium can push these deals toward the negative net present value (NPV) boundary, which may not be immediately reflected in short-term metrics but becomes evident over time. This is also mirrored in the stock market's allocation of negative abnormal returns to acquirers of these deals during the announcement period. These findings align with our earlier observations that such acquisitions involve higher costs and longer completion times. However, further research may be necessary to fully understand the underlying factors contributing to the long-term underperformance and to determine whether other variables might influence these outcomes.

5. Conclusion

This study investigates the role of gender diversity on the boards of target firms in mergers and acquisitions, focusing on its impact on acquisition premiums, deal completion time, announcement period abnormal returns for both target and acquirer firms, and the acquirers' long-term performance. Our findings provide evidence that gender diversity at the target firm significantly influences acquisition outcomes, supporting our hypotheses.

First, our results confirm that companies with gender-diverse boards are less likely to receive acquisition bids. Across various models, firms with more female directors are less likely to become acquisition targets. This is consistent with the view that gender-diverse boards are more effective at governance and less prone to poor performance, making them less attractive as targets for acquisitions aimed at corporate restructuring. Second, we strongly support the idea that gender-diverse target boards are associated with higher bid premiums. Our analysis reveals that the presence of female directors, particularly when the target board has reached a critical mass of three or more women, leads to significantly higher acquisition premiums. This suggests that gender-diverse boards are more effective in negotiating favorable deals for their shareholders, extracting more value during acquisition negotiations.

Further, our findings show that gender-diverse boards extend the time required to complete deals. The thoroughness and diligence attributed to gender-diverse boards likely contribute to more extensive due diligence processes, lengthening the time to finalize acquisition transactions. However, while statistically significant, this extension in deal time appears to be economically modest, indicating that the additional scrutiny imposed by diverse boards does not drastically delay deal completion.

We find that gender diversity at the target firm positively impacts the target's announcement period abnormal returns, underscoring the value that gender-diverse boards bring to their shareholders during acquisition announcements. Boards with a critical mass of female directors are particularly effective in securing value for the target firm's shareholders, as evidenced by the higher abnormal returns around acquisition announcements. Conversely, we find a negative association between target board gender diversity and acquirers' announcement period abnormal returns. Acquirers consistently experience lower abnormal returns when they acquire gender-diverse target firms, likely due to the higher premiums paid and the extended time required to close these deals. This suggests that while gender diversity benefits the target's shareholders, it imposes a cost on acquirers' shareholders.

Moreover, our analysis extends to the long-term performance of acquirers. The regression results presented in Table 11 indicate that acquirers of gender-diverse targets underperform their peers who acquire male-only targets in the long run. The gender-diverse target acquirer indicator variable yields negative coefficients across all three models estimated (-0.0312 in Model 1, -0.0510 in Model 2, and -0.0096 in Model 3), with two being statistically significant at conventional levels. This finding implies that the higher premiums paid and longer deal completion times associated with acquiring gender-diverse targets may push these deals toward the negative net present value boundary. Consequently, the initial costs and challenges are reflected not only in the immediate negative abnormal returns during the announcement period but also in the acquirers' sustained underperformance over time.

Overall, this study contributes to the growing body of literature on the role of gender diversity in corporate governance, particularly in the context of mergers and acquisitions. Our findings highlight the importance of gender-diverse boards in enhancing firm value during acquisitions for target firms, while also revealing potential challenges for acquirers in both the short and long term. These results underscore the complex dynamics that gender diversity introduces into the M&A process, suggesting that while it can be beneficial for target shareholders, it may pose challenges for acquirers that need to be carefully managed.

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Table 1: Sample Distribution

This table presents sample distribution across years (Panel A) and industries (Panel B) of acquisition bids over the period: 1999-2022. The industry classification is as per Standard Industrial Classification (SIC).

Panel A:	Year-by	y-year distri	ibution	Panel B: Industry-by-industry distribution					
Year	Obs.	Percent	Total deal value (\$mil)	Industry category	Obs.	Perce nt			
1000	10	1 1 1	68 1/1 06	Business Services	3	0.18			
2000	86	5.02	106 583 00	Banking	86	5.02			
2000	60	3.50	91 627 53	Trading	12	0.7			
2001	57	3 33	58 342 93	Flectronic Equipment	749	43 75			
2002	88	5.14	211 184 20	Pharmaceutical Products	104	6 07			
2003	94	5 49	235 485 30	Petroleum and Natural Gas	38	2.22			
2005	108	6.31	216.437.50	Computers	60	3.5			
2006	118	6.89	177.838.10	Non-Metallic and Industrial Metal Mining	307	17.93			
2007	100	5.84	156,984,50	Medical Equipment	353	20.62			
2008	83	4.85	208,770.40						
2009	87	5.08	121,875.40						
2010	63	3.68	124,781.40						
2011	74	4.32	89,496.26						
2012	67	3.91	101,550.10						
2013	83	4.85	414,389.10						
2014	105	6.13	436,962.40						
2015	92	5.37	345,596.50						
2016	54	3.15	118,475.50						
2017	70	4.09	405,481.60						
2018	50	2.92	282,259.40						
2019	44	2.57	153,698.10						
2020	45	2.63	108,829.30						
2021	35	2.04	202,949.20						
2022	30	1.75	97,217.78						
Total	1,712	100	68,141.96	Total	1,712	100			

Table 2: Descriptive Statistics

 \mathbf{i}

`	Male only targets (Obs 667)		Gender div (Obs	erse targets 1045)	Mean test of difference	Median test of difference
	Mean	Median	Mean	Median	(t-stat and sig.)	(χ²-stat and sig.)
Panel A: Percentage of female directors						
Percentage of target female directors			0.1707	0.1429		
Target gender diverse dummy 2			0.8775	1.0000		
Target gender diverse dummy 3			0.1215	0.0000		
Percent of acquirer female directors	0.1348	0.0000	0.7145	0.1818	-3.54 (0.00)	197.16 (0.00)
Gender diverse bidder dummy	0.4948	0.0000	0.8995	1.0000	-12.00 (0.00)	76.42 (0.00)
Panel B: Targets' board and financial characteria	stics					
Target Board size	7.5847	7.0000	9.6383	9.0000	-19.69 (0.00)	343.44 (0.00)
Target CEO Duality	0.3148	0.0000	0.3187	0.0000	-1.06 (0.29)	0.73 (0.39)
Target Percentage of independent directors	0.6753	0.6667	0.6968	0.7000	-7.94 (0.00)	104.12 (0.00)
Target Market capitalization	5.7866	5.7579	6.6925	6.7113	-10.83 (0.00)	93.45 (0.00)
Target Leverage	0.1880	0.1149	0.2306	0.1830	-2.49 (0.01)	9.48 (0.00)
Target Cash holdings	0.1873	0.1135	0.1639	0.1022	3.42 (0.00)	7.13 (0.00)
Target Return on assets	-0.0577	0.0102	-0.0591	0.0119	1.51 (0.13)	0.02 (0.88)
Panel C: Acquirers' board and financial characte	eristics					
Board size	9.0270	9.0000	10.4737	10.0000	-12.49 (0.00)	158.77 (0.00)
CEO Duality	0.2894	0.0000	0.2785	0.0000	-1.42 (1.15)	1.22 (0.27)
Percentage of independent directors	0.2993	0.0167	0.2234	0.0160	0.70 (0.48)	11.61 (0.00)
Market capitalization	7.8756	7.7921	8.8905	8.8592	-12.28 (0.00)	142.08 (0.00)
Leverage	0.2166	0.1946	0.2538	0.2276	-3.94 (0.00)	21.19 (0.00)
Cash holdings	0.9821	0.1297	0.8114	0.1239	0.21 (0.83)	1.04 (0.31)
Return on assets	0.0107	0.0499	0.0437	0.0499	-1.47 (0.14)	3.82 (0.05)

This table presents mean and median values of the variables used in the study for two groups - (i) acquirers of male-only targets and (ii) acquirers of genderdiverse targets – and the statistics of the test of differences. *P*-values are reported in parentheses. All variables are defined in Appendix A.

Table 2: Descriptive Statistics (Contd.)

 \mathbf{i}

	Male only targets		Gender div	erse targets	Mean test of	Median test of
	Mean	Median	Mean	Median	difference (t-stat and sig.)	difference (χ²-stat and sig.)
Panel D: Deal Characteristics						
Cash only dummy	0.3928	0.0000	0.3866	0.0000	0.63 (0.53)	0.28 (0.59)
Stock only dummy	0.2009	0.0000	0.2019	0.0000	1.16 (0.25)	0.65 (0.41)
Unrelated dummy	0.4468	0.0000	0.4900	0.0000	0.75 (0.45)	0.42 (0.52)
Tender offer dummy	0.1649	0.0000	0.1789	0.0000	-0.90 (0.37)	0.35 (0.55)
Hostile bid dummy	0.1259	0.0000	0.1206	0.0000	-1.72 (0.08)	0.96 (0.32)
Serial bidder dummy	0.3823	0.0000	0.4421	0.0000	-2.98 (0.00)	6.48 (0.01)
Panel E: Bid premium, days taken and abnormal re	turn					
Bid premium (%)	0.5612	0.3445	0.8672	0.4126	-3.79 (0.00)	34.88 (0.00)
Days taken to complete the deal	111.9700	93.0000	126.7874	104.5000	-2.75 (0.00)	2.92 (0.08)
Log days	4.3749	4.5433	4.5314	4.6200	-3.16 (0.00)	6.19 (0.01)
Announcement period abnormal return, target (%)	0.2297	0.1704	0.2693	0.1906	-2.08 (0.04)	2.49 (0.11)
Announcement period abnormal return, acquirer (%)	-0.0054	-0.0036	-0.0125	-0.0065	-0.20 (0.84)	0.00 (0.95)

Table 3: Correlation Matrix

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Percent of acquirer female directors	(1)	1.0000							
Gender diverse bidder dummy	(2)	0.1107***	1.0000						
Percentage of target female directors	(3)	0.1103***	0.3789***	1.0000					
Gender diverse target dummy	(4)	0.0853***	0.2788***	0.7358***	1.0000				
Target gender diverse dummy 2	(5)	0.1000***	0.3606***	0.4960***	0.2224***	1.0000			
Target gender diverse dummy 3	(6)	0.0118	0.1517***	0.5338***	0.4712***	-0.3040***	1.0000		
Board size	(7)	0.0009	0.3700***	0.1776***	0.2893***	0.0970***	0.2571***	1.0000	
CEO Duality	(8)	0.0399*	-0.0298	0.0120	0.0342	-0.0240	0.0203	-0.0098	1.0000
Percentage of independent directors	(9)	0.5717***	-0.1027***	-0.0353	-0.0170	-0.0178	-0.0258	-0.0472*	0.1041***
Market capitalization	(10)	-0.0039	0.3917***	0.2333***	0.2846***	0.1128***	0.2478***	0.5766***	0.0020
Leverage	(11)	0.1141***	0.0551**	0.1046***	0.0948***	0.0746***	0.0298	0.0096	0.0340
Cash holdings	(12)	0.1602***	-0.1000***	-0.0133	-0.0053	-0.0184	-0.0156	-0.0887***	-0.0064
Return on assets	(13)	-0.0350	0.0825***	0.0414*	0.0356	0.0317	0.0383	0.0806***	0.0499**
Target Board size	(14)	0.0043	0.2106***	0.2306***	0.4300***	0.1605***	0.3604***	0.6123***	0.0195
Target CEO Duality	(15)	-0.0617**	0.0005	-0.0081	0.0256	-0.0248	0.0561**	0.0231	0.2383***
Target Percentage of independent directors	(16)	0.0156	0.0138	0.1530***	0.1885***	-0.0430*	0.1610***	0.0725***	0.0416*
Target Market capitalization	(17)	0.0394	0.1628***	0.1828***	0.2534***	0.1607***	0.1397***	0.2882***	0.0061
Target Leverage	(18)	0.0478**	0.0296	0.0564**	0.0602**	0.0771***	0.0293	0.0061	0.0337
Target Cash holdings	(19)	-0.0224	-0.0712***	-0.0383	-0.0824***	-0.0153	-0.0889***	-0.2275***	-0.0835***
Target Return on assets	(20)	0.0020	-0.0201	-0.0455*	-0.0364	0.0010	-0.0073	0.0318	0.0650***
Bid premium (%)	(21)	-0.0046	0.0460*	0.1651***	0.0912***	-0.0521**	0.1779***	0.0229	-0.0115
Announcement period abnormal return, acq. (%)	(22)	0.0305	0.0309	-0.0367	0.0049	-0.0557**	0.0173	0.0581**	-0.0306
Announcement period abnormal return, tar. (%)	(23)	-0.0412*	0.0847***	0.1060***	0.0504**	0.0062	0.0971***	0.0622**	-0.0232
Days taken to complete the deal	(24)	0.0028	-0.0217	0.0467*	0.0735***	0.0736***	0.0110	0.0881***	0.0334
Cash only dummy	(25)	-0.0090	0.0765***	0.0223	-0.0152	-0.0162	0.0210	-0.0085	-0.0247
Stock only dummy	(26)	0.0104	-0.1096***	-0.0397	-0.0280	0.0152	-0.0255	0.0059	-0.0244
Unrelated dummy	(27)	-0.0093	0.0244	0.0525**	-0.0180	0.0355	0.0085	-0.0221	-0.0442*
Tender offer dummy	(28)	-0.0377	0.0588**	0.0515**	0.0218	-0.0188	0.0646***	0.0175	-0.0067
Hostile bid dummy	(29)	-0.0017	-0.0235	0.0169	0.0416*	-0.0196	0.0232	-0.0276	-0.0489**
Serial bidder dummy	(30)	0.0111	0.1248***	0.0507**	0.0720***	0.0070	0.0940***	0.1640***	0.0060

Table 3:	Correlation	Matrix ((Contd.))
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		(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Percentage of independent directors	(9)	1.0000							
Market capitalization	(10)	-0.0464*	1.0000						
Leverage	(11)	0.0771***	0.1630***	1.0000					
Cash holdings	(12)	0.1016***	-0.0869***	-0.0801***	1.0000				
Return on assets	(13)	-0.0147	0.1377***	0.0218	-0.0646***	1.0000			
Target Board size	(14)	-0.0192	0.3841***	0.0203	-0.0201	0.0571**	1.0000		
Target CEO Duality	(15)	-0.0387	0.0088	0.0161	-0.0165	0.0337	0.0754***	1.0000	
Target Percentage of independent directors	(16)	0.0307	0.0102	-0.0380	0.0192	0.0196	0.1010***	0.0341	1.0000
Target Market capitalization	(17)	0.0549**	0.5166***	0.2087***	-0.0136	0.0879***	0.3637***	-0.0954***	0.0234
Target Leverage	(18)	0.0535**	0.1473***	0.3742***	-0.0647***	0.0315	0.0836***	-0.0154	-0.0394
Target Cash holdings	(19)	-0.0363	-0.3025***	-0.2782***	0.2510***	-0.1151***	-0.2074***	-0.0218	0.0113
Target Return on assets	(20)	0.0460*	0.0876***	0.0307	-0.0166	0.1443***	0.0809***	0.0135	-0.0545**
Bid premium (%)	(21)	-0.0203	0.0370	0.0805***	-0.0210	0.0145	0.0312	0.0108	0.0561**
Announcement period abnormal return, acq. (%)	(22)	0.0203	0.0839***	0.0822***	-0.0107	0.0170	0.0188	-0.0478**	0.0096
Announcement period abnormal return, tar. (%)	(23)	-0.0558**	0.0365	-0.0227	-0.0406*	0.0328	-0.0004	0.0469*	0.0196
Days taken to complete the deal	(24)	0.0549**	0.0223	0.0470*	-0.0194	0.0116	0.1434***	-0.0739***	0.0444*
Cash only dummy	(25)	-0.0420*	0.1004***	-0.0479**	-0.0058	0.0915***	-0.0862***	0.0457*	-0.0207
Stock only dummy	(26)	0.0147	-0.1789***	-0.0451*	0.0157	-0.1551***	0.0802***	0.0081	-0.0593**
Unrelated dummy	(27)	-0.0167	0.0671***	-0.0369	0.0804***	-0.0307	-0.0491**	0.0027	0.0069
Tender offer dummy	(28)	-0.0382	0.0246	-0.0568**	-0.0488**	0.0326	-0.0115	0.0424*	0.0015
Hostile bid dummy	(29)	-0.0117	0.0519**	0.0801***	0.0373	0.0181	0.0152	-0.0215	0.0453*
Serial bidder dummy	(30)	-0.0176	0.3591***	0.0355	0.0157	0.0512**	0.1053***	0.0880***	-0.0132

Table 3: Correlation Matrix (Contd.)

		(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Target Market capitalization	(17)	1.0000							
Target Leverage	(18)	0.3625***	1.0000						
Target Cash holdings	(19)	-0.2789***	-0.2501***	1.0000					
Target Return on assets	(20)	0.3446***	0.0506**	-0.2324***	1.0000				
Bid premium (%)	(21)	0.0243	0.0447*	-0.0023	-0.0509**	1.0000			
Announcement period abnormal return, acq. (%)	(22)	-0.0162	0.0306	-0.0617**	0.0049	-0.0065	1.0000		
Announcement period abnormal return, tar. (%)	(23)	-0.2441***	-0.0795***	0.0433*	-0.1804***	0.1148***	0.0551**	1.0000	
Days taken to complete the deal	(24)	0.3874***	0.1495***	-0.1340***	0.1628***	-0.0618**	-0.0408	-0.1459***	1.0000
Cash only dummy	(25)	-0.2824***	-0.1799***	0.0962***	-0.0401*	-0.0426*	0.1448***	0.2390***	-0.2640***
Stock only dummy	(26)	0.0510**	-0.0144	-0.0263	-0.0158	-0.0570**	-0.1030***	-0.1093***	0.1638***
Unrelated dummy	(27)	-0.1140***	-0.0502**	0.0941***	-0.0293	0.0109	-0.0064	0.0597**	-0.1526***
Tender offer dummy	(28)	-0.1673***	-0.0874***	0.0815***	-0.0670***	0.0039	0.0445*	0.2090***	-0.2589***
Hostile bid dummy	(29)	0.2053***	0.0588**	0.0491**	0.0407*	0.1183***	0.0598**	-0.1357***	0.0305
Serial bidder dummy	(30)	0.0132	-0.0515**	-0.0562**	-0.0157	0.0222	0.0678***	0.0323	-0.1107***

Table 3: Correlation Matrix (Contd.)

		(25)	(26)	(27)	(28)	(29)	(30)
	(25)	1.0000	(20)	(27)	(20)	(2))	(50)
Cash only dummy	(25)	1.0000					
Stock only dummy	(26)	-0.4009***	1.0000				
Unrelated dummy	(27)	0.1509***	-0.1057***	1.0000			
Tender offer dummy	(28)	0.3052***	-0.1802***	0.0571**	1.0000		
Hostile bid dummy	(29)	-0.0902***	-0.1213***	0.0273	-0.0396	1.0000	
Serial bidder dummy	(30)	0.1629***	-0.1608***	0.1275***	0.0676***	0.0615**	1.0000

Note: This table presents the correlation matrix for the variables used in the regression models. The asterisk *, ** or *** denotes statistical significance at the 10%, 5% or 1%, respectively. All variables are defined in Appendix A.

Table 4: Likelihood of a Gender Diverse Firm Becoming a Target

This table reports regression estimates for Equation (1) when the dependent variable is an indicator variable that takes the value of 1 if a company receives a bid, and zero otherwise. Model (1) uses the percentage of female directors on the board (PFDIR) as the main explanatory variable while model (2) uses an indicator variable that takes the value of one if a board is gender diverse and zero otherwise as the main explanatory variable. The p-values are reported in parentheses, while superscript *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively. Variable definitions are given in Appendix A.

	Model (1)	Model (2)			
	PFEM	DFEM			
	DV=D_TARGET				
PFDIR/DFDIR	-0.6011***	-0.5001***			
	(0.01)	(0.00)			
BSIZE	0.0088	0.0366**			
	(0.54)	(0.01)			
CEODAUL	-0.6010***	-0.5965***			
	(0.00)	(0.00)			
PINDDIR	-1.0188***	-1.0255***			
	(0.00)	(0.00)			
SIZE	-0.0982***	-0.0995***			
	(0.00)	(0.00)			
LEV	0.0028***	0.0028***			
	(0.00)	(0.00)			
CASH	-0.0021***	-0.0023***			
	(0.00)	(0.00)			
GROWTH	0.5698***	0.5588***			
	(0.00)	(0.00)			
ROA	-0.1906***	-0.1903***			
	(0.00)	(0.00)			
TOBINQ	-0.1614***	-0.1478***			
	(0.00)	(0.00)			
Constant	0.9182	0.9263			
	(0.71)	(0.70)			
Year and Industry FE	Yes	Yes			
N	77,801	77,801			
Pseudo R2	0.3422	0.3465			
Wald statistic	2461.57***	2526.63***			

Table 5: Target Gender Diversity and Acquisition Premium

This table reports regression estimates for Equation (2) when the dependent variable is the bid premium paid to targets. Models (1) and (4) include all observations; Models (1) and (4) include all observations; Model (1) controls for target gender diversity (TAR_PFDIR) as the main independent variable. Model (2) includes controlling for acquirer gender diversity (ACQ_PFDIR) and Model (3) includes two categorical variables (TAR_DMYFDIR_2 & TAR_DMYFDIR_3) for target firms with 2 or less female directors and target firms with 3 or more female directors in the board. Model (4) includes the interaction of the percentage of gender diversity between target and acquirer firms (ACQ_PFDIR× TAR_PFDIR). The p-values are reported in parentheses, while superscript *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively. Variable definitions are given in Appendix A.

	BID PREMIUM	BID PREMIUM	BID PREMIUM	BID PREMIUM
	Model (1)	Model (2)	Model (3)	Model (4)
LAMBDA	0.1274	0.1254	0.1234	0.1097
	(0.24)	(0.25)	(0.26)	(0.29)
TAR PFDIR	3.7146**	3.8161**	3.7837**	
	(0.03)	(0.03)	(0.03)	
ACO PFDIR		-0.0289	-0.0546	
<u> </u>		(0.12)	(0.27)	
ACO PFDIR× TAR PFDIR			0.1254	
~			(0.54)	
TAR DMYFDIR 2			· · · ·	-0.1164
				(0.37)
TAR DMYFDIR 3				1.8209**
				(0.01)
ACO BDSIZE	0.0204	0.0217	0.0217	0.0205
<	(0.65)	(0.63)	(0.63)	(0.65)
ACO CEODUAL	-0.2361	-0.2379	-0.2368	-0.2191
<	(0.19)	(0.18)	(0.19)	(0.20)
ACO PINDIR	0.0013	0.0044	0.0046	0.0006
~_	(0.73)	(0.32)	(0.30)	(0.87)
TAR BDSIZE	-0.0123	-0.0133	-0.0130	-0.0394
	(0.82)	(0.80)	(0.81)	(0.49)
TAR CEODUAL	-0.0199	-0.0273	-0.0274	-0.0632
	(0.92)	(0.89)	(0.89)	(0.75)
TAR PINDIR	0.5064	0.5017	0.4962	0.4644
—	(0.19)	(0.19)	(0.19)	(0.28)
ACO SIZE	-0.0408	-0.0416	-0.0412	-0.0512
<	(0.54)	(0.53)	(0.54)	(0.46)
ACO LEV	1.0695*	1.0944*	1.0944*	1.1692**
	(0.05)	(0.05)	(0.05)	(0.04)
ACQ CASH	-0.0115	-0.0085	-0.0094	-0.0140
	(0.26)	(0.43)	(0.38)	(0.23)
ACQ ROA	0.1483	0.1424	0.1400	0.1823
	(0.40)	(0.42)	(0.42)	(0.29)
TAR SIZE	-0.0440	-0.0445	-0.0446	-0.0086
—	(0.48)	(0.47)	(0.47)	(0.89)
TAR LEV	0.1855	0.1859	0.1889	0.1570
_	(0.76)	(0.76)	(0.76)	(0.80)
TAR CASH	-0.3052	-0.3152	-0.3127	-0.2193
—	(0.51)	(0.50)	(0.50)	(0.63)
TAR_ROA	-0.4717	-0.4740	-0.4730	-0.5384
	(0.27)	(0.27)	(0.27)	(0.20)
ALLCASH	-0.5420***	-0.5372***	-0.5393***	-0.5312***
	(0.00)	(0.00)	(0.00)	(0.00)
ALLSTOCK	-0.4751***	-0.4727***	-0.4747***	-0.4975***
	(0.00)	(0.00)	(0.00)	(0.00)
UNRELATED	-0.0267	-0.0309	-0.0295	0.0023
	(0.87)	(0.85)	(0.85)	(0.99)
TENDEROFFER	0.2401**	0.2346**	0.2352**	0.2165*
	(0.03)	(0.04)	(0.04)	(0.05)
HOSTILE	1.2105**	1.2110**	1.2095**	1.1600**

	(0.02)	(0.02)	(0.02)	(0.02)
SERIAL	0.0493	0.0512	0.0513	0.0109
	(0.82)	(0.81)	(0.81)	(0.96)
Constant	0.6387	0.6412	0.6432	0.8650
	(0.54)	(0.54)	(0.54)	(0.37)
R^2 /Pseudo-adjusted R^2	0.1407	0.1409	0.1410	0.1478
Ν	1,712	1,712	1,712	1,712

Table 6: Target Gender Diversity and Time Taken to Complete the Deals

This table reports regression estimates for Equation (2) when the dependent variable is the natural logarithm of number of days taken to complete the deal value. Models (1) and (4) include all observations; Model (1) controls for target gender diversity (TAR_PFDIR) as the main independent variable. Model (2) includes controlling for acquirer gender diversity (ACQ_PFDIR) and Model (3) includes two categorical variables (TAR_DMYFDIR_2 & TAR_DMYFDIR_3) for target firms with 2 or less female directors and target firms with 3 or more female directors in the board. Model (4) includes the interaction of the percentage of gender diversity between target and acquirer firms (ACQ_PFDIR× TAR_PFDIR). The p-values are reported in parentheses, while superscript *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively. Variable definitions are given in Appendix A.

	LOG (DAYS)	LOG (DAYS)	LOG (DAYS)	LOG (DAYS)
	Model (1)	Model (2)	Model (3)	Model (4)
LAMBDA	0.1313*	0.1304*	0.1292*	0.1285*
	(0.05)	(0.05)	(0.05)	(0.05)
TAR PFDIR	0.7865***	0.8529***	0.8318***	
	(0.00)	(0.00)	(0.00)	
ACO PFDIR	()	-0.0227	-0.0402	
		(0.11)	(0.38)	
ACO PFDIR×TAR PFDIR		(0011)	0.0832	
			(0.64)	
TAR DMYFDIR 2			(0101)	0.0573
				(0.34)
TAR DMYFDIR 3				0 2723**
mit_bin11bit_b				(0.01)
ACO BDSIZE	0.0396**	0.0400**	0.0399**	0.0398**
	(0.03)	(0.03)	(0.03)	(0.03)
ACO CEODUAL	-0.0096	-0.0088	-0.0075	-0.0072
neg_eleberm	(0.89)	(0.90)	(0.91)	(0.91)
ACO PINDIR	0.0054*	0.0078**	0.0080**	0.0053*
heg_indbik	(0.06)	(0.03)	(0.020)	(0.06)
TAR BDSIZE	0.0171	0.0168	0.0170	0.0125
	(0.22)	(0.23)	(0.22)	(0.40)
TAR CEODIIAI	(0.22) 0.0047	-0.0003	-0.0003	-0.0003
TAR_CEODOAE	(0.94)	(1.00)	(1.00)	(1.00)
TAR DINIDIR	-0.0046	-0.0076	(1.00)	0.0109
	-0.0040	-0.0070	(0.94)	(0.93)
ACO SIZE	-0.15/11***	-0 153/***	0.1527***	-0 15/11***
ACQ_SIZE	(0.00)	-0.1334	(0.00)	(0.00)
ACO RIEV	(0.00)	(0.00)	(0.00)	(0.00)
ACQ_BLEV	-0.0992	-0.0646	-0.0872	-0.0801
	(0.01)		(0.03)	-0.0035
AcQ_CASH	-0.0038	-0.0009	-0.0017	-0.0035
ACO POA	(0.70)	(0.94)	(0.90)	(0.78)
ACQ_KOA	-0.0314	-0.0348	(0.21)	-0.0490
TAD SIZE	(0.25)	(0.22) 0.1479***	(0.21)	(0.20)
IAK_SIZE	(0.00)	(0.00)	(0.00)	(0.00)
TAD DIEV	(0.00)	(0.00)	(0.00)	(0.00)
TAK_BLEV	(0.0392)	(0.0420)	(0.0400)	(0.0273)
TAD CASH	(0.79)	(0.77)	(0.73)	(0.03)
TAR_CASH	-0.5511	-0.3342	-0.3322	-0.3493
TAD DOA	(0.03)	(0.03)	(0.05)	(0.03)
TAR_ROA	(0.00)	(0.00)	(0.00)	(0.00)
ALLCASH	(0.00)	(0.00)	(0.00)	(0.00)
ALLCASH	0.0202	(0.0243)	0.0233	(0.0232)
ALISTOCK	(0.81)	(0.70)	(0.78)	(0./9)
ALLSIUCK	$(0.042)^{++++}$	0.3409	0.3403^{+++}	0.3392^{+++}
INDELATED	(0.00)	(0.00)	(0.00)	(0.00)
UNKELAIED	-0.200/***	-0.2000****	-0.2034***	-0.19/0***
TENDEDOFFED	(0.00)	(0.00)	(0.00)	(0.00)
IENDEKUFFEK	-0.1259*	-0.1296*	-0.1294*	-0.1291*
	(0.08)	(0.07)	(0.07)	(0.07)

HOSTILE	-0.7830**	-0.7879**	-0.7888**	-0.7818**
	(0.03)	(0.03)	(0.03)	(0.03)
SERIAL	-0.0193	-0.0176	-0.0175	-0.0284
	(0.76)	(0.78)	(0.78)	(0.66)
Constant	3.5289***	3.4974***	3.4981***	3.5824***
	(0.00)	(0.00)	(0.00)	(0.00)
R2/Pseudo-adjusted R2	0.2002	0.2019	0.2020	0.1986
Ν	1,712	1,712	1,712	1,712

Table 7: Target Gender Diversity and Targets Announcement Period Abnormal Returns

This table reports regression estimates for Equation (3) when the dependent variable is 3-day announcement period abnormal returns of the target firms. Models (1) and (4) include all observations; Model (1) controls for target gender diversity (TAR_PFDIR) as the main independent variable. Model (2) includes controlling for acquirer gender diversity (ACQ_PFDIR) and Model (3) includes two categorical variables (TAR_DMYFDIR_2 & TAR_DMYFDIR_3) for target firms with 2 or less female directors and target firms with 3 or more female directors in the board. Model (4) includes the interaction of the percentage of gender diversity between target and acquirer firms (ACQ_PFDIR× TAR_PFDIR). The p-values are reported in parentheses, while superscript *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively. Variable definitions are given in Appendix A.

	TAR CAR 3	TAR CAR 3	TAR CAR 3	TAR CAR 3
	Model (1)	<u>IAK_CAK_5</u> Model (2)	Model (3)	<u>Madal (4)</u>
		0.0158		0.0156
LAMBDA	(0.11)	(0.11)	(0.01/1)	(0.12)
	(0.11)	(0.11)	(0.08)	(0.12)
BIDPREM	(0.15)	0.0093	0.0095	0.0094
TAD DEDID	(0.13)	(0.10)	(0.13)	(0.10)
TAK_FFDIK	(0.06)	(0.04)	(0.02)	
ACO DEDIR	(0.00)	(0.04)	(0.02)	
ACQ_PFDIR		-0.0038	(0.21)	
ACO DEDIDY TAD DEDID		(0.55)	(0.21)	
ACQ_ITDIK^ TAK_ITDIK			(0.13)	
TAR DMVEDIR 2			(0.15)	0.0233
TAR_DWITDIR_2				(0.14)
TAD DMVEDID 3				0.14)
TAR_DWITDIR_5				(0.0003)
ACO BDSIZE	0.0044	0.0046	0.0046	0.0045
ACQ_DDSIZE	(0.18)	(0.17)	(0.16)	(0.18)
ACO CEODUAI	-0.0161	-0.0163	-0.0171	-0.0151
ACQ_CLODOAL	(0.31)	(0.30)	(0.28)	(0.35)
ACO PINDIR	0.0002	0.0006	0.0005	0.0002
AcQ_INDIK	(0.67)	(0.31)	(0.46)	(0.70)
TAR BOSIZE	0.079**	0.0078**	0.0076**	0.0063*
TAIC_DDSIZE	(0.03)	(0.03)	(0, 04)	(0.08)
TAR CEODUAL	(0.03) 0.0267	0.0257	(0.04)	0.0254
	(0.11)	(0.12)	(0.12)	(0.12)
TAR PINDIR	0.0004	-0.0002	0.0037	0.0026
	(0.99)	(0.99)	(0.88)	(0.92)
ACO SIZE	0.0145**	0.0143**	0.0140**	0.0142**
neg_sill	(0.04)	(0.04)	(0.04)	(0.04)
ACO BLEV	0.0051	0.0084	0.0084	0.0071
	(0.91)	(0.85)	(0.85)	(0.87)
ACO CASH	-0.0007	-0.0003	0.0003	-0.0007
	(0.77)	(0.89)	(0.89)	(0.78)
ACO ROA	0.0229	0.0221	0.0238	0.0228
~_	(0.23)	(0.24)	(0.23)	(0.22)
TAR SIZE	-0.0452***	-0.0453***	-0.0452***	-0.0449***
—	(0.00)	(0.00)	(0.00)	(0.00)
TAR BLEV	0.0230	0.0230	0.0209	0.0210
—	(0.59)	(0.59)	(0.62)	(0.62)
TAR CASH	-0.0381	-0.0394	-0.0412	-0.0379
—	(0.44)	(0.42)	(0.40)	(0.44)
TAR ROA	-0.0941**	-0.0945**	-0.0952**	-0.0948**
—	(0.02)	(0.02)	(0.02)	(0.02)
ALLCASH	0.0643***	0.0649***	0.0665***	0.0642***
	(0.00)	(0.00)	(0.00)	(0.00)
ALLSTOCK	-0.0156	-0.0153	-0.0138	-0.0161
	(0.37)	(0.38)	(0.42)	(0.35)
UNRELATED	-0.0003	-0.0009	-0.0019	-0.0002
	(0.98)	(0.95)	(0.90)	(0.99)
TENDEROFFER	0.0888 * * *	0.0881***	0.0876***	0.0886***

	(0.00)	(0.00)	(0.00)	(0.00)
HOSTILE	-0.0783***	-0.0782***	-0.0772***	-0.0782***
	(0.00)	(0.00)	(0.00)	(0.00)
SERIAL	-0.0270*	-0.0268*	-0.0268*	-0.0279*
	(0.09)	(0.10)	(0.10)	(0.08)
Constant	0.1330	0.1334	0.1320	0.1396
	(0.28)	(0.28)	(0.29)	(0.26)
R2/Pseudo-adjusted R2	0.2044	0.2050	0.2071	0.2046
Ν	1,712	1,712	1,712	1,712

Table 8: Target Gender Diversity and Acquirers Announcement Period Abnormal Returns This table reports regression estimates for Equation (3) when the dependent variable is 3-day announcement period abnormal returns of the acquirer's firm. Models (1) and (4) include all observations; Model (1) controls for target gender diversity (TAR_PFDIR) as the main independent variable. Model (2) includes controlling for acquirer gender diversity (ACQ_PFDIR) and Model (3) includes two categorical variables (TAR_DMYFDIR_2 & TAR_DMYFDIR_3) for target firms with 2 or less female directors and target firms with 3 or more female directors in the board. Model (4) includes the interaction of the percentage of gender diversity between target and acquirer firms (ACQ_PFDIR× TAR_PFDIR). The p-values are reported in parentheses, while superscript *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively. Variable definitions are given in Appendix A.

significance at the 1076, 576 and	ACO CAD 2			
	$\frac{AUQ_CAK_3}{(1)}$	$\frac{ACQ_CAR_3}{(2)}$	$\frac{AUQ_UAK_3}{(2)}$	$\frac{ACQ_CAK_3}{(4)}$
		(2)	(3)	(4)
LAMBDA	0.0035	0.0035	0.0038	0.0035
DIDDEN	(0.26)	(0.25)	(0.21)	(0.26)
BIDPREM	-0.0004	-0.0004	-0.0004	-0.0006
	(0.20)	(0.21)	(0.22)	(0.10)
IAK_PFDIK	-0.0412**	-0.0439**	-0.039/**	
	(0.02)	(0.01)	(0.03)	
ACQ_PFDIR		0.0007	0.0040	
		(0.68)	(0.48)	
ACQ_PFDIR× TAR_PFDIR			0.0832	
TAD DAMEDID 2			(0.64)	0.0100***
TAR_DMYFDIR_2				-0.0109***
TAD DAMEDID 2				(0.01)
TAR_DMYFDIR_3				-0.0106*
ACO DDGIZE	0.0005	0.0005	0.0005	(0.09)
ACQ_BDSIZE	0.0005	0.0005	0.0005	0.0005
	(0.51)	(0.55)	(0.53)	(0.53)
ACQ_CEODUAL	-0.0033	-0.0035	-0.0030	-0.0038
	(0.40)	(0.41)	(0.39)	(0.30)
ACQ_PINDIR	0.0002	0.0001	(0, 0, 0)	0.0002
TAD DDCIZE	(0.28)	(0.57)	(0.08)	(0.28)
TAR_BDSIZE	0.0011	0.0011	0.0011	0.0014*
TAD CEODUAL	(0.16)	(0.15)	(0.17)	(0.10)
TAR_CEODUAL	-0.0064	-0.0062	-0.0062	-0.0062
	(0.11)	(0.12)	(0.12)	(0.13)
TAR_PINDIR	0.0049	(0.0050)	(0.005)	(0.67)
ACO SIZE	(0.48)	(0.47)	(0.39)	(0.07)
ACQ_SIZE	(0.21)	0.0019	(0.21)	(0.22)
ACO DIEV	(0.21)	(0.19)	(0.21)	(0.23)
ACQ_BLEV	(0.10)	(0.11)	(0.10)	(0.0223)
	(0.10)	(0.11)	(0.10)	(0.10)
ACQ_CASH	(0.0000)	-0.0000	(0.0001)	(1,00)
ACO POA	0.0037	(0.97)	(0.90)	(1.00)
ACQ_KOA	-0.0037	-0.0030	-0.0032	-0.0034
TAR SIZE	-0.0037**	-0.0037**	-0.0036**	-0.0035**
TAIC_SIZE	(0.01)	(0.0057)	(0.02)	(0.003)
TAR RIEV	0.0166	0.0166	0.0162	(0.02) 0.0174*
TAIL_DEE V	(0.10)	(0.10)	(0.11)	(0, 09)
TAR CASH	-0.0212*	-0.0210*	-0.0213*	-0.0204
	(0.0212)	(0.0210)	(0.09)	(0.10)
TAR ROA	0.0030	0.0030	0.0029	0.0028
TAK_KOA	(0.67)	(0.66)	(0.67)	(0.68)
ALLCASH	0.0171***	0.0170***	0.0173***	0.0172***
THE CHOIL	(0,00)	(0,00)	(0,01)	(0,00)
ALLSTOCK	-0.0025	-0.0026	-0.0023	-0.0025
	(0.66)	(0.66)	(0.69)	(0.67)
UNRELATED	-0.0057	-0.0056	-0.0057	-0.0055
	(0.12)	(0.13)	(0.11)	(0.13)
TENDEROFFER	0.0024	0.0025	0.0024	0.0021
			0.0021	0.0021

	(0.54)	(0.51)	(0.53)	(0.59)
HOSTILE	0.0171***	0.0171***	0.0173***	0.0168***
	(0.00)	(0.00)	(0.00)	(0.00)
SERIAL	0.0032	0.0032	0.0031	0.0033
	(0.38)	(0.39)	(0.40)	(0.37)
Constant	-0.0718***	-0.0719***	-0.0721***	-0.0710***
	(0.01)	(0.01)	(0.01)	(0.01)
R2/Pseudo-adjusted R2	0.0883	0.0887	0.0901	0.0897
Ν	1,712	1,712	1,712	1,712

Table 9: Executive vs Non-executive and Independent vs Non-independent Distinction

This table presents the regression results for Equation (3) by replacing the TAR_PFDIR variable with (i) the percentages of executive (TAR_PFDIR_EXEC) and non-executive (TAR_PFDIR_NON_EXEC) female directors of target firms (Panel A), and (ii) the percentages of independent (TAR_PFDIR_IND) and non-independent (TAR_PFDIR_NON_IND) female directors of target firms (Panel B). All model specifications employ robust standard errors with one-way clustered t-statistics reported in parentheses below each coefficient. The superscripts ***, **, and * correspond to statistical significance at the one-, five-, and ten-percent levels, respectively. See Appendix A for the variable definitions.

Panel A: Executive Vs. Non-Executive Target Female Directors in the Board						
	Model (1)	Model (2)	Model (3)	Model (4)		
	BID PREMIUM	LOG (DAYS)	ACQ_CAR_3	TAR_CAR_3		
TAR_PFDIR_EXEC	-0.2042	8.6320	-0.1332**	0.2611		
	(0.83)	(0.20)	(0.05)	(0.40)		
TAR_PFDIR_NON_EXEC	0.8173**	3.9468**	-0.0550**	0.0401		
	(0.02)	(0.03)	(0.02)	(0.67)		
Constant	2.2878	-1.9847	-0.0448	0.0490		
	(0.18)	(0.23)	(0.10)	(0.69)		
Controls	Yes	Yes	Yes	Yes		
Year & Industry Fixed Effects	Yes	Yes	Yes	Yes		
Ν	1,002	1,279	1,279	1,279		
\mathbb{R}^2	0.2772	0.1609	0.0907	0.2008		
Panel B: Independent Vs. Non-Independe	ent Target Female Directors in the	Board				
	Model (1)	Model (2)	Model (3)	Model (4)		
	BID PREMIUM	LOG (DAYS)	ACQ_CAR_3	TAR_CAR_3		
TAR_PFDIR_IND	0.7218**	4.2850**	-0.0635**	0.0709		
	(0.04)	(0.03)	(0.01)	(0.46)		
TAR_PFDIR_NON_IND	0.5219	6.1534	-0.0858*	0.1172		
	(0.47)	(0.17)	(0.07)	(0.57)		
Constant	0.2716	-1.5771	-0.0536**	0.0784		
	(0.62)	(0.26)	(0.04)	(0.49)		
Controls	Yes	Yes	Yes	Yes		
Year & Industry Fixed Effects	Yes	Yes	Yes	Yes		
Ν	995	1,271	1,271	1,271		
R ²	0.2915	0.1613	0.0896	0.1990		

Table 10: Multivariate Tests Split on Target Characteristics

This table presents the regression results for acquisition performance, premiums, and due diligence. Panel A segments whether the target firm has a high or low institutional ownership at the median value. Panel B segments whether the target firm has a high or low analyst following segmentation at the median value, while Panel C segments on return volatility of target firms. Panel D segments whether target firm has a high managerial ability or low managerial ability at the median value. Panel E segments whether target firm has a high model specifications employ robust standard errors with one-way clustered t-statistics reported in parentheses below each coefficient. The superscripts ***, **, and * correspond to statistical significance at the one-, five-, and ten-percent levels, respectively. See Appendix A for the variable definitions.

Panel A: Institutional Ov	vnership							
	BID PR	EMIUM	LOG (DAYS)	ACQ (CAR 3	TAR CAR 3	
	High_IO	Low_IO	High_IO	Low_IO	High_IO	Low_IO	High_IO	Low_IO
TAR PFDIR	6.8374***	-0.9143	1.2343***	0.6626*	-0.0411*	-0.0559**	0.4272***	0.0178
_	(0.01)	(0.11)	(0.00)	(0.07)	(0.10)	(0.03)	(0.00)	(0.87)
Diff in Coeff.		· · ·	, ,	· · ·	· · · ·	· · ·		
Chi ²								
Constant	3.1627	3.2256	2.8331***	3.8702***	0.0095	-0.0457	-0.0516	0.0255
	(0.11)	(0.11)	(0.00)	(0.00)	(0.75)	(0.19)	(0.80)	(0.90)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year & Industry Fixed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	782	930	642	761	782	930	782	930
\mathbf{R}^2	0 3184	0.0940	0.2761	0 2209	0 1232	0 1417	0 2704	0 3335
Panel A: Analysts Follow	ving	0.0910	0.2701	0.2209	0.1202	0.1117	0.2701	0.0000
	BID PR	EMIUM	LOG	DAYS)	ACO	CAR 3	TAR (CAR 3
	High AF	Low AF	High AF	Low AF	High AF	Low AF	High AF	Low AF
TAR PFDIR	6.5667**	0.2750	0.5392	0.9260**	-0.0717***	-0.0211	0.2474**	0.1494
_	(0.03)	(0.61)	(0.14)	(0.01)	(0.01)	(0.36)	(0.02)	(0.21)
Diff in Coeff. Chi ²		. ,						
Constant	1.5850	2.5003**	3.7156***	4.6938***	-0.0943**	-0.0250	0.4475***	-0.1146
	(0.17)	(0.03)	(0.00)	(0.00)	(0.04)	(0.54)	(0.00)	(0.62)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year & Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ν	857	855	680	723	857	855	857	855
R ²	0.2293	0.0913	0.2466	0.2153	0.1476	0.0854	0.2649	0.3094

Panel C: Standard Deviation of Target Returns								
	BID PR	EMIUM	LOG (DAYS)	ACQ	CAR 3	TAR (CAR 3
	High_RetStd	Low_RetStd	High_RetStd	Low_RetStd	High_RetStd	Low_RetStd	High_RetStd	Low_RetStd
TAR_PFDIR	3.9333**	4.1232	1.1130***	0.4224	-0.0539**	-0.0254	0.2404*	0.1756**
	(0.04)	(0.13)	(0.00)	(0.25)	(0.05)	(0.30)	(0.07)	(0.03)
Diff in Coeff.								
Chi ²								
Constant	3.1650***	2.7793**	2.8301***	4.1186***	-0.0887***	-0.0540	-0.0419	0.3318
~	(0.00)	(0.02)	(0.00)	(0.00)	(0.00)	(0.10)	(0.73)	(0.26)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year & Industry Fixed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Effects N	000	202	755	(19	000	902	000	902
IN B ²	909	803	/33	048	909	803	909	803
R- Papal D: Targat Manage	0.1/31	0.1300	0.1900	0.2042	0.1552	0.0974	0.2254	0.2343
- Fanel D: Target Manage	PID DD	FMIIIM		DAVS)		CAD 3	TAD	CAD 3
	High MA		High MA	Low MA	High MA	Low MA	High MA	Low MA
TAR PEDIR	0.9108**	-0.5853	1 0427**	-0.2398	-0.0059	-0.1033**	0 1953	-0 2097**
	(0.04)	(0.35)	(0.05)	(0.67)	(0.84)	(0.01)	(0.19)	(0.04)
Diff in Coeff.	(****)	(0.00)	(0.00)	(0.07)	(****)	(****)	(****)	(****)
Chi ²								
Constant	4.8712***	4.0273***	3.2308*	-0.4166	0.0374	-0.1358***	0.0579	-0.0217
	(0.00)	(0.00)	(0.06)	(0.53)	(0.55)	(0.00)	(0.75)	(0.92)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year & Industry Fixed	Ves	Ves	Ves	Ves	Ves	Ves	Ves	Ves
Effects	103	103	103	103	103	103	103	105
N	506	456	601	601	601	601	601	601
<u>R²</u>	0.2529	0.2436	0.2547	0.1032	0.1621	0.1592	0.2766	0.2187
Panel E: Target R&D				-		~		~
	BID PR	EMIUM	LOG (DAYS)	ACQ_0	CAR_3	TAR_O	CAR_3
TAD DEDID	<u>High_K&D</u>	<u>Low_K&D</u>	Hign_ R&D	<u>Low_R&D</u>	$\frac{\text{Hign}_{\text{K&D}}}{0.09(4***)}$	LOW_ K&D	<u>Hign_ K&D</u>	LOW_ K&D
IAK_PFDIK	5.8940 ^{**}	5.5895*	1.04//	0.5056	-0.0804***	(0.64)	0.3209*	-0.0708
Diff in Coeff	(0.00)	(0.09)	(0.01)	(0.20)	(0.00)	(0.04)	(0.09)	(0.49)
Chi ²								
Constant	-1.4349	2.9622***	4.6169***	3.1087***	-0.0668	-0.0102	0.2248	-0.3060**
	(0.26)	(0.00)	(0.00)	(0.00)	(0.11)	(0.75)	(0.11)	(0.04)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Year & Industry Fixed Effects	Yes							
Ν	752	960	622	781	752	960	704	960
R ²	0.1811	0.1773	0.2573	0.2549	0.1297	0.1172	0.2852	0.2023

Table 10: Robustness Check

This table presents the regression results for acquisition performance, premiums, and due diligence. This table reports regression estimates when the main independent variable is the executive versus non-executive target female directors in Panel A and independent versus non-independent target female directors in Panel B. All model specifications employ robust standard errors with one-way clustered t-statistics reported in parentheses below each coefficient. The superscripts ***, **, and * correspond to statistical significance at the one-, five-, and ten-percent levels, respectively. See Appendix A for the variable definitions.

Panel A: Executive Vs. Non-Executive Target Female Directors in the Board						
	BID PREMIUM	LOG (DAYS)	ACQ_CAR_3	TAR_CAR_3		
TAR_PFDIR_EXEC	-0.2042	8.6320	-0.1332**	0.2611		
	(0.83)	(0.20)	(0.05)	(0.40)		
TAR_PFDIR_NON_EXEC	0.8173**	3.9468**	-0.0550**	0.0401		
	(0.02)	(0.03)	(0.02)	(0.67)		
Constant	2.2878	-1.9847	-0.0448	0.0490		
	(0.18)	(0.23)	(0.10)	(0.69)		
Controls	Yes	Yes	Yes	Yes		
Year & Industry Fixed Effects	Yes	Yes	Yes	Yes		
Ν	1,002	1,279	1,279	1,279		
\mathbb{R}^2	0.2772	0.1609	0.0907	0.2008		
Panel B: Independent Vs. Non-Independent T	arget Female Directors in the	e Board				
	BID PREMIUM	LOG (DAYS)	ACQ_CAR_3	TAR_CAR_3		
TAR_PFDIR_IND	0.7218**	4.2850**	-0.0635**	0.0709		
	(0.04)	(0.03)	(0.01)	(0.46)		
TAR_PFDIR_NON_IND	0.5219	6.1534	-0.0858*	0.1172		
	(0.47)	(0.17)	(0.07)	(0.57)		
Constant	0.2716	-1.5771	-0.0536**	0.0784		
	(0.62)	(0.26)	(0.04)	(0.49)		
Controls	Yes	Yes	Yes	Yes		
Year & Industry Fixed Effects	Yes	Yes	Yes	Yes		
N	995	1,271	1,271	1,271		
\mathbb{R}^2	0.2915	0.1613	0.0896	0.1990		

Table 11: Long-run performance of acquirers of gender diverse targets

This table presents the regression results for the post-acquisition performance of acquirers. This table reports regression estimates when the main independent variable is the executive versus non-executive target female directors in Panel A and independent versus non-independent target female directors in Panel B. All model specifications employ robust standard errors with one-way clustered t-statistics reported in parentheses below each coefficient. The superscripts ***, ***, and * correspond to statistical significance at the one-, five-, and ten-percent levels, respectively. See Appendix A for the variable definitions.

	Model (1)	Model (2)	Model (3)
	AVGRET(EW)	AVGRET(VW)	AVGCHROA
Gender diverse target acquirer dummy	-0.0312**	-0.0510	-0.0096*
	(0.05)	(0.22)	(0.05)
ACQ BDSIZE	0.0053	0.0069	-0.0013
	(0.14)	(0.50)	(0.19)
ACQ CEODUAL	0.0039	0.0248	-0.0014
	(0.80)	(0.54)	(0.75)
ACQ PINDIR	-0.0005***	0.0009	-0.0004***
	(0.00)	(0.50)	(0.01)
TAR BDSIZE	-0.0008	0.0066	0.0007
—	(0.80)	(0.42)	(0.43)
TAR CEODUAL	0.0038	0.0128	0.0083*
_	(0.80)	(0.73)	(0.08)
TAR_PINDIR	-0.0006	-0.0057	-0.0160
	(0.99)	(0.96)	(0.20)
ACQ_SIZE	0.0024	0.0172	0.0141***
_	(0.65)	(0.27)	(0.00)
ACQ_LEV	-0.0542	-0.2263**	0.0059
	(0.22)	(0.05)	(0.69)
ACQ_CASH	-0.0038	-0.0091	-0.0010
	(0.26)	(0.32)	(0.36)
ACQ_ROA	0.0011	-0.1166	0.3183***
	(0.99)	(0.58)	(0.00)
TAR_SIZE	-0.0003	0.0032	-0.0003
	(0.95)	(0.79)	(0.85)
TAR_LEV	-0.0228	-0.0982	-0.0163
	(0.50)	(0.27)	(0.17)
TAR_CASH	-0.1151**	-0.1484	-0.0449**
	(0.03)	(0.32)	(0.05)
TAR_ROA	0.0221	0.0235	0.0049
	(0.47)	(0.78)	(0.63)
ALLCASH	0.0041	0.0252	0.0062
	(0.80)	(0.55)	(0.21)
ALLSTOCK	0.0111	0.0443	-0.0086
	(0.61)	(0.44)	(0.25)
UNRELATED	-0.0025	-0.0179	0.0025
	(0.86)	(0.63)	(0.57)
TENDEROFFER	0.0115	0.0217	0.0014
	(0.51)	(0.60)	(0.79)
HOSTILE	0.0301	0.0291	0.0113*
	(0.18)	(0.66)	(0.06)
SERIAL	-0.0085	-0.0310	-0.0063
	(0.53)	(0.45)	(0.16)
Constant	-0.1839**	-0.1593	-0.0588**
	(0.05)	(0.59)	(0.01)
\mathbb{R}^2	0.0717	0.1049	0.5059
N	1314	1317	1282

Appendix A: Definitions of variables

Variable	Code	Definition
Percentage of female directors	PFDIR	The percentage of female directors on the board of the firm divided by the size of the board.
Gender diverse dummy	DFDIR	Indicator variable that takes the value of one if there is at least one female director on a firm's board, and zero otherwise.
Percentage of target female directors	TAR_PFDIR	The percentage of female directors on the board of the target firm divided by the size of the target board.
Target gender diverse dummy 2	TAR_DMYFDIR_2	Indicator variable that takes the value of one if there is at least one or two female directors on a target firm's board, and zero otherwise.
Target gender diverse dummy 3	TAR_DMYFDIR_3	Indicator variable that takes the value of one if there are three or more female directors on a target firm's board, and zero otherwise.
Percent of acquirer female directors	ACQ_PFDIR	The percentage of female directors on the board of the acquirer firm divided by the size of the acquirer board.
Gender diverse bidder dummy	DFDIR	Indicator variable that takes the value of one if there is at least one female director on a bidder's board, and zero otherwise.
Percent of executive female directors on the target board	TAR_PFDIR_EXEC	The number of executive female directors on the target firm's board divided by the size of the board.
Percentages of non-executive female directors on the target board	TAR_PFDIR_NON_EXEC	The number of non-executive female directors on the target firm's board divided by the size of the board.
Percentages of independent female directors on the target board	TAR_PFDIR_IND	The number of independent female directors on the target firm's board divided by the size of the board.
Percentages of non-independent/grey female directors on the target board	TAR_PFDIR_GREY	The number of non-independent female directors on the target firm's board divided by the size of the board.
Firm size	SIZE	The natural logarithm of the bidder's market capitalization.
Leverage	LEV	Short-term debt plus current portion of long-term debt plus long-term debt divided by total assets.
Cash holdings	CASH	Total cash holdings divided by total assets.
Growth	GROWTH	The ratio of sales in the current fiscal year to sales in the last year minus one.
Return on assets	ROA	Income before extraordinary divided by opening year book value of total assets
Tobin's Q	TOBINQ	The market value of total assets divided by the book value of total assets. The market value of assets is calculated as the book value of total assets minus the book value of common equity plus the number of common shares outstanding times the stock price.
Board size	BSIZE	The number of directors on the board.
Percent of independent directors	PINDDIR	The proportion of independent directors on the board.

Indicator variable that takes the value of one if both CEO and chair positions are held by the same person, and
zero otherwise.
The ratio of the final offer price to the target stock price four weeks prior to the original announcement date
minus one.
AR_3 Cumulative abnormal return earned by the acquirer/target during the three-day announcement period.
CAR_3 Note: Note: We employ the conventional event-study method (Brown and Warner, 1985) to calculate the
cumulative abnormal return earned by an acquirer over a 3-day event window (from $t = -1$ to $t = +1$) around
the announcement day (t = 0). The firm-specific α_i and β_i parameters are estimated using daily returns for
estimation period follows (hang (1998), Masulis et al. (2007) and Moeller et al. (2004). We exclude the 30-day
window immediately before the acquisition appouncement from the estimation period as information on
acquisition events is often leaked to the capital market well before the actual announcement.
The number of days taken to complete the deal.
Natural logarithm of the number of days taken to complete the deal.
Indicator variable that takes the value of one if the acquisition is 100% financed with cash, and zero otherwise.
Indicator variable that takes the value of one if the acquisition is 100% financed with stock, and zero otherwise.
Indicator variable that takes the value of one if the bidder and the target belong to different four-digit primary
SIC
codes reported by SDC, and zero if they belong to same SIC codes.
Indicator variable that takes the value of one if the SDC classifies the bid as a hostile takeover, and zero
otherwise.
Indicator variable that takes the value of one if the bidder acquires three or more targets in a given year, and
Indicator variable that takes the value of one if the bidder is a foreign entity, and zero otherwise.
The percentage of total institutional ownership in the target firm.
The number of equity analysts following the firm, replaced by 0 for firms not covered by IBES for target firms.
The standard deviation of monthly stock returns of target firms over the fiscal year and coded as zero when
missing.
The managerial ability score of target firms calculated by Demerjian et al. (2012, 2013).
The research and development expense of target firms is divided by total assets coded as zero when missing.
Equally weighted monthly buy and hold return earned by the acquirer for the 36-month period following the
acquisition month.
Value-weighted monthly buy and hold return earned by the acquirer for the 36-month period following the
acquisition month
The average change in ROA reported by the acquirer during the three years following the acquisition.
vear in which the acquisition occurred. We then calculate the average change over the three years