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Authors

Even-Tov, Omri Lourie, Ben Nekrasov, Alex <u>et al.</u>

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Failed Acquisition Offers: The Impact of Failure Reasons on Target Valuation*

Omri Even-Tov University of California, Berkeley omri_eventov@haas.berkeley.edu

Alex Nekrasov University of Illinois Chicago <u>nekrasov@uic.edu</u> Ben Lourie University of California, Irvine blourie@uci.edu

Jean (Jieyin) Zeng National University of Singapore jeanzeng@nus.edu.sg

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Abstract

Using a large hand-collected sample of 1,246 failed acquisition offers from 1979 to 2016, we examine the effects of failure reasons on the revaluation of target firms. We find a negative revaluation of -16% for failures not caused by target rejection, suggesting exposure of adverse information about the target's economic conditions. Conversely, targets declining offers show a positive revaluation of +7%, indicating target management's private information about the firm's superior prospects. These revaluation effects are stronger for hard-to-value targets, consistent with failure reasons revealing more information when there is greater uncertainty about the target's value.

Keywords: Mergers and acquisitions; Failed offers; Target valuation; Failure reasons.

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1. Introduction

Mergers and acquisitions (M&A) are transformative events with significant repercussions for firms and investors. While extensive research has investigated the outcomes of successful acquisition offers (Agrawal and Jaffe, 2000; Cartwright and Schoenberg, 2006), our understanding of failed offers, particularly the implications of failure reasons for target valuation, is still incomplete. These failures are an important channel through which the market learns about target prospects. In this study, we compile a comprehensive dataset of failed acquisition offers, identifying the reason for each failure. Leveraging this data, we extend prior literature by providing new insights into how failure reasons influence the revaluation of targets around the acquisition proposal.

Our analyses employ a hand-collected sample of 1,246 failed offers between 1979 and 2016. We ascertain the reasons for offer failures by reading all relevant press releases and news articles on Factiva from six months prior to the acquisition announcement to one year after the failure date. We categorize failure reasons into two groups: offers rejected by the target (rejection group) and all other reasons without explicit target objection (non-rejection group). To assess the impact of failure reasons on target valuation, we calculate cumulative abnormal returns (CAR) across various subwindows of the entire proposal period, which spans from 25 trading days before the acquisition announcement to 25 trading days after the offer failure date.

Our analyses yield several important insights. We find a significant and large negative revaluation of approximately -16% for targets in the non-rejection group over the proposal period. This decline occurs in the periods leading up to and around the disclosure of offer failure and affects both targets that remain independent and those that are acquired by another bidder in the subsequent five years. These findings suggest that the market reacts not only to the loss of the offer

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premium due to the failure but also to new unfavorable information about the target's value that sometimes emerges during due diligence. This information may include poor financial performance, operating inefficiencies, and regulatory issues, prompting a negative reassessment of the target's value.

In contrast, targets in the rejection group experience a significant positive revaluation of around +7% over the proposal period. This pattern holds for both targets that stay independent and those acquired in the next five years. These findings suggest that despite the failure, the initial offer premium does not fully disappear, likely due to the market perceiving the target's rejection as a signal of positive internal information. This information may reflect the target management's private insights into the firm's positive outlook. Across the entire sample, the offsetting effects of the two groups result in an overall insignificant revaluation, which underscores the importance of considering failure reasons when assessing the effects of offer failures on target valuation.

To gain further insight into the impact of failure reasons on target revaluation, we consider hard-to-value targets. We expect that failure reasons are more likely to reveal new information when there is high uncertainty about the target's value. Employing several proxies for valuation uncertainty, our findings corroborate this prediction. Specifically, the effect of failure reason on target revaluation is more pronounced for targets with higher R&D expenditure, lower profitability, and poorer financial reporting quality.

Our findings are robust to controlling for a host of deal and firm characteristics and common corporate governance measures. Furthermore, a battery of sensitivity analyses confirms the robustness of our results to excluding hostile acquisitions, leveraged buyouts (LBOs), smaller deals, or targets with high or low book-to-market ratios. In addition, our findings remain consistent across various subperiods and apply to all-cash and all-stock acquisitions.

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Our study contributes to the literature on the valuation consequences of acquisition offers, particularly in the context of offer failures. Several studies examine how deal characteristics, capital structure, and subsequent acquisition activity affect target valuation (e.g., Bradley, Desai, and Kim, 1983; Safieddine and Titman, 1999; Malmendier, Opp, and Saidi, 2016). Other studies investigate the valuation of unsuccessful bidders (e.g., Savor and Lu, 2009; Jacobsen, 2014). However, few studies examine how failure reasons affect target valuation and find mixed results, likely due to small sample sizes. For instance, Dodd (1980) finds a significant revaluation only for targets that reject offers in a sample of 80 failures, while Davidson, Dutia, and Cheng (1989), analyzing 163 failures, find no significant revaluation irrespective of failure reasons when targets are not subsequently acquired.¹ Our study significantly extends this research by employing a much larger sample, more recent data, and more rigorous methodology. Contrary to previous research, we document a substantial negative revaluation for targets that do not reject offers, both when they remain independent and when they are subsequently acquired. This new evidence is robust and indicates that the disclosure of failure reasons permits new unfavorable information about the target's prospects to come to light.

Furthermore, by carefully examining each failed acquisition offer in the SDC database using all relevant press releases and news articles, we provide an accurate and comprehensive sample of failed offers that includes the reasons for each failure. We believe that this dataset, provided in an on-line appendix, should benefit future research.

2. Data

Appendix A details the sample construction process. Due to the large number of filtering steps involved, we focus on the key steps here and refer the reader to Appendix A for further

¹ Both studies only conduct univariate analyses.

details. Beginning with 63,082 acquisition offers in the Securities Data Company (SDC) Mergers and Acquisitions database between 1979 and 2016, involving publicly traded U.S. targets, we exclude 56,928 successful acquisitions. We further remove 3,021 failed acquisitions based on SDC information, including offers to purchase less than 50% (767 observations), targets with market values below \$10 million (422 observations), and offers classified as "Seeking Buyer Withdrawn" or "Dis Rumor" (443 observations). To determine the reasons for acquisition failures and correct errors in the SDC database (Barnes, Harp and Oler, 2014), we manually review all press releases and news articles on Factiva from six months prior to the acquisition announcement until one year after the failure date. This extensive process eliminates 146 offers with unclear or multiple failure reasons that prevent clean categorization, 478 observations misclassified by the SDC, and 195 cases without any press release discussing the acquisition process. Additionally, we consolidate failed bids for the same target into one observation (Bates and Lemmon 2003; Bates and Becher 2017), eliminating 241 observations, and exclude 677 observations where another bid for the same target succeeded. Our final sample consists of 1,246 observations.

Table 1 classifies failure reasons into two groups: the first comprises offers rejected by the target (rejection group) and the second encompasses all other reasons without explicit target objection (non-rejection group). The rejection group comprises 673 observations, including target board rejections due to low offer price (210 observations), unspecified reasons (169 observations), and concerns over shareholders' interests (146 observations). The non-rejection group is comprised of 573 observations, including 194 acquirer withdrawals, 132 mutual agreements to cease acquisition,² and 29 terminations due to regulatory obstacles.

² No news articles related to offers in this category indicate a target rejection. Our results remain robust even when excluding this category.

3. Empirical results

Table 2 and Figure 1 present the univariate results for the rejection and non-rejection groups.³ The pre-announcement and announcement returns, along with the offer premium, are similar for both groups, suggesting that the market does not initially distinguish between these two cohorts. However, in the periods before and around the failure disclosure, the non-rejection group experiences a complete reversal from an initial positive reaction to a large negative revaluation of -16.30% (mean CAR [A-25, F+25] at -16.30%). In contrast, the initial revaluation of the rejection group, though diminishes, remains a significant positive at +7.34%.⁴ Figure 1 further demonstrates that, in the full sample, the initial positive revaluation fully disappears and becomes indistinguishable from zero, indicating the offsetting effects in the two groups.

Figure 2 delves into post-failure outcomes by separately examining firms that remain independent versus those acquired by another bidder within the next five years. Panel A shows that firms in the non-rejection group consistently experience negative revaluation whether they are acquired (-10.2%) or not (-17.85%). These findings suggest that the market reacts not only to the loss of the offer premium but also to new unfavorable information about the target's stand-alone value. Conversely, Panel B shows that firms in the rejection group exhibit positive revaluation, both when subsequently acquired (+9.43%) and when they remain independent (+6.35%), indicating the market's upward revision of the target's value in both cases.

Next, we conduct multivariate analysis by estimating the following regression:

$$CAR_{j}(X_{i}) = \alpha_{1} + \beta_{1}Rejection_{j} + Controls + Industry FE + Year FE + \varepsilon_{j,i},$$
 (1)

³ Since the proposal period varies across acquisition offers, we express trading days as a percentage of the proposal period (Malmendier et al., 2016).

⁴ Additional untabulated tests reveal that both groups exhibit insignificant abnormal stock returns in the subsequent five years, suggesting that the observed revaluations are enduring.

where $CAR_j(X_i)$ is the cumulative abnormal return for target firm *j* over six different return windows X_i : the entire proposal period (A-25,F+25), the pre-acquisition announcement period (A-25,A-2), the acquisition announcement period (A-2,A+2), the intermediate period (A+2,F-2), the failure period (F-2,F+2), and the post-failure period (F+2,F+25). The indicator, *Rejection*, equals 1 if the target belongs to the rejection group, and 0 otherwise.

Table 3 Panel A reports the results using the base set of controls, which includes the following deal and firm characteristics: indicators for all-cash (*Cash*), all-stock (*Stock*), and mixed cash and stock (*Mix*) acquisitions;⁵ the target's market value (*Target_size*); the offer premium (*Offer_premium*); and an indicator for offers made by a private equity firm (*PE*). All regression analyses include year- and industry-fixed effects (based on the Fama-French 48-industry classification). Appendix B provides variable definitions. The descriptive statistics in Table 2 show that targets in the non-rejection group are less (more) likely to receive all-cash (all-stock) offers compared to the rejection group. The two groups have comparable average market values, incidence of private equity acquirers, and offer premiums.

The regression results in Table 3 Panel A are consistent with the univariate results in Table 2, indicating that controlling for deal and firm characteristics does not impact our conclusion from the univariate results. In particular, as shown in columns 1 and 2 of Table 3 panel A, during the pre-announcement period and at the acquisition announcement date, the coefficient on the rejection indicator is not significantly different from zero. These results are consistent with investors' inability to differentiate between the two groups prior to and at the time of the acquisition announcement date. In columns 3 and 4, the coefficient on the rejection indicator is positive and significant, indicating a divergence between the two groups conditional on the reason

⁵ The medium of payment is available for only 60% of our sample. Consequently, the remaining 40% are captured by the intercept.

for the offer failure. In the post-failure period (column 5), the coefficient is insignificant, consistent with market efficiency. As shown in column 6, over the entire proposal period the mean CAR is 21.2% higher for the rejection group relative to the non-rejection group. This compares to 23.64% found in our univariate results in Table 2.⁶

In Panel B of Table 3, we validate our results by controlling for additional deal and firm characteristics. These include an indicator of a hostile takeover (*Hostile*), an indicator of a tender offer (*Tender*), the time between the acquisition announcement and failure dates (*Time*), the acquirer's market-to-book ratio (Acq_MB), the ratio of the target's to acquirer's market value, the acquirer's stock return around the failure date (Acq_CAR), the target's probability of default based on the Merton model (*Merton*), the target's prior-year stock returns (*Mom*), the target's average return on assets over the past three years (*ROA*), the target's industry Hirschman-Herfindahl index (*HHI*), and the target's Lerner index (*LI*).⁷ The results show that our findings remain robust to the inclusion of these control variables. The coefficient on *Rejection* stays positive and significant in columns 3, 4, and 6.

Offer failures may be influenced by potential conflicts of interest between managers and shareholders, as acquisitions can affect the target CEO's career prospects and wealth. To further substantiate the robustness of our results, we incorporate controls for commonly used corporate governance measures. Specifically, these include the following variables: an indicator of a staggered board (*St_Board*), an indicator of a target's poison pill provision (*Ppil*), the percentage of shares held by the target's CEO (*Perc_share*), and the percentage of vested and unvested options

⁶ Removing the 132 observations classified as mutual consent from the non-rejection group does not change our results. Specifically, for the six return windows reported in Table 3, we find CARs of 1.7%, -1.0%, 12.0%, 12.5%, 2.1%, and 22.8%, respectively.

⁷ The reduction in the number of observations in Panel B primarily stems from the inclusion of Acq_MB and Acq_CAR , which require the acquirer to be a publicly traded firm (a decrease of 709 observation). Additional observations are eliminated due to the calculation of the probability of default.

held by the target's CEO (*Perc_opt*). The findings in Panel C of Table 3 confirm that our results hold even after controlling for these corporate governance measures, with the coefficient on *Rejection* remaining positive and significant in columns 3, 4, and 6.

Overall, our univariate and multivariate analyses show a significant negative (positive) target revaluation for the non-rejection (rejection) group. The negative revaluation observed in the non-rejection group is consistent with the interpretation that these offer failures reveal unfavorable information about the target's value, either as an independent entity or as a potential future target. Conversely, the positive revaluation of the rejected group suggests that the target's rejection signals positive information about its prospects.

To further examine the informativeness of failure reasons, we investigate whether the results are stronger for targets with greater valuation uncertainty. The idea is that deal failures are more likely to unveil new information when there is high uncertainty about the target's value. To this end, we use four proxies: high R&D spending (Officer et al., 2009), low profitability (Aboody et al., 2018), low analyst following (Dahiya et al., 2017), and low financial reporting quality proxied by a high magnitude of abnormal accruals (Skaife and Wangerin, 2013).

The results, presented in Panel A of Table 4, are consistent with our expectations. The coefficient on the rejection indicator is significantly larger for targets with high R&D, low profitability, and low financial reporting quality. However, we do not find a significant effect of analyst following. Overall, these findings are consistent with the notion that failure reasons are more informative for targets with higher valuation uncertainty.

Next, we delve deeper into more detailed sub-categories of failure reasons. For the rejection group, we consider whether targets rejected the offer due to a low offer price. For the non-rejection group, we consider whether the acquirer withdrew the offer. The results, reported in Panel B of

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Table 4, align with the main results, showing insignificant differences between these more detailed sub-groups. This finding suggests that our main categorization into the rejection and non-rejection groups adequately captures the impact of failure reasons on target revaluation.

Finally, we conduct a series of additional tests, not tabulated for brevity, to corroborate our main results. First, to mitigate concerns regarding the potential influence of small deals, we reestimate our results using only targets with market capitalizations of at least \$50 million or \$120 million, which is the sample median. Our results remain unchanged, indicating that small targets do not drive our conclusions. Second, to ensure that our results are not influenced by hostile takeovers, we restrict our analysis to friendly acquisitions and find similar results. Third, acknowledging the coverage limitations of the SDC database before 1989 (Netter et al., 2011), we repeat our analysis for the period starting from 1989 and find similar results. Furthermore, we split the sample period into two and three equal subperiods and find that results are not driven by any specific period. Fourth, our conclusions remain unchanged when we restrict the analysis to all-cash or all-stock acquisitions, targets with either low or high market-to-book ratios, or when excluding leveraged buyouts (LBOs). Finally, to confirm that our results are not influenced by anticipated future takeovers, we exclude deals where the target is acquired or actively being considered for acquisition within the subsequent 12 months and find similar results.

4. Conclusion

In this study, we utilize a large hand-collected sample of failed acquisitions covering almost four decades to examine the impact of failure reasons on the valuation of target firms. Our findings reveal a substantial negative revaluation when targets do not reject offers, suggesting that these failures provide the market with new adverse information about the target firms' economic conditions. Conversely, targets that reject offers experience a significant positive revaluation, suggesting that these rejections reveal the target management's private information about the firm's positive outlook. These revaluation effects are greater for hard-to-value targets, in line with the notion that failure reasons reveal more information amid heightened uncertainty about the target's value. These revaluations are robust controlling for various deal and firm characteristics and hold for targets that remain independent as well as those later acquired by another bidder. Our findings not only contribute to the literature on the valuation consequences of M&A activities but also provide a comprehensive dataset of failure reasons for future research.

An intriguing avenue for future research is the potential impact of target CEO compensation packages, especially merger-related bonuses, on M&A decisions (Hartzell et al., 2004; Fich et al., 2016; Li et al., 2022). Investigating whether targets that reject offers subsequently adjust CEO bonuses to decrease the likelihood of future rejections could provide valuable insights into the dynamics between executive incentives and merger outcomes. This area, while beyond the scope of our study, promises to decrease to decrease in understanding of the strategic considerations in M&A activities.

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Figure 1: Revaluation of targets firms in failed acquisition offers

This figure plots the CAR for failed acquisition offers starting 25 trading days prior to the announcement of the acquisition offer date (A) and ending 25 trading days after the offer failure date (F). The sample consists of 1,246 failed acquisition offers, including 673 rejected offers (rejection group) and 573 acquisition offers that fail due to other reasons (non-rejection group). The intermediate period between the deal announcement and failure date is normalized (in percentage) since it varies across deals.

Figure 2: Revaluation of target firms in failed acquisition offers for the non-rejection and rejection groups conditional on future acquisition activity



Panel A: Non-rejection group



Panel B: Rejection group

This figure plots the CAR for failed acquisition offers starting 25 trading days prior to the announcement of the acquisition offer date (A) and ending 25 trading days after the offer failure date (F). The intermediate period between the deal announcement and failure date is normalized (in percentage) as it varies across deals. Panel A plots the returns for the non-rejection group and includes 153 observations (420 observations) that are acquired (remain independent) during the five-year period starting half a year after the deal failure date. Panel B plots the returns for the rejection group and includes 186 observations) that are acquired (remain independent) during the five-year period starting half a year after the deal failure date. We identify firms that were subsequently acquired using CRSP codes 200 through 300.

Table 1: Classification of failure reasons

| Code | Reason | Ν |
|----------|--------------------------------------------------------------------------------------------|-------|
| Rejecti | on Group (Total N-673) | |
| 1 | Target hoard rejected the offer stating that the offer price is too low | 210 |
| 2 | Target board rejected the offer without providing any specific reason | 169 |
| 3 | Target board rejected the offer stating it is not in shareholders' best interest | 146 |
| 4 | Target board and target shareholders rejected the offer | 80 |
| 5 | Target board rejected the offer citing inability of the acquirer to get financing | 33 |
| 6 | Target board rejected the offer citing an anti-takeover mechanism | 23 |
| 7 | Target board rejected the offer citing regulation | 8 |
| 8 | Target board rejected the offer stating managers' concern for their personal fate | 4 |
| Non-Re | election Group (Total N=573) | |
| 1,011 11 | Acquirer withdrew offer due to (Total N=194): | |
| 1 | Acquirer's shareholders objected | 43 |
| 2 | Acquirer stated that the target has poor performance | 43 |
| 3 | Acquirer loss of interest | 36 |
| 4 | Acquirer stated that the target stock price became too high | 20 |
| 5 | Acquirer stated deterioration in industry conditions | 19 |
| 6 | Acquirer stated due diligence | 11 |
| 7 | Acquirer became a target | 8 |
| 8 | Acquirer stated that the acquisition is not in the acquirer shareholders' best interest | 5 |
| 9 | Acquirer was unable to receive a pooling treatment | 5 |
| 10 | Acquirer stated that the target is purchasing another firm | 2 |
| 11 | Acquirer's lenders objected | 2 |
| | Mutual consent of acquirer and target to terminate the offer (Total N=132): | |
| 12 | Mutual consent of termination (not citing specific reasons) | 55 |
| 13 | Disagreement over price | 44 |
| 14 | Recent stock market activity / decline in both companies' share prices | 15 |
| 15 | Acquirer and target offer differing views about the failure | 9 |
| 16 | Delay in regulation | 4 |
| 17 | Bad synergy | 5 |
| | Regulatory obstacles that led to the failure of the acquisition offer (Total N=29): | |
| 18 | Antitrust | 16 |
| 19 | Acquirer decided that regulation is excessive | 5 |
| 20 | Other regulatory obstacles | 8 |
| | Miscellaneous reasons (Total N=218): | |
| 21 | Chapter 11, capital infusion to prevent insolvency, creditors' restructuring agreement | 47 |
| 22 | News reports indicating that the acquirer is unable to obtain financing | 35 |
| 23 | News reports indicating that the acquirer withdrew due to poor performance | 28 |
| 24 | Other reasons | 23 |
| 25 | Unable to complete deal on time | 9 |
| 26 | No reason provided for withdrawal | 76 |
| Total r | number of failed proposed deals | 1,246 |

This table presents the distribution of failure reasons for our sample of 1,246 failed acquisition offers. We identify the failure reason for each deal by reading related press releases and news articles using the Factiva database over the period starting six months prior to the SDC acquisition announcement date through one year after the SDC withdrawn date. We classify the 1,246 failed acquisition offers into two groups: offers rejected by the target (rejection group) and all other reasons without explicit target objection (non-rejection group).

| | Rejection group | | | Non-rejection group | | | Diff | | |
|-------------------------|-----------------|------------|-----------------|---------------------|-----|------------|-------------|--------|--------------|
| | Ν | Mean | Median | STD | Ν | Mean | Median | STD | p-value |
| CAR [A-25, A-2] | 673 | 3.97%*** | 2.53%*** | 17.64% | 573 | 1.96%** | 0.63%* | 21.19% | 0.07^{*} |
| CAR [A-2, A+2] | 673 | 14.46%*** | $11.74\%^{***}$ | 16.39% | 573 | 13.73% *** | 10.66%*** | 22.78% | 0.52 |
| CAR [A+2, F-2] | 673 | -4.15% *** | -2.62%*** | 19.99% | 573 | -16.54%*** | -12.66%*** | 22.45% | 0.00^{***} |
| CAR [F-2, F+2] | 673 | 0.52% | -0.52% | 14.29% | 573 | -11.87%*** | -9.95%*** | 20.23% | 0.00^{***} |
| CAR [F+2, F+25] | 673 | -4.26% *** | -4.45%*** | 15.68% | 573 | -4.26%*** | -4.54%*** | 25.53% | 1.00 |
| CAR [A-25, F+25] | 673 | 7.34%*** | 5.56% *** | 31.70% | 573 | -16.30%*** | -16.89% *** | 40.42% | 0.00^{***} |
| Cash | 673 | 43.39% | 0.00% | 49.60% | 573 | 23.04% | 0.00% | 42.14% | 0.00^{***} |
| Stock | 673 | 9.06% | 0.00% | 28.73% | 573 | 22.16% | 0.00% | 41.57% | 0.00^{***} |
| Mix | 673 | 13.08% | 0.00% | 33.74% | 573 | 15.36% | 0.00% | 36.09% | 0.25 |
| Target MV in \$billions | 673 | 1.04 | 0.12 | 4.05 | 573 | 0.92 | 0.09 | 4.45 | 0.62 |
| Offer_premium | 673 | 32.76% | 27.61% | 40.08% | 573 | 29.80% | 25.00% | 39.91% | 0.19 |
| Mom | 673 | 9.62% | 3.95% | 56.96% | 571 | -2.43% | -8.32% | 62.73% | 0.00^{***} |
| PE | 673 | 8.32% | 0.00% | 27.64% | 573 | 10.47% | 0.00% | 30.64% | 0.19 |

 Table 2: Descriptive statistics and univariate results

This table provides descriptive statistics for variables used in the paper for the rejection and non-rejection groups. All variables are defined in Appendix B. The last column presents the p-value for difference in means between the two groups. The sample period spans 1979 through 2016. ***, ** denote significance at the 1%, 5%, and 10% level for a two-tailed test, respectively.

| 0 | | | | | | |
|---------------------------------------------------------------|------------------|----------------|-----------------|---------------|--------------|---------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | CAR [A-25, | CAR [A-2, | CAR [A+2, | CAR [F-2, | CAR [F+2, | CAR [A- |
| | A-2] | A+2] | F-2] | F+2] | F+25] | 25, F+25] |
| Panel A: Base s | set of controls | | | | | |
| Rejection | 0.008 | -0.011 | 0.109^{***} | 0.124*** | 0.015 | 0.212^{***} |
| | [0.74] | [-1.02] | [7.48] | [11.70] | [1.15] | [10.18] |
| Cash | -0.005 | 0.040^{***} | 0.016 | -0.051*** | -0.009 | 0.001 |
| | [-0.36] | [2.93] | [0.87] | [-3.90] | [-0.57] | [0.04] |
| Stock | -0.012 | -0.014 | -0.044** | -0.036** | 0.049^{**} | -0.085*** |
| | [-0.72] | [-0.80] | [-2.00] | [-2.16] | [2.40] | [-2.62] |
| Mix | -0.001 | -0.012 | -0.013 | -0.042*** | -0.004 | -0.088*** |
| | [-0.06] | [-0.68] | [-0.60] | [-2.59] | [-0.23] | [-2.77] |
| Target_size | 0.003 | 0.001 | 0.015^{***} | 0.011^{***} | 0.003 | 0.030*** |
| | [1.07] | [0.35] | [3.33] | [3.43] | [0.88] | [4.73] |
| Offer premium | 0.232^{***} | 0.188^{***} | -0.025 | -0.005 | 0.006 | 0.248^{***} |
| | [18.19] | [13.96] | [-1.37] | [-0.43] | [0.38] | [9.85] |
| PE | -0.018 | -0.016 | 0.001 | -0.019 | 0.027 | -0.047 |
| | [-1.02] | [-0.86] | [0.05] | [-1.09] | [1.24] | [-1.38] |
| Adjusted R ² | 23.7% | 16.5% | 14.6% | 12.8% | -1.1% | 21.7% |
| Panel B: Contr | olling for addit | tional firm an | d deal characte | eristics | | |
| Rejection | 0.003 | -0.020 | 0.101^{***} | 0.151*** | -0.005 | 0.182^{***} |
| | [0.15] | [-0.90] | [3.26] | [6.05] | [-0.17] | [3.79] |
| Adjusted R ² | 27.8% | 34.4% | 14.6% | 12.0% | 4.8% | 24.6% |
| Panel C: Controlling for corporate governance characteristics | | | | | | |
| Rejection | -0.021 | -0.012 | 0.078^{***} | 0.172^{***} | 0.019 | 0.207^{***} |
| | [-0.92] | [-0.45] | [2.62] | [7.45] | [0.52] | [3.93] |
| Adjusted R ² | 23.3% | 16.5% | 19.8% | 20.4% | -2.9% | 22.2% |

Table 3: Regression results

Panel A reports the results using the base set of controls (*Cash, Stock, Mix, Target_size, Offer_premium*, and *PE*). Panel B further controls for additional firm and deal characteristics (*Hostile, Tender, Time, Acq_MB, R_size, Merton, Mom, ROA, HHI*, and *LI*). Panel C controls for corporate governance characteristics (*St_board, Ppil, Perc_share, Perc_opt*) in addition to the base set of controls. Appendix B contains variable definitions. The number of observations is 1,246 in Panel A, 475 in Panel B, and 398 in Panel C. All regressions include Fama and French 48-industry dummies and year dummies. Below each coefficient value is the corresponding t-statistic. ***, **, * denote significance at the 1%, 5%, and 10% level for a two-tailed test, respectively.

| Panel A: The ro | le of target valuation | uncertainty | | |
|------------------------|-------------------------|----------------|-------------------|----------------------|
| | (1) | (2) | (3) | (4) |
| | High R&D | Low R&D | Low profit margin | High profit margin |
| Rejection | 0.382*** | 0.181*** | 0.231*** | 0.147*** |
| | [5.41] | [8.64] | [6.26] | [5.78] |
| Chi-square p- value | 0.001 | *** | 0. | 030** |
| | (5) | (6) | (7) | (8) |
| | Low analyst | High analyst | High absolute | Low absolute |
| | following | following | abnormal accruals | abnormal accruals |
| Rejection | 0.251*** | 0.203*** | 0.251*** | 0.178*** |
| | [6.61] | [6.35] | [6.06] | [5.87] |
| Chi-square p- value | 0.29 | 07 | (|).08* |
| Panel B: Sub-ca | tegories of failure rea | sons | | |
| | (1) | (2) | (3) | (4) |
| | Rejections due to | Rejections for | Offer withdrawn | Offer is not |
| | low offer price | other reasons | by acquire | withdrawn by acquire |
| Rejection | 0.231*** | 0.191*** | | |
| - | [6.05] | [7.94] | | |
| Non-Rejection | | | -0.213*** | -0.209*** |

| Fable 4: Additional analyses: tar | rget valuation uncertainty a | and sub-categories of failure reasons |
|-----------------------------------|------------------------------|---------------------------------------|
|-----------------------------------|------------------------------|---------------------------------------|

[-6.75]

Chi-square p-0.241 0.910 value

Panel A shows the results of estimating the base model from Table 3 for targets with high versus low valuation uncertainty. Valuation uncertainty is proxied using R&D expense scaled by sales above the sample median (columns 1 and 2), profit margin below the sample median (columns 3 and 4), the number of analysts following the firm below the sample median (columns 5 and 6), and absolute abnormal accruals from the modified Jones Model above the sample median (columns 7 and 8). Panel B shows the results of estimating the base from Table 3 for sub-categories of failure reasons. Columns 1 and 2 examine rejections due to low offer price. Columns 3 and 4 examine withdrawals by the acquirer. In both panels, the dependent variable is CAR [A-25, F+25]. All regressions include Fama and French 48-industry dummies and year dummies. Below each coefficient value is the corresponding t-statistic. ***, **, * denote significance at the 1%, 5%, and 10% level for a two-tailed test, respectively.

[-8.92]

Appendix A: Sample Construction

| Step 1 – Filtering using SDC information | No. of obs. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| SDC sample that satisfies the following criteria: (1) the merger or acquisition is announced between January 1, 1979 and December 31, 2016, (2) the target is a U.S. company, and (3) the target is a publicly traded company | 63,082 |
| Excluding successful acquisitions | -56,928 |
| Excluding observations in which the acquirer sought to acquire less than 50% | -767 |
| Excluding observations whose target's market value is less than \$10 million as of 25 trading days prior to the acquisition announcement date | -422 |
| Excluding observations classified by SDC as "Seeking Buyer Withdrawn" or "Dis Rumor" | -443 |
| Excluding observations with missing CRSP permanent number | -397 |
| Excluding observations in which the target is not traded as of 25 trading days prior to the acquisition announcement date | -385 |
| Excluding observations with missing COMPUSTAT gykey | -147 |
| Excluding observations classified as share repurchase | -320 |
| Excluding observations in which the target and the acquirer are the same firm | -72 |
| Excluding observations in which the target's stock price is less than \$1 as of 25 trading days prior to the acquisition announcement date | -68 |
| Total observations after filtering using SDC information | 3,133 |
| Step 2 - Manual filtering using press releases and news articles information | / |
| Excluding observations that we identified as acquirers seeking less than 50% | -105 |
| Excluding observations that we identified as seeking a buyer and their intention was withdrawn | -78 |
| Excluding observations that we identified as delisted during the acquisition process | -71 |
| Excluding observations that we identified as rumors | -63 |
| Excluding observations that we identified as going through a recapitalization/spin- off/restructuring | -57 |
| Excluding observations that we identified as successful acquisitions | -35 |
| Excluding observations that we identified as duplicates | -28 |
| Excluding observations that we identified as no formal offer was made | -25 |
| Excluding observations that we identified as the acquirer already owning more than 50% of the target | -8 |
| Excluding observations that we identified as sales between different shareholders | -6 |
| Excluding observations that we identified as private targets | -2 |
| Total observations that we identified as inconsistent with SDC | 478 |
| Excluding failed acquisition offers with multiple bidders where one bidder successfully acquired the target | -627 |
| Combining multiple bidders for the same target into one observation if all bidding parties fail to acquire the target | -241 |
| Excluding observations where we could not find a press release regarding the acquisition | -195 |
| Excluding observations with missing information on COMPUSTAT or CRSP | -105 |
| Excluding observations where the acquisition process exceeds one year | -95 |
| Total observations with a failure reason | 1,392 |
| Excluding observations with multiple reasons for the acquisition failure | -146 |
| Final sample | 1,246 |

| Variable | Definition |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Rejection | Indicator variable set to 1 if an acquisition is rejected by the target's board, 0 otherwise. |
| CAR [A-25, | CAR of the target starting 25 trading days and up to 2 trading days before the |
| A-2] | acquisition announcement date. |
| CAR [A-2, | CAR of the target over the five-day acquisition announcement window (termed as |
| A+2] | announcement period). |
| <i>CAR</i> [<i>A</i> +2, | CAR of the target starting 2 trading days after the acquisition announcement date and |
| F-2] | ending 2 trading days before the offer failure date. |
| CAR [F-2, | CAR returns of the target over the five-day offer failure window. |
| $\frac{[\Gamma+2]}{[CAP[E+2]]}$ | CAP of the target starting 2 trading days and up to 25 trading days following the offer |
| F+25] | failure date. |
| CAR [A-25, | CAR of the target starting 25 trading days before the acquisition announcement date and |
| F+25] | ending 25 trading days after the offer failure date (proposal period). |
| Cash | Indicator variable set to 1 for all-cash acquisitions, 0 otherwise. |
| Stock | Indicator variable set to 1 for all-stock acquisitions, 0 otherwise. |
| Mix | Indicator variable set to 1 for acquisitions paid with both stock and cash, 0 otherwise |
| Taraat siza | Logarithm of the market value of equity of the target as of 26 trading days prior to the |
| Target_size | acquisition announcement date. |
| | The ratio of the initial offer price to the stock price of the target as of 26 trading days |
| Offer_premi | prior to the acquisition announcement date, minus one. When unavailable, the initial |
| ит | offer price is approximated as the target's stock price two trading days after the |
| | acquisition announcement date. |
| PE | Indicator variable set to 1 for offers made by private equity firms, 0 otherwise. |
| Hostile | Indicator variable set to 1 for hostile takeovers, 0 otherwise. |
| Tender | Indicator variable set to 1 for tender offer acquisitions, 0 otherwise. |
| Time | The number of days between the offer date and the failure date. |
| Acq_MB | The acquirer's market-to-book ratio 26 trading days before the offer date. |
| Acq_CAR | The acquirer's CAR over the 5-day window centered on the offer failure date. |
| Merton | The target's probability of default measured using the Merton model |
| Mom | The target's CAR measured over the one-year window ending one month prior to the acquisition announcement date. |
| - DOL | The net income divided by the total assets of the target averaged over the three years |
| ROA | prior to the acquisition announcement date. |
| | The mean of the sum of the squared sales (in percentage) of all firm with the industry of |
| HHI | the target, calculated in the fiscal year prior to the acquisition announcement date. |
| 11 | The Lerner-Index, calculated as the target's operating profit margin minus the industry |
| | average profit margin at the end of the previous year. |
| St_board | Indicator variable set to 1 if the target had a staggered board in the previous year. |
| Ppil | Indicator variable set to 1 if the target had a poison pill provision in the previous year. |
| Para shara | The percentage of shares owned by the target's CEO, relative to the target's number of |
| renc_snure | shares outstanding, as of 25 trading days prior to the acquisition announcement date. |
| | The percentage of vested and unvested options owned by the target's CEO, relative to |
| Perc_opt | the target's number of shares outstanding, as of 25 trading days prior to the acquisition |
| | announcement date. |

Appendix B: Variable definitions