Hard Marriage with Heavy Burdens: Labor Unions as Takeover Deterrents*

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Abstract

We examine the causal effect of unionization on a firm's takeover exposure and merger gains. To establish causality, we use a regression discontinuity design that relies on "locally" exogenous variation generated by union elections that pass or fail by a small margin of votes. Barely passing a union election leads to a significant reduction in a firm's probability of receiving a takeover bid. A barely unionized target also enjoys a lower announcement return, receives a lower offer premium, and experiences longer bid duration. The negative effect of unions on targets' takeover exposure and merger gains is more pronounced when the union elections are held in states without right-to-work legislation, in states with more union-friendly successor statutes, when the mergers are horizontal, and when the unions are large. Bidders of unionized targets have more experience in making merger deals, possess higher bargaining power, and face less union threat by themselves. Our paper provides new insights into the real effects of unionization in terms of the market for corporate control.

Key words: Takeover exposure; Merger gains; Labor unions; Regression discontinuity design

JEL: G34, G30, J51

1. Introduction

The disciplinary role of corporate takeovers is well recognized in the corporate finance literature.[1] Existing studies have focused on investigating how corporate takeovers influence and are influenced by agency conflicts between managers and shareholders.[2] However, how agency conflicts between a firm's stakeholders (e.g., employees) and shareholders affect the market for corporate control attracts far less attention in the literature. Because a firm is a nexus of contracts between many parties, understanding how a firm's employees affect its takeover exposure is important for a number of reasons. First, labor is a key input to a firm's production and accounts for a large portion of the firm's operation cost. As a result, it largely determines a firm's productivity and profitability that are inherently connected to the causes and consequences of corporate takeovers. Second, a change in corporate control often alters the welfare of employees in firms involving takeovers, which could motivate them to react strongly to takeover threats.

In this paper, we explore how agency conflicts between a firm's employees and shareholders affect the firm's takeovers. Specifically, we investigate the effect of labor unions on a firm's takeover exposure and merger gains. This question is important for understanding the disciplinary role of financial markets: If labor unions attract takeovers, unions' negative effects on firm value (Lee and Mas, 2012) might be muted when acquirers restore the efficiency of unionized targets after mergers. If, however, labor unions deter takeovers, they block the opportunity for takeover markets to act as the "court of last resort" (Kini et al., 2004), double hitting the firms' value. Unionization provides an ideal setting for our study, because labor unions represent employees in bargaining with their employer and agency conflicts become more material when labor unions are in place (McLaughlin and Fraser, 1984; Abraham and Medoff, 1984). In addition, labor unions are powerful in affecting merger talks and influencing merger and acquisition (M&A) outcomes.

We propose two competing hypotheses regarding the role of unions in M&As that are developed from prevailing views of unionization. Our first hypothesis postulates that labor unions attract takeover bids and increase a firm's takeover exposure. According to the *Q*-theory of M&A proposed by Jovanovic and Rousseau (2002), acquirers actively search for underperforming targets and aim to achieve higher post-merger operation efficiency through

[1] See, e.g., Jensen (1988), Scharfstein (1988), Weisbach (1993), and Kini et al. (2004).
[2] See, e.g., Jensen and Meckling (1976), Morck et al. (1990), Bliss and Rosen (2001), and Harford and Li (2007).

aggressive cost-cutting restructuring. Firms with unionized workforce tend to have sticky wages and rigid employment contracts, which dramatically increase their operating costs and risks (Chen et al. 2011a) and constrain the firms' capability of restructuring. To the extent that a change in corporate control of a unionized firm leads to a stronger ex post bargaining position for the new employer (i.e., the acquirer), taking over a unionized, underperforming firm could allow the acquirer to unlock greater efficiency gains and recoup larger rents held by target unionized labor. This view is consistent with Shleifer and Summers (1988) who argue that hostile takeovers serve to breach implicit labor contracts between incumbent managers and workers and transfer wealth from target stakeholders to acquirer shareholders.[3] Therefore, unionized firms may appear attractive as potential targets.

An alternative hypothesis generates the opposite empirical prediction, i.e., a firm's labor union reduces its takeover exposure. There are three plausible reasons that unions deter takeovers. First, if the change in corporate control cannot substantially alter collective bargaining contracts, target labor unions could bind the hands of the acquirer from realizing synergistic gains, such as enhanced market power, scale of economy, and acquisition of growth. This view is supported by numerous studies that document unions being destroying firm value in the long run (e.g., Grout, 1984; Connolly et al., 1986; Malcomson, 1997; Lee and Mas, 2012; and Bradley et al., 2015). Second, potential conflicts between target unions and acquirer unions or acquirer management could significantly increase the uncertainty of deal completion and threaten post-merger integration. This *ex post* threat could discourage acquirers from bidding for unionized targets *ex ante*. We provide a more detailed discussion of anecdotal evidence supporting this view in the next section. Third, managers could form alliance with workers in fending off takeover threat (Pagano and Volpin, 2005; Atanassov and Kim, 2009), and labor unions can be used as powerful weapons to protect incumbent managers. Taken together, our second hypothesis argues that labor unions deter takeovers.

Identifying the causal effect of labor unions on a firm's takeover exposure is challenging because of the endogenous nature of unionization: workers forming labor unions could give rise to or result from underlying characteristics that are related to a firm's exposure to takeovers. For

[3] Empirical work supporting the view includes Kaplan (1989), Davis et al. (2011), and Li (2012) who document significant job losses and wage reductions among target employees after corporate takeovers. Becker (1995) conclude that the wealth redistribution from target employees to acquirer shareholders accounts for a significant portion of target offer premium.

example, unionization status could be correlated with unobservable firm heterogeneity that affects a firm's takeover exposure (the omitted variable concern) or firms that want to attract or deter takeovers may be more likely to unionize (the reverse causality concern).

To establish causality, we focus on a sample of firms that hold union elections and use a regression discontinuity design (RDD) that relies on locally exogenous variation in a firm's unionization status. The RDD compares takeover exposures of firms that barely pass union elections with those of firms that barely fail to pass union elections. For these close-call elections, passing is very close to an independent, random event and is unlikely to correlate with firm unobservable characteristics. This locally exogenous variation in unionization status allows us to identify the causal effect of unionization.

We collect union election outcomes between 1978 and 2008 from the National Labor Relations Board (NLRB) and M&A information from the SDC database. We use four proxies to capture a firm's takeover exposure and merger gains: a firm's probability of receiving a takeover bid, a firm's abnormal stock returns upon receiving a takeover bid, offer premium a target firm receives, and the bid duration (i.e., the length of bid negotiation, counted in the number of calendar days from the date of bid announcement to the date of bid completion or withdrawal).

After performing various diagnostic tests to ensure that the key identifying assumptions of the RDD are satisfied, we show that unionization appears to have a causal, negative effect on a firm's takeover exposure and merger gains. According to our nonparametric local linear regression estimation, barely passing a union election reduces the average number of takeover bids a firm receives by 48% within 3 years after the union election. Conditional on receiving a takeover bid, a barely unionized target experiences a lower price run-up and 3-day abnormal announcement return (19.6 percentage points lower in total) and receives a significantly lower offer premium (24.5 percentage points lower), compared with the targets that barely fail to pass union elections. It also takes 88 more days for a barely unionized target to close the deal, which is 65% longer than the average bid duration of 134 days in our sample.

These results are robust to alternative choices of bandwidths and become absent in two falsification tests in which we chose fictitious thresholds to determine union election outcomes and replace unionized firms with a group of non-unionized firms that are matched by industry, size, and book-to-market value. Overall, our findings are consistent with the hypothesis that labor unions reduce a firm's takeover exposure and diminish its merger gains.

Next, we explore how cross-sectional variation in labor union power and conflicts between target unions and potential acquirers alter our baseline results. We perform four tests. We first use the state-level right-to-work legislation to capture labor unions' general bargaining power. In states that adopt right-to-work legislation, unions cannot force employees to join the union or pay union dues as preconditions of employment. Hence, in right-to-work states, unions have considerably less bargaining power than those in states without right-to-work legislation. We find that the negative effect of unionization on takeover exposure is stronger for firms whose union elections are held in states without right-to-work legislation. In contrast, the effect is absent for firms with union elections being held in states with right-to-work legislation.

Second, we explore the variation in state-level successor statutes that captures labor unions' bargaining power specifically in M&A transactions. When business ownership changes hands, the continuation of union representation and the transfer of unexpired collective bargaining agreement (CBA) are critical to target employees' benefits. Federal successor doctrine provides limited guidance on the definition of a successor and the associated obligations (Huggett 1997). This gap grants states considerable autonomy in determining the unions' bargaining power in merger talks. Using hand-collected data on state-level successor statutes, we find that our baseline results are stronger for firms whose union elections are held in states with more union-friendly successor statutes.

In the third cross sectional test, we classify deals based on whether a M&A transaction is a horizontal merger or not. Compared with other forms of M&A deals, horizontal mergers are more likely to result in divestitures of overlapping production lines and large scale layoffs. In addition, rival unions representing the same type of workers in the acquirers and targets in horizontal mergers are more likely to fight for post-merger union representation in the combined firms. As a result, potential conflicts between target unions and acquirers in horizontal mergers are more severe. Consistent with this conjecture, we find that the negative effect of labor unions on takeover exposure and merger gains is more pronounced in horizontal mergers.

In our last cross sectional test, we show that our baseline results are more pronounced in firms with large unions (in terms of a large number of eligible employees and a large number of election participants). This is because large unions, if established, impose a heavier burden on the involving firms and the unionized labor has a greater power in voicing its opinion of the proposed M&A deals. These findings are consistent with our second hypothesis that unions are

obstacles to takeovers, especially when unions have larger bargaining power and are more likely to create conflicts between the acquirer and target employees.

In the last part of our paper, we show that though labor unions appear a heavy burden to target firms, they do not seem to reduce the total value created in mergers: The combined firms involving unionized targets perform similarly to the ones involving non-unionized targets in terms of announcement returns, post-merger profitability, and long-term market valuation. This is because bidders of unionized targets differ from those of non-unionized targets: They on average conduct more merger deals in the past, possess higher bargaining power, and are subject to less threat from their own labor unions. These characteristics appear to make them more capable of dealing with target unions, unlocking efficiency gains, and creating value for the combined firms. The evidence suggests that target unions deter potential bidders who are inexperienced in dealing with labor unions, reducing the pool of potential bidders and leaving only the most powerful and capable bidders acquiring unionized targets. Hence, reduced competition among these powerful and experienced bidders significantly diminishes the target firms' alternative options and bargaining power, which explains a lower offer premium and target announcement return we document earlier.

Our paper contributes to two strands of literature. First, our paper is related to studies that examine the effect of a firm's labor practices and employee rights on its takeovers outcomes. John, Knyazeva, and Knyazeva (2015) find that acquirers with strong labor rights make worse acquisitions, supporting the view that there exist agency conflicts between acquirer shareholders and employees. Wang and Xie (2013) find that employee influence can exacerbate manager-shareholder conflicts if employees' incentives are more aligned with managers. Change, Kang, and Zhang (2012) document that corporate pension deficits motivate employees to closely monitor and influence managers' takeover decisions, supporting a disciplinary role of acquirers' employees. While these papers focus on investigating the effects of employee rights on acquiring firms, our paper examines how shareholder-employee conflicts could affect a firm's takeover exposure and merger gains as a takeover target.

A contemporaneous paper by Dessaint, Golubov, and Volpin (2015) examines the role of employment protection in takeover activity in a global setting. They find that major increases in employment protection result in reductions in takeover activities, combined firm gains, takeover premium, and layoffs following mergers. They interpret their findings as evidence of workforce

restructuring being a prime source of synergies. Different from theirs, we focus on the U.S. firms and use the RDD to identify the causal effect of unionization on a firm's takeover exposure and merger gains.

Second, our paper contributes to the literature that examines various effects of labor unions on corporate investment and financial policies. Lee and Mas (2012) show negative abnormal returns over a long period to union victories, implying that unionization destroys shareholder wealth. Bradley et al. (2015) find that unions reduce firm value through their hindrance on firm innovation. Klasa, Maxwell, and Ortiz-Molina (2009) and Matsa (2010) show that unionized firms strategically hold less cash and are more likely to use financial leverage, which allows them to shield their cash flows from union demands. Chen et al. (2011a, 2011b) find that the cost of equity is significantly higher in more unionized industries while the cost of debt is lower in these industries. Our paper contributes to this literature by showing a tight link between unionization and a firm's subsequent exposure to takeovers, an important field of corporate investment and financial policies.

The rest of our paper proceeds as follows. Section 2 discusses background and explains why unions should matter in the M&A setting. Section 3 describes the data and presents summary statistics. Section 4 provides our main results. Section 5 presents tests to explore plausible underlying mechanisms. Section 6 explores total value creation and bidder characteristics. Section 7 concludes.

2. Labor unions in takeovers

Though many previous studies have found that unions reduce firm values, DiNardo and Lee (2004), using the same RDD identification strategy as ours, show negligible economic effects of labor unions on firms' average survival rates, employment, output, productivity, and wages in recent decades. Deriving from their findings, it could be tempting to conclude that, if labor unions do not affect a stand-alone firm's productivity and labor related aspects, they should not have a significant effect on the firm's takeover exposure either. This implication, however, may not be true, because merger and acquisition often combine independent entities and even if labor unions have negligible effects on individual stand-alone firms, they can still become the bone of contention in M&A when multiple firms are involved. We discuss below a few union-

induced problems that do not exist for stand-alone unionized firms but emerge as significant challenges to M&A.

First, most mergers inevitably lead to plant closures and layoffs. Target employees naturally resist takeover threats when they face employment uncertainty. As important stakeholders of target firms, target employees can voice their opinions on merger proposals and their attitude towards the deals is an important determinant of merger clauses, especially when they enjoy significant employee rights through labor unions. Second, when both the target and the acquirer are unionized, rival unions may fight for representing the employees in the combined firm. Union conflicts are often hard to reconcile and may negatively affect post-merger integration. Third, workers in different firms may have different labor contracts. As a result, combining employees from two firms usually requires acquirer management to negotiate new contracts with target employees. It is common that members in acquirer and target unions are subject to different seniority rules pre-acquisition and such differences can create significant disagreement in the negotiation process and provoke prolonged tension. Last, abovementioned tension between acquirer management and target employees can persist long after deal closure and threaten the acquirer's ability to pursue future takeovers if target unions are powerful.

We present, in Appendix Table A1, some anecdotal evidence that exemplifies the problems discussed above. These cases are real-world M&A deals which we collect from news search through Factiva, LexisNexis, and other media sources. Our cases cover firms in the airlines, financial service, entertainment, manufacturing, and utility industries. Since airline industry experienced a few mega-mergers, they attract most media coverage and therefore could appear slightly overrepresented in our examples. We elaborate big events caused by union actions against proposed mergers in Appendix Table A1 and provide a brief summary here.

In almost all cases, unemployment concerns and labor contract problems give rise to the conflicts. Rival union fights arise between large competing unions in the acquiring firm and the target (e.g., in the US Airways – America West merger and the US Airways – American Airlines merger). Union conflicts often negatively affect post-merger integration in the long run (e.g., in the American Airlines – Trans World Airline merger, the Continental – United merger, and the US Airways – American Airlines merger). Union oppositions also significantly delay merger talks and increase deal uncertainty (e.g., the Cooper Tire & Rubber – Apollo Tyres merger, the LaFarge – Holcim merger, and the Philadelphia Gas Works – UIL merger). Even though in only

one out of eleven cases (i.e., the Philadelphia Gas Works – UIL merger), the target's labor union eventually fends off the bidder, it does not imply the effect of unions is by any means small. This is because target unions deter potential bidders who are inexperienced in dealing with labor unions, reducing the pool of potential bidders. Taking into account possible oppositions of target unions, only bidders that are most confident in completing the mergers propose the bids.

Overall, we believe that labor unions could create unique and substantial challenges for firms when they engage in M&A, even though these challenges may not exist when firms remain standalone, as documented by DiNardo and Lee (2004).

3. Data and summary statistics

We compile our data set from multiple sources. Union election data are collected from the NLRB between 1978 and 2008. It contains employer name, location, SIC code, the date of the election, the number of participants, and the outcomes of the voting.[4] We eliminate observations if the election outcome is not available or if the number of employees participating in the election is less than 100, consistent with Lee and Mas (2012). The analysis of takeover premium, announcement returns, and other measures of takeovers require information on firm performance and valuation. Hence, we restrict our union election sample to publicly traded firms. We identify a total of 4,160 unique union elections for public firms. Some firms have union elections in consecutive years. To mitigate the confounding effects of multiple union elections on a firm's takeover exposure, we only keep those that have no preceding elections in the past 4 years and no subsequent elections in the next 4 years of the election close date.[5] We also require that the state information of union elections is available. Our final sample consists of 1,814 elections between 1978 and 2004.

We plot a time series of union election frequencies and passage rates in our sample period in Figure 1. There is a considerable spike followed by a sharp decline in the number of firms holding union elections in early 1980s. Beyond this period, there is a quite stable trend with roughly 50 elections per year. The second plot in Figure 1 shows passage rates for union elections across time. There is considerable variation through time, but in each year the majority of union elections fail to pass, which is consistent with the general downtrend of unionization

[4] For a thorough discussion of the union election process, see DiNardo and Lee (2004, pages 1,388 - 1,392).
[5] We investigate a firm's takeover exposure within 3 years after the union elections, so a 4-year screening window ensures that no multiple union elections exist during this period.

rates in the U.S. We also check and find that the time series of union elections do not exhibit an obvious co-movement with merger waves.

We collect all takeover bids from the SDC Mergers and Acquisitions database between 1978 and 2008. Our takeover sample stops at year 2008 because we investigate a firm's takeover exposure up to three years after union elections. We require that the M&A deal value exceeds $1 million and the bidder seeks to acquire more than 50% of target shares to gain the control of the firm and holds less than 50% of target shares beforehand. We then link the takeover data to the union election data as follows: for each firm in our union election data set, we identify takeover bids it receives, if any, within 3 years after its union election. We then compute the total number of bids each firm receives as a measure of the firm's post-election takeover exposure. For a few bids that miss offer premium information in the SDC database, we manually search Factiva and LexisNexis for complementary information and fill out the missing data when available.

We report summary statistics in Table 1. Among 1,814 union elections in our sample, 44% of them are in favor of unionization with a standard deviation of 21%. The passage rate is 30%, which suggests that approximately one third of elections lead to unionization. We identify 119 bids received by firms in our sample within 3 years after their union elections. The average offer premium is about 45% and the average 3-day cumulative abnormal return (CAR) for the target is 19%. Consistent with the findings in previous studies that part of target merger gains are revealed to the market before takeover announcements, we find a sizeable target price run-up of 9% (i.e., abnormal return computed using the market model) during the month right before the takeover announcement. We therefore compute the sum of target 3-day CAR and 1-month price run-up as a measure for target announcement returns. We also compute the duration of bid negotiation for all single-bidder mergers, defined as the total number of calendar days between the bid announcement date and the bid completion (or withdrawal) date. The mean (median) of bid duration is 134 (99) days, with a standard deviation of 127 days. We compare the distribution of our sample variables with that from the sample including all takeover bids for U.S. public targets between 1978 and 2008. We find that they are similar to each other.

4. RDD and main results

We present our main results in this section. Section 4.1 discusses our empirical strategy and reports various diagnostic tests for the validity of using the RDD. Section 4.2 presents our

main RDD results. Section 4.3 reports two falsification tests to ensure that the main results are not spurious.

4.1 Empirical strategy and diagnostic tests

A standard but naïve approach to evaluate the effect of unionization on a firm's takeover exposure is to estimate the following model using the ordinary least squares (OLS) in a firm-year panel:

$$TakeoverExposure_{i,t \to t+N} = \alpha + \beta Unionization_{i,t} + \gamma' Z_{i,t} + \varepsilon_{i,t} \quad (1)$$

where *i* indexes firm, *t* indexes time, and *N* indexes the study horizon on takeover exposure. The dependent variable, *Takeover Exposure*, is one of takeover exposure measures, such as the number of bids received, offer premium, announcement returns, and bid duration. The variable of interest is *Unionization*, which is a binary variable that equals one if the union election passes and leads to unionization and zero if the union election fails to lead to unionization. *Z* is a vector of observable determinants of a firm's takeover exposure.

However, as discussed before, unobservable firm characteristics correlated with both union election outcomes and takeover exposure could bias the results and the direction of causality can go the opposite: firms that want to attract or deter takeovers may be more likely to unionize. Therefore, β obtained from Equation (1) cannot be interpreted as a causal effect of unionization.

To address these concerns and establish causality, we exploit a unique feature of the union election data – we observe the percentage of vote for unionization in every election. Union election results are determined by a simple majority rule: The workplace is unionized if the vote for unionization passes 50%. The RDD relies on "locally" exogenous variation in unionization status generated by union elections that pass or fail by a small margin of votes around the 50% threshold. Conceptually, this empirical approach compares the subsequent takeover exposure of firms that pass the union elections by a small margin to that of firms that do not pass the elections by a small margin. It is a powerful identification strategy, because for these close-call elections, randomized variation in firm unionization status helps us to identify the causal effect of unionization on a firm's takeover exposure. Another advantage of the RDD is that we do not have to include observable covariates, *Z*, in the analysis because the inclusion of covariates is

unnecessary for identification (Lee and Lemieux, 2010). Thus, we are able to make use of nearly all of our observations even though some of them have missing data on covariates.

A key identifying assumption of the RDD is that agents (both voters and employers in our setting) cannot *precisely* manipulate the forcing variable (i.e., the number of votes in favor of unionization) near the known cutoff (Lee and Lemieux, 2010).[6] If this identifying assumption is not violated, the variation in union recognition status is as good as that obtained from a randomized experiment. To check the validity of this assumption, we perform two diagnostic tests.

First, Figure 2 presents a histogram of union vote share distribution in 40 equally-spaced vote share bins (with a bin width of 2.5%) with the x-axis representing the percentage of votes in favor of unionization. If there is a systematic sorting of firms within close proximity of the threshold, this sorting would be observed by a discontinuity in the vote share distribution at the 50% vote threshold. The figure shows that the vote share distribution is continuous within close proximity of the cutoff. Therefore, there is no evidence of precise manipulation by either workers or firms at the cutoff point.

Second, we follow McCrary (2008) and provide a formal test of a discontinuity in the density at the cutoff. Using the two-step procedure developed in McCrary (2008), Figure 3 plots the density of union vote shares.[7] The x-axis represents the percentage of votes favoring unionization. The dots depict the density and the solid line represents the fitted density function of the forcing variable (i.e., the number of votes favoring unionization) with a 95% confidence interval around the fitted line. The density appears smooth and the estimated curve gives little indication of a strong discontinuity near the 50% threshold. The discontinuity estimate is 0.30 with a standard error of 0.19. Therefore, we cannot reject the null hypothesis that the difference in density at the threshold is zero. Overall, the above two tests suggest that the validity assumption of the RDD that there is no precise manipulation by agents at the known threshold is not violated. This finding is consistent with previous studies that use the same union election data (e.g., DiNardo and Lee, 2004; Lee and Mas, 2012).

Another important assumption of the RDD is that there should not be discontinuity in other covariates that are correlated with a firm's takeover exposure at the cutoff point. In other

[6] Lee (2008) shows that even in the presence of manipulation, as long as firms do not have precise control over the forcing variable, an exogenous discontinuity still allows for random assignment to the treatment.
[7] See http://emlab.berkeley.edu/~jmccrary/DCdensity for a detailed discussion of the algorithm.

words, firms that vote to unionize should not be systematically different from firms that vote not to unionize. We perform this diagnostic test by comparing the covariates of firms that fall in a narrow band of vote shares [48%, 52%] around the winning threshold of 50%. Therefore, we are comparing firms that win or lose by a very small margin.

We report the results in Table 2. Observable covariates include firm market cap, profitability, leverage, *Q*, cash holdings, asset tangibility, external blockholder ownership, and industry takeover activities. We also compare powerful anti-takeover provisions firms could adopt such as staggered boards, golden parachute, poison pills, and supermajority in approving M&As. We create a dummy variable for each of them that equals one if a firm adopts the corresponding provision and zero otherwise. These covariates have been used in the prior literature seeking to explain takeover probability (see, e.g., Ambrose and Megginson, 1992; Cremers et al., 2009; Cai et al., 2015). Some of them are also important determinants of offer premium and target announcement returns (see, e.g., Walkling, 1985; Officer, 2003, 2004; Bates et al., 2008; Betton et al., 2014). These covariates are similar between firms that barely unionize and those that barely fail to *before* union elections, suggesting that for these close-call elections, election outcomes are unlikely to be correlated with firm observable characteristics.[8]

Overall, the diagnostic tests suggest that there does not appear a precise manipulation by agents within close proximity of the 50% threshold. Further, there is no discontinuity in other covariates at the cutoff point before the union elections.

4.2 Main RDD results

We present the main RDD results in this subsection. We examine the effect of unionization on a firm's takeover exposure and merger gains over a three-year horizon post-election. Takeovers are rare events. On average, about less than 5% of public firms receive takeover bids each year. Hence, a very short horizon (e.g., shorter than one year) suffers from a small sample problem that may create significant biases. However, over an excessively long horizon (e.g., more than 5 years) there might be other firm activities that affect takeover exposure and contaminate the results. Therefore, a three-year horizon appears a good balance

[8] The only covariate that is close to be marginally different (p-value = 0.131) across the two groups of firms is the anti-takeover provision of "supermajority in approving M&As". In our sample, barely unionized firms (Win=1) are less likely to have such a provision, which makes them easier to be targeted in takeovers, *ceteris paribus*. This difference, even if significant, would bias against us finding the results that unionized target are less likely to receive takeover bids.

between the tradeoff. Using a two-year or four-year window produces quantitatively similar results.

We first present the RDD results in Figure 4 to visually check the relation between a firm's unionization status and its subsequent takeovers around the election cutoff. We investigate the number of bids that firms receive within 3 years after the union election (left-top panel), duration of bid negotiation (right-top panel), offer premium (left-bottom panel), and cumulative abnormal announcement returns (right-bottom panel). The x-axis represents the percentage of votes in favor of unionization. We once again divide the spectrum of vote shares into 40 equally-spaced bins (with a bin width of 2.5%).[9] In all plots displayed, firms that fail to unionize are to the left of the 50% threshold and firms that succeed in unionizing are to the right of the threshold. The dots depict the average value of the corresponding variables within the bins. The solid line represents the fitted local polynomial kernel estimate with a 95% confidence interval around the fitted value.

The figures show a significant discontinuity in all measures at the threshold. Specifically, within close proximity of the threshold, the number of bids a firm receives within 3 years after the union election drops significantly if the percentage of votes in favor of unionization just crosses the 50% cutoff point. This finding suggests that, ceteris paribus, the existence of union reduces a firm's exposure to takeover attempts. Conditional on receiving a bid, firms that barely pass union elections appear to receive a significantly lower offer premium than those that barely fail to pass the union elections. Consistent with this finding, these firms also experience a significantly lower price run-up and 3-day announcement return when the takeover bids are publicly announced. Bid negotiation process involving these barely unionized targets also seems to take a much longer period.[10] Overall, our observations from these visual checks point to a negative, causal effect of unionization on a firm's takeover exposure and its merger gains.

We next employ a nonparametric local linear estimation to perform our RDD tests formally. The baseline estimation results use the optimal bandwidth defined by Imbens and

[9] The choice of the bin width reflects a tradeoff discussed in Imbens and Lemieux (2008). The bin width needs to be large enough to have a sufficient amount of precision so that the plots look smooth on either side of the threshold, but small enough to make the jump around the threshold clear. We use alternative bin widths and get similar results from both plots and regressions.

[10] Note that firms without unions are more likely to receive multiple competing bids than unionized firms do, and the bid duration of the contested bids is often longer than that of the single-bidder bids. To make a fair and meaningful comparison, we only contrast here the average duration of all single-bidder bids received by firms in our sample.

Kalyanaraman (2012) that minimizes the mean squared error (MSE) in a sharp regression discontinuity setting. In Table 3, we report the local linear estimation results using both a triangular kernel and a rectangular kernel.[11] The coefficient estimates on *Unionization* are all statistically significant with similar magnitudes in both specifications, confirming the negative effect of unionization on a firm's takeover exposure and merger gains we observe in Figure 4. The economic effect is sizable: the estimates suggest that firms passing a union election receive 0.072 fewer takeover bids in the next 3 years after the union election, which represents roughly a 48% reduction from the average number of bids a typical firm receives in a 3-year period (an average firm receives 0.15 bids in a 3-year period).

Conditional on receiving a takeover bid, firms that barely pass the union election receive a significantly lower offer premium and enjoy a much lower cumulative abnormal announcement return. The magnitudes of reductions are economically sounded. For example, barely unionized targets receive an average offer premium that is 24.5 percentage points lower than non-unionized targets. They also experience a cumulative abnormal return that is 19.6 percentage points lower on takeover announcement, including the pre-announcement price run-up. Meanwhile, it takes much longer for unionized firms to complete the deal, evidenced by the fact that the bid duration is about 88 days longer when the M&A deal involves unionized targets.

We also report in Table 3 the baseline RDD regression results with alternative bandwidths that are 75% and 125% of the optimal bandwidth defined by Imbens and Kalyanaraman (2012). Our baseline results continue to hold for specifications using alternative bandwidths and the magnitudes of coefficients remain similar across different bandwidths.

In an unreported analysis, we contrast other aspects of deal characteristics between unionized and non-unionized targets. We find that the probability of deal completion is lower for unionized targets, though the difference is not statistically significant at the 10% level. This finding, however, does not necessarily suggest a negligible effect of unionization on bid completion rate. This is because taking into account possible oppositions of target unions, only bidders that are more confident and capable of completing the mergers will propose the bids while other potential bidders may have already been deterred from bidding *ex ante*. The methods of payment, in general, do not exhibit a strong correlation with the targets' unionization status.

[11] As Imbens and Lemieux (2008) point out, the choice of kernel typically has little impact on estimation in practice. The statistics literature has shown that a triangular kernel might be optimal for estimating local linear regressions at the boundary, because it puts more weight on observations closer to the cutoff point.

Overall, these RDD results confirm our visual observation presented in Figure 4 regarding the sharp discontinuity in a firm's takeover exposure and merger gains around the cutoff point, suggesting a negative, causal effect of unionization on a firm's takeover exposure.

4.3 Falsification tests

In this subsection, we perform two falsification tests to ensure that our main results are not spurious.

In the first falsification test, we argue that if our main RDD results truly reflect a causal effect of labor unions on a firm's takeover exposure, the results should be absent if we assume an alternative, fictitious cutoff to determine the union election outcomes along the spectrum of vote shares. This is because firms falling in the small intervals around any fictitious cutoff point do not actually differ in their unionization status. As a result, we shall not be able to observe a significant discontinuity in takeover exposure at the fictitious cutoff points that are different from the true threshold of 50%.

To test this conjecture, we first randomly select an alternative cutoff point along the spectrum of union vote shares between 0% and 100% other than 50%. We then assume that it is the threshold that determines union election outcomes and re-estimate the local linear RDD model with a triangular kernel. We repeat this placebo estimation 1,000 times and plot a histogram of the distribution of the RDD estimates from these falsification tests in Figure 5. We also include a dashed vertical line that represents the RDD estimate that uses the true threshold reported in Table 3. The histogram is centered at zero, which is consistent with the conjecture that the effect of unionization on firm takeover exposure is absent at artificially chosen vote thresholds.

In the second falsification test, we keep the observations of failed union elections in our sample, but for each passed union election, we replace the firm with a matched firm that has no union in place by the time of observation. We require non-unionized matched firm to be in the same industry as the unionized firm and has size and book-to-market ratio as close to the unionized firm as possible. For each matched firm, we obtain the number of bids it receives within three years after the original firm's union election date. If the matched firm receives any bids, we also obtain their announcement returns, offer premiums, and bid duration.

The matched firms face a similar takeover environment as the unionized firms. The only significant difference between the unionized firms and their matched firms is their unionization status (by construction, the matched firms are non-unionized). Therefore, if our main RDD results truly capture a causal effect of labor unions on a firm's takeover exposure and are not driven by chance, the results should be absent for the matched firm group. We rerun our RDD regression with unionized firms being replaced with their non-unionized matched firms. We find that the coefficient estimates are statistically insignificant with mixed signs, suggesting that unionization status is the force that drives our baseline results.

5. Possible Mechanisms

In this section, we explore possible underlying mechanisms through which labor unions affect a firm's takeover exposure and merger gains. We explore how cross-sectional variation in target union power and conflicts between target unions and potential acquirers alter our baseline RDD results. We carry out the analysis through four subsample tests: the right-to-work legislation and the state-level successor statutes create significant variation in union power across different states; horizontal and non-horizontal mergers differ much in potential conflicts between target unions and acquirers in post-merger integration; and the size of target unions reflects both union power and potential conflicts between target employees and acquirer management.

5.1 Right-to-work legislation

As discussed in the introduction, states that have adopted right-to-work legislation cannot force employees to join unions or pay union dues as preconditions of employment. Therefore, in states with right-to-work legislation, unions have considerably less bargaining power than those in states without right-to-work legislation. One consequence of weaker union bargaining power is that a unionized workforce in a right-to-work state will have a smaller effect on a firm's takeover exposure than that in states without similar legislation.

We first collect information regarding right-to-work legislation in each state from the Department of Labor, following Masta (2010) and John, Knyazeva, and Knyazeva (2014). We then classify observations into a weak union power subsample (i.e., union elections held in states with right-to-work legislation) or a strong union power subsample (i.e., union elections held in states without right-to-work legislation). We carry out the classification on a state-year panel

basis. For example, Oklahoma enacts the right-to-work legislation in 2001, so any union elections occurring in Oklahoma before 2001 is classified into the strong union power subsample and any union elections occurring in Oklahoma after 2001 is classified into the weak union power subsample. We don't have the exact enactment date of right-to-work legislation. Hence, for any union elections occurring during the first (second) half of the enactment year, we classify them into the strong (weak) union power subsample. Our results are not sensitive to this assumption.

Table 4 reports the results for firms whose union elections are held in states with (panel A) and without (panel B) right-to-work legislation, using the nonparametric local linear RDD estimation.[12] In states with right-to-work legislation, we find that the coefficient estimates on *Unionization* exhibit mixed signs and are statistically insignificant across all regressions. On the contrary, as reported in panel B, winning a union election in states without right-to-work legislation (which affords unions more bargaining power) has a much larger economic and statistical effect on a firm's takeover exposure and merger gains. The results are consistent with the conjecture that unions in states with right-to-work legislation have weaker bargaining power and therefore have a smaller effect on a firm's exposure to takeovers.

5.2 State successor statutes

Next, we explore how variation in state laws that regulate the successorship and transfer of collective bargaining agreement (CBA) in M&As alters our main results.

Labor unions and employers bargain through a collective bargaining process, in which they reach CBA to establish wages, hours, and conditions of employment. The National Labor Relation Act (NLRA) does not specifically address the continuation of employees' union representation or the continuation of unexpired CBA during corporate ownership transfer. The NLRB and Supreme Court have attempted to fill these gaps with federal common law. This body of law, known as the "Federal successor doctrine", defines the rights and obligations of employees when a business changes ownership. However, the Supreme Court has not provided a fixed definition of when a purchasing employer is a successor or a uniform declaration of what

[12] States with right-to-work legislation as of 2004 (our union election sample end year) include Alabama, Arizona, Arkansas, Florida, Georgia, Idaho, Iowa, Kansas, Louisiana, Mississippi, Nebraska, Nevada, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, and Wyoming.

obligations follow a finding of successorship (Huggett 1997). Federal successor doctrine, therefore, offers limited protection to unionized employees in takeover targets (Sweeney 1991).

This gap grants states considerable autonomy in defining successorship and imposing obligations on successors, which governs target unions' bargaining power in M&As. We manually collect data on state-level successor statutes and identify states that have more union-friendly laws in regulating successor liability.[13] We expect target unions in these states to have higher bargaining power with acquirers. We explain in Appendix Table A2 related state-level successor statutes for each state and how these statutes favor unions in regulating the transfer of CBA liability during the change of corporate control.

Ideally, we want to check whether our results are stronger for firms in states with more union-friendly laws. However, only about 30% of our observations fall into this subsample of states. The sample becomes particularly small (i.e., 36 observations) when we examine offer premium, announcement returns, and bid duration, which makes the RDD test not performable. Hence, we instead focus on firms in states with less union-friendly successor statutes and check whether our results become weaker.

Table 5 reports the results. The results indeed appear weaker. Specifically, though the probability of receiving bids do not change much, the magnitudes of both cumulative abnormal announcement returns and offer premium coefficient estimates drop more than 60% and become statistically insignificant. The difference in bid duration between the two groups of targets also becomes insignificant. Overall, the results seem to be consistent with our hypothesis that labor unions reduce the targets' bargaining power in mergers, especially for the targets whose union elections are held in states with more union-friendly successor statutes.

5.3 Horizontal mergers

Acquirers pursue takeovers for different reasons. Horizontal mergers are more likely to have a larger effect on target firm operation: They often involve more aggressive post-merger integration between the acquirer and target and lead to a greater efficiency improvement through target plant shutdown and large scale layoffs. Meanwhile, if the acquirer and target operate in the same industry, they are more likely to have labor unions representing the same type of

[13] These states include Illinois, Minnesota, Delaware, Massachusetts, Pennsylvania, Rhode Island, California, and Ohio.

employees on both firms. Anecdotal evidence suggests that rival unions representing the same type of employees in the acquirer and target are more likely to fight for union representation in the combined firm or for other issues such as differences in contract seniority rules. Overall, target unions could create more conflicts and therefore appear more troublesome in horizontal mergers. Hence, we expect that the negative effect of labor unions is more pronounced for horizontal mergers.

We define a merger to be horizontal if the acquirer and the target belong to the same Fama-French 17-industry classifications.[14] Among 119 bids in our sample, 51 bids are classified as horizontal mergers and the remaining 68 bids are classified as non-horizontal mergers.

Table 6 presents the nonparametric local linear RDD regression results for this test. For non-horizontal mergers (panel A), the coefficient estimates on *Unionization* retain the same signs as those in our baseline results, but all of them decrease significantly in magnitudes and four out of five lose statistical significance. For instance, the differences in cumulative abnormal announcement returns and offer premium between barely unionized targets and non-unionized targets drop by more than 60%, suggesting a significantly diminished effect of unionization in non-horizontal mergers.

In contrast, our results become stronger for horizontal mergers (panel B). The difference in cumulative announcement returns and offer premium between the two groups of targets both increases by 4 percentage points from our baseline results and now are -23.6% and -28.1%, respectively. Note that the difference in the average number of takeover bids received by the two groups of targets seems to shrink in the subsample of horizontal mergers, compared with that in our baseline results. However, this reduction is mechanical because we classify all bids into two categories (horizontal vs. non-horizontal). In other words, the probability for a firm to receive a certain type of bid is always lower than the probability of receiving a bid regardless of its type. After taking this into account, the difference in the number of takeover bids received by the two groups of targets is actually more pronounced in horizontal mergers.

5.4 Union size

[14] Using other industry classification (e.g., based on 3-digit SIC code or Fama-French 48-industry classifications) does not materially change our results.

Large unions in target firms could possess stronger bargaining power and cause more potential conflicts with acquirers in mergers, ceteris paribus. In this subsection, we check whether our baseline results are stronger for firms with large unions.

We first sort all union elections by the number of eligible employees. We take the bottom half as the small union election subsample and the top half as the large union election subsample.[15] The average (median) number of eligible employees in the small union subsample is 136 (133) and that in the large union subsample is 507 (338). Hence, the two subsamples exhibit substantial difference in union size.

Table 7 presents the nonparametric local linear RDD regression results for the small union (panel A) and large union subsamples (panel B). The results for the large union subsample are similar to, if not apparently stronger than, our baseline results. The results for the small union subsample are weaker. Announcement returns and offer premium of barely unionized targets do not seem to differ significantly from those of non-unionized targets in the small union subsample, though the difference in the number of received bids continues to be significant between the two groups of targets.

6. Value creation and bidder characteristics

Given our findings that labor unions deter takeover attempts and reduce the target's merge gains, a nature question is whether acquiring a unionized target affects the total value created in M&A transactions. To explore this question, following existing literature (e.g., Healy et al. 1992; Andrade et al. 2001; Bhagat et al. 2005; Harford 2005), we compute the combined firms' announcement returns and changes in firms' operating performance and market valuation after deal completion. The combined firms' announcement returns reflect the market's assessments of total value creation in the proposed deals at the time of takeover announcements. Changes in firms' operating performance and market valuation capture the *ex post* deal quality in a longer horizon. Our analysis here focuses on the completed deals, because target unions do not affect acquirers' future performance or valuation if the proposed bids fail to complete. Our sample includes 91 completed deals.

[15] Note that our sample screening criteria already excludes very small union elections whose participants are less than 100.

We measure changes in combined firms' operating performance and market valuation as follows:

$$\Delta ROA = \frac{1}{3}\left(\sum_{n=1}^{3} ROA_{c,t+n} - \sum_{n=1}^{3} ROA_{w,t-n}\right) \quad (2)$$

$$\Delta Q = \frac{1}{3}\left(\sum_{n=1}^{3} Q_{c,t+n} - \sum_{n=1}^{3} Q_{w,t-n}\right) \quad (3)$$

where $ROA_{c,t+n}$ is the combined firm's return-on-assets in the nth year after the merger, and $ROA_{w,t-n}$ is the weighted average of the acquirer's and target's return-on-assets in the nth year before the merger. Similar interpretation applies to changes in the market valuation *Q*, defined as a firm's market-to-book ratio.

We perform the nonparametric local linear RDD regression analysis on the combined firm's abnormal announcement returns, ΔROA, and ΔQ to compare deal quality for the completed mergers that involve barely unionized and non-unionized targets. The coefficient estimate on *Unionization* for the combined firm's abnormal announcement return is 0.023 with a t-statistic of 0.4. The coefficient estimates on *Unionization* for ΔROA and ΔQ are also statistically insignificant and economically small. These results suggest that the market does not seem to discount the combined firms' value in mergers involving unionized targets and, consistent with the market reactions, the combined firms do not exhibit poorer operating performance or lower valuation than those in mergers involving non-unionized targets.

The above findings that unionized targets suffer from lower merger gains while the total value created in the mergers seems to be unaffected suggest that acquirers of unionized targets benefit more from these deals. One plausible reason is that acquirers of unionized targets could be different from those of non-unionized targets in their experience in M&As and ability of dealing with unions. We explore this conjecture by examining acquirers' past experience in M&As, their bargaining power relative to targets in these deals, and the performance of their past deals. Because the number of deals an acquirer makes in the past is highly skewed to the right in our sample, we define a dummy variable, *experienced acquirer*, that equals one if an acquirer conducts 5 or more deals in the past 15 years, and zero otherwise. We compute an acquirer's bargaining power relative to its target in each bid following Ahern (2012). Specifically, we measure an acquirer's relative bargaining power using the difference between the acquirer's dollar gain and the target's dollar gain in the deal, normalized by the sum of the acquirer's and

target's pre-merger market values. Finally, we capture the performance of their past deals using changes in ROA and changes in *Q* as defined in Equations (2) and (3).

The top panel of Table 8 reports the RDD regression results. Compared with acquirers of non-unionized targets, acquirers of unionized targets are 46.5% more likely to be an experienced bidder. They possess higher bargaining power, and their relative share of merger gains in past deals is on average 22 percentage points higher than those of non-unionized targets. They also appear to experience a larger improvement in post-merger performance (ROA) and valuation (*Q*), suggesting more value creation in merger deals they complete in the past.

We next investigate both explicit and implicit union threats an acquirer faces before making its takeover bid. As shown in Section 2, severe union fights and contention on seniority rules are often fueled by conflicts between powerful rival unions in the acquirer and target firm. We therefore postulate that an acquirer with a lower level of threat from its own unions (if any) could possess some advantages in taking over a unionized target through reducing potential union conflicts. A low level of union threat in an acquiring firm may also reflect the acquirer's superior ability in dealing with its own employees, which could potentially help its negotiation with target employees, too.

We measure explicit union threat by the number of existing unions an acquirer has and the total eligible employees covered by these unions. We measure implicit union threat by the total number of union elections an acquirer has in the past and the total number of participants in these union elections. The intuition for our implicit union threat measure is that, even if a union election fails in the past, employees still have the option to pursue union elections again in the future (DiNardo and Lee, 2004), and this threat is expected to become more substantial and realistic if the acquirer takes over a unionized target.

We again run a `nonparametric local linear` RDD regression to test whether acquirers of unionized targets differ from those of non-unionized targets in terms of their explicit and implicit union threats. The bottom panel of Table 8 presents the results. Acquirers of unionized targets on average have 1.2 fewer union elections in the past, and the total number of participants in these union elections is also smaller. Though acquirers of unionized targets do not have a significantly smaller number of unions in place, the total number of eligible employees covered by their existing unions is significantly lower for these bidders.

Overall, our analysis in this section shows that target unionization status does not seem to significantly affect the total value creation in the transactions. One plausible reason is that acquirers of unionized target differ significantly from those of non-unionized targets. We find that they are more likely to be experienced acquirers, possess higher bargaining power, conduct better merger deals in the past, and are subject to less explicit and implicit threat from their own unions. These characteristics seem to make these acquirers more capable of dealing with target unions and hence create value for the combined firms. The evidence further suggests that target unions deter potential bidders who are inexperienced in dealing with labor unions, reducing the pool of potential bidders and leaving only the most powerful and capable bidders acquiring unionized targets. Hence, reduced competition among these powerful and experienced bidders significantly diminishes the target firms' alternative options and bargaining power, which explains a lower offer premium and target announcement return we document in Section 4.

7. Conclusion

In this paper, we examine the causal effect of unionization on a firm's takeover exposure and merger gains. To establish causality, we use a RDD that relies on "locally" exogenous variation generated by elections that pass or fail by a small margin of votes. Barely passing a union election leads to a significant reduction in a firm's probability of receiving a takeover bid. A barely unionized target firm also enjoys a lower announcement return, receives a lower offer premium, and experiences longer duration of bid negotiation. The negative effect of unions on takeover exposure and merger gains is more pronounced when union elections are held in states without right-to-work legislation and in states with more union-friendly successor statues, when the mergers are horizontal, and when the unions in the target firms are large. We also document that the negative effect of unionization on target firms does not seem to significantly affect the combined firm value. Acquirers of unionized targets appear to make this happen, because they have more experience in making merger deals in the past, exhibit better performance in these past deals, possess higher bargaining power relative to their past targets, and face less threat from their own unions.

Our paper provides new insights into the effects of unionization on corporate control. In addition, given that labor unions in the U.S. are regulated and can be altered by labor laws and

regulations over time, our paper also provides important policy implications for policy makers when they alter union regulations or labor laws to affect the market of corporate control.

References

Abraham, K., and J. Medoff, 1984. Length of service and layoffs in union and non-union work groups. *Industrial and Labor Relations Review* 38: 87-97.

Ahern, K. R., 2012. Bargaining power and industry dependence in mergers. *Journal of Financial Economics* 103: 530-50.

Ambrose, K.W. and W. L. Megginson, 1992. The role of asset structure, ownership structure and takeover defenses in determining acquisition likelihood. *Journal of Financial and Quantitative Analysis* 27: 575–89.

Andrade, G., M. Mitchell, and E. Stafford., 2001. New evidence and perspectives on mergers. *Journal of Economic Perspectives* 15: 103-20.

Atanassov, J., and H. Kim, 2009. Labor and corporate governance: International evidence from restructuring decisions. *Journal of Finance* 64: 341-74.

Bates, T. W., D. A. Becher, and M. L. Lemmon, 2008. Board classification and managerial entrenchment: Evidence from the market for corporate control. *Journal of Financial Economics* 87: 656-77.

Becker, B., 1995. Union rents as a source of takeover gains among target shareholders. *Industrial and Labor Relations Review* 49: 3-19.

Betton, S., B. E. Eckbo, R. Thompson, and K. S. Thorburn, 2014. Merger negotiations with stock market feedback. *Journal of Finance* 69: 1705-45.

Bhagat, S., M. Dong, D. Hirshleifer, and R. Noah, 2005. Do tender offers create value? New methods and evidence. *Journal of Financial Economics* 76: 3-60.

Bhagat, S., A. Shleifer and R. Vishny, 1990. Hostile takeovers in the 1980s: The return to corporate specialization. *Brookings Papers on Economic Activity: Microeconomics*.

Bliss, R., and R. Rosen, 2001. CEO compensation and bank mergers. *Journal of Financial Economics* 61: 107-38.

Bradley, D., I. Kim, and X. Tian, 2015. Do unions affect innovation? *Management Science*, forthcoming.

Cai, Y., X. Tian, and H. Xia, 2015. Location, proximity, and M&A transactions. *Journal of Economics & Management Strategy*, forthcoming.

Chang, X., J. Kang, and W. Zhang, 2012. Employees as creditors: The disciplinary role of pension deficits in the market for corporate control. *Working paper*.

Chen, J., M. Kacperczyk, and H. Ortiz-Molina. 2011a. Labor unions, operating flexibility, and the cost of equity. *Journal of Financial and Quantitative Analysis* 46: 25-58.

Chen, J., M. Kacperczyk, and H. Ortiz-Molina. 2011b. Do nonfinancial stakeholders affect the pricing of risky debt? Evidence from unionized workers. *Review of Finance* 16: 347-83.

Connolly, R. A., B. T. Hirsch, and M. Hirschey. 1986. Union rent seeking, intangible capital, and market value of the firm. *Review of Economics and Statistics* 68: 567-77.

Cremers, M, V. Nair, and K. John, 2009. Takeover and the cross-section of returns, *Review of Financial Studies* 22: 1409-45.

Cuñat, V., M. Gine, and M. Guadalupe. 2012. The vote is cast: The effect of corporate governance on shareholder value. *Journal of Finance* 67: 1943-77.

Davis, S. J., J. Haltiwanger, R. Jarmin, J. Lerner, and J. Miranda, 2011. Private equity and employment. *Working paper.*

Dessaint, O., A. Golubov, P. Volpin, 2015. Employment protection and takeovers. *Working Paper.*

DiNardo, J., and D. S. Lee, 2004. Economic impacts of new unionization on private sector employers: 1984–2001. *Quarterly Journal of Economics* 119: 1383-441.

Grout, P. A. 1984. Investment and wages in the absence of binding contracts: A Nash bargaining approach. *Econometrica* 52: 449-60.

Harford, J., 2005. What drives merger waves? *Journal of Financial Economics* 77: 529-60.

Harford, J. and K. Li, 2007. Decoupling CEO wealth and firm performance: The case of acquiring CEOs. *Journal of Finance* 62: 917–49.

Healy, P., K. Palepu, and R. Ruback, 1992. Does corporate performance improve after mergers? *Journal of Financial Economics* 31: 135-75.

Huggett, B. T., 1997. Successor clauses: what they are and why every union should have one. *Catholic University Law Review* 46: 835 – 905.

Imbens, G. and T. Lemieux, 2008. Regression discontinuity designs: A guide to practice. *Journal of Econometrics* 142: 615-35.

Imbens, G. and K. Kalyanaraman, 2012. Optimal bandwidth choice for the regression discontinuity estimator. *Review of Economic Studies* 79: 933-59.

Jensen, M. C., 1988, Takeovers: Their causes and consequences. *Journal of Economic Perspectives* 2: 21–48.

Jensen, M. and W. Meckling, 1976. Theory of the firm: managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics* 3: 305–60.

John, K., A. Knyazeva, and D. Knyazeva, 2015. Employee rights and acquisitions. *Journal of Financial Economics* 118: 49-69.

Jovanovic, B. and P. Rousseau, 2002. The Q-theory of mergers. *American Economic Review* 92: 198-204.

Kaplan, S. N., 1989. The effects of management buyouts on operating performance and value. *Journal of Financial Economics* 24: 217-54.

Kini, O., W. Kracaw, and S. Mian, 2004. The nature of discipline by corporate takeovers. *Journal of Finance* 59: 1511-52.

Klasa, S., W. F. Maxwell, and H. Ortiz-Molina, 2009. The strategic use of corporate cash holdings in collective bargaining with labor unions. *Journal of Financial Economics* 92: 421-42.

Lee, D. S. 2008. Randomized experiments from non-random selection in U.S. house elections, *Journal of Econometrics* 142: 675-97.

Lee, D. S. and T. Lemieux, 2010. Regression discontinuity designs in economics. *Journal of Economic Literature* 48: 281-355.

Lee, D. S. and A. Mas, 2012. Long-run impacts of unions on firms: New evidence from financial markets, 1961–1999. *Quarterly Journal of Economics* 127: 333-78.

Li, X., 2012. Workers, unions, and takeovers, *Journal of Labor Research* 33: 443-60.

Malcomson, J. M., 1997. Contracts, hold-up, and labor markets. *Journal of Economic Literature* 35: 1916-57.

Masulis, R. W., C. Wang, and F. Xie, 2007. Corporate governance and acquirer returns. *Journal of Finance* 62: 1851-89.

Matsa, D. A. 2010. Capital structure as a strategic variable: Evidence from collective bargaining. *Journal of Finance* 65: 1197-232.

McCrary, J. 2008. Manipulation of the running variable in the regression discontinuity design: A density test. *Journal of Econometrics* 142: 698-714.

McLaughlin, D. and D. Fraser, 1984. Collective bargaining: The next twenty years. *Annals of the American Academy of Political and Social Science* 473: 33-39.

Morck, R., Shleifer, A., and R. Vishny, 1990. Do managerial objectives drive bad acquisitions? *Journal of Finance* 45: 31-48.

Officer, M. S., 2003. Termination fees in mergers and acquisitions. *Journal of Financial Economics* 69: 431–67.

Officer, M. S., 2004. Collars and renegotiations in mergers and acquisitions. *Journal of Finance* 59: 2719–743.

Pagano, M. and P. F. Volpin, 2005. Managers, workers, and corporate control. *Journal of Finance* 60: 841-68.

Scharfstein, D., 1988. The disciplinary role of takeovers, *Review of Economic Studies* 55: 185–99.

Shleifer, A. and L. Summers, 1988. Breach of trust in hostile takeovers. In A. J. Auerbach (Ed.), *Corporate Takeovers: Causes and Consequences*. University of Chicago Press, Chicago.

Sweeney, E. C., 1991. Dodging the supremacy clause bullet: do state successor statutes survive federal labor law preemption. *Industrial Relations Law Journal* 13: 183.

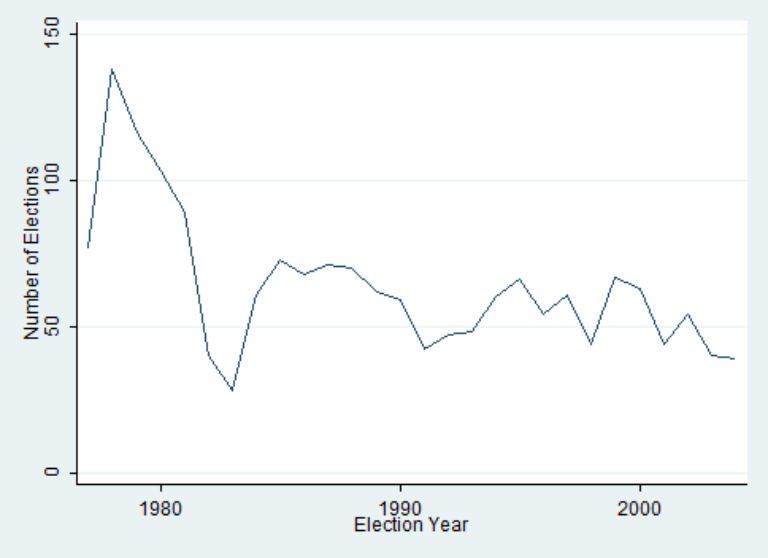
Walkling, R., 1985. Predicting tender offer success: A logistic analysis. *Journal of Financial and Quantitative Analysis* 20: 461–78.

Wang, C., and F. Xie, 2013. Employee influence, worker-manager alliance, and shareholder returns from acquisitions. *Working paper*.

Weisbach, M. S., 1993. Corporate governance and hostile takeovers, *Journal of Accounting and Economics* 16: 199–208.

Figure 1
Number of union elections and passage rates by year

This figure plots the number of union elections by year (top) and the average passage rates by year (bottom) in our final sample. Union election results are from the National Labor Relations Board (NLRB) over 1978 to 2004.



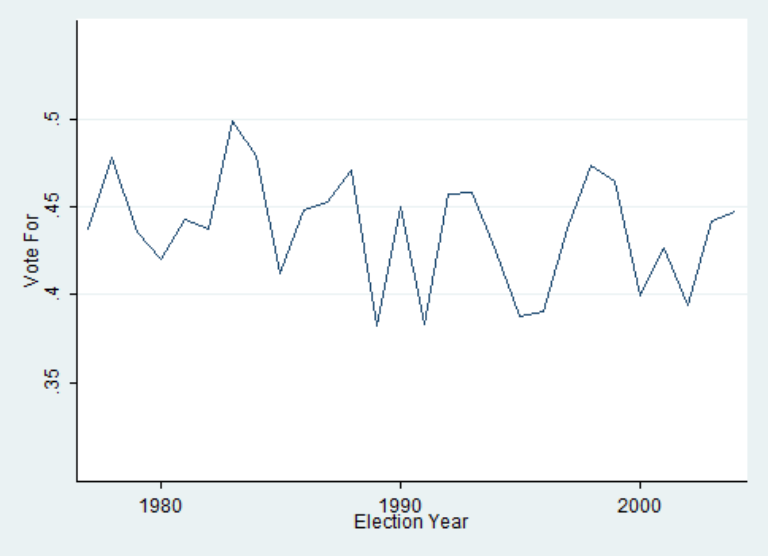


Figure 2
Distribution of votes

This figure plots a histogram of the distribution of the number of elections with the percentage of votes for unionizing in our sample across 40 equally-spaced bins (with a 2.5% bin width). Union election results are from the National Labor Relations Board (NLRB) over 1978 to 2004.

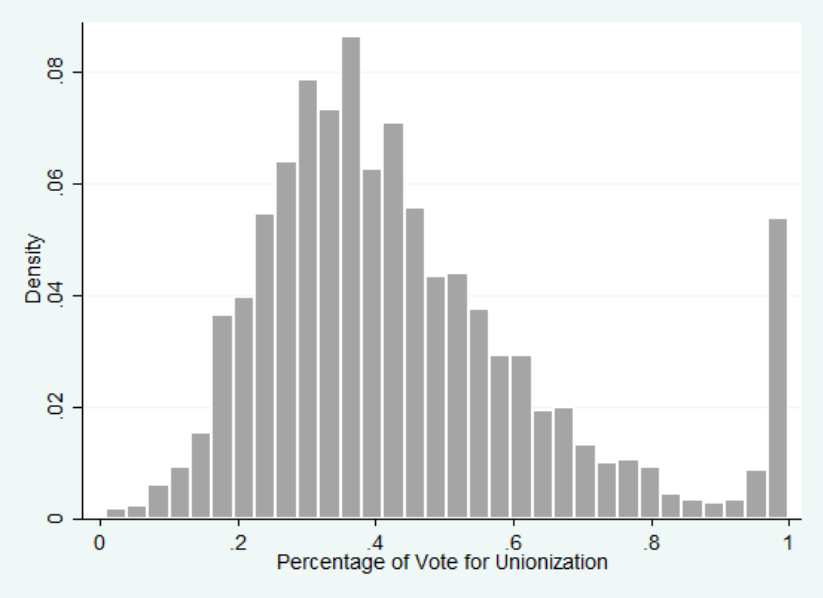


Figure 3
Density of union vote shares

This figure plots the density of union vote shares following the procedure in McCrary (2008). The x-axis is the percentage of votes favoring unionization. The dots depict the density estimate. The solid line represents the fitted density function of the forcing variable (the number of votes) with a 95% confidence interval around the fitted line. Union election results are from the National Labor Relations Board (NLRB) over 1978 to 2004.

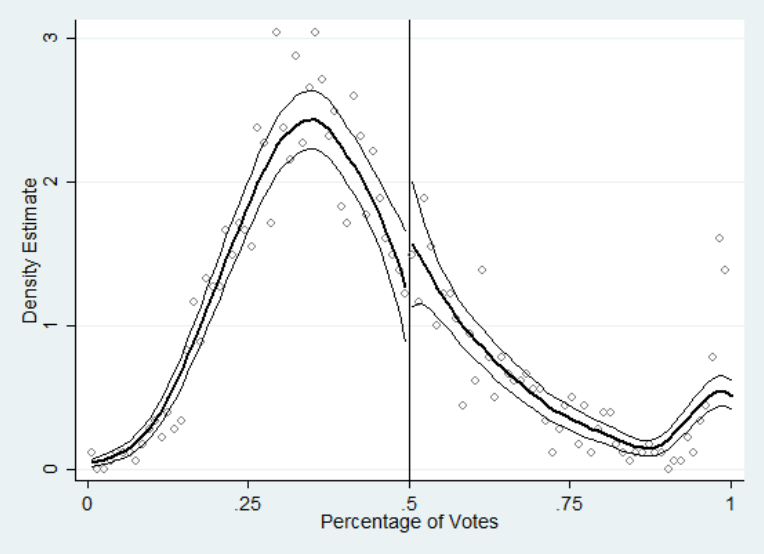


Figure 4
Regression discontinuity plots

This figure presents regression discontinuity plots using a fitted local kernel estimate with a 95% confidence interval around the fitted value. The x-axis is the percentage of votes favoring unionization. The dots depict different takeover exposure variables in each of 40 equally-spaced bins (with a bin width of 2.5%). Union election results are from the National Labor Relations Board (NLRB) over 1978 to 2004. Takeover and stock valuation data are collected from SDC database and CRSP over the 1978 to 2008 time period.

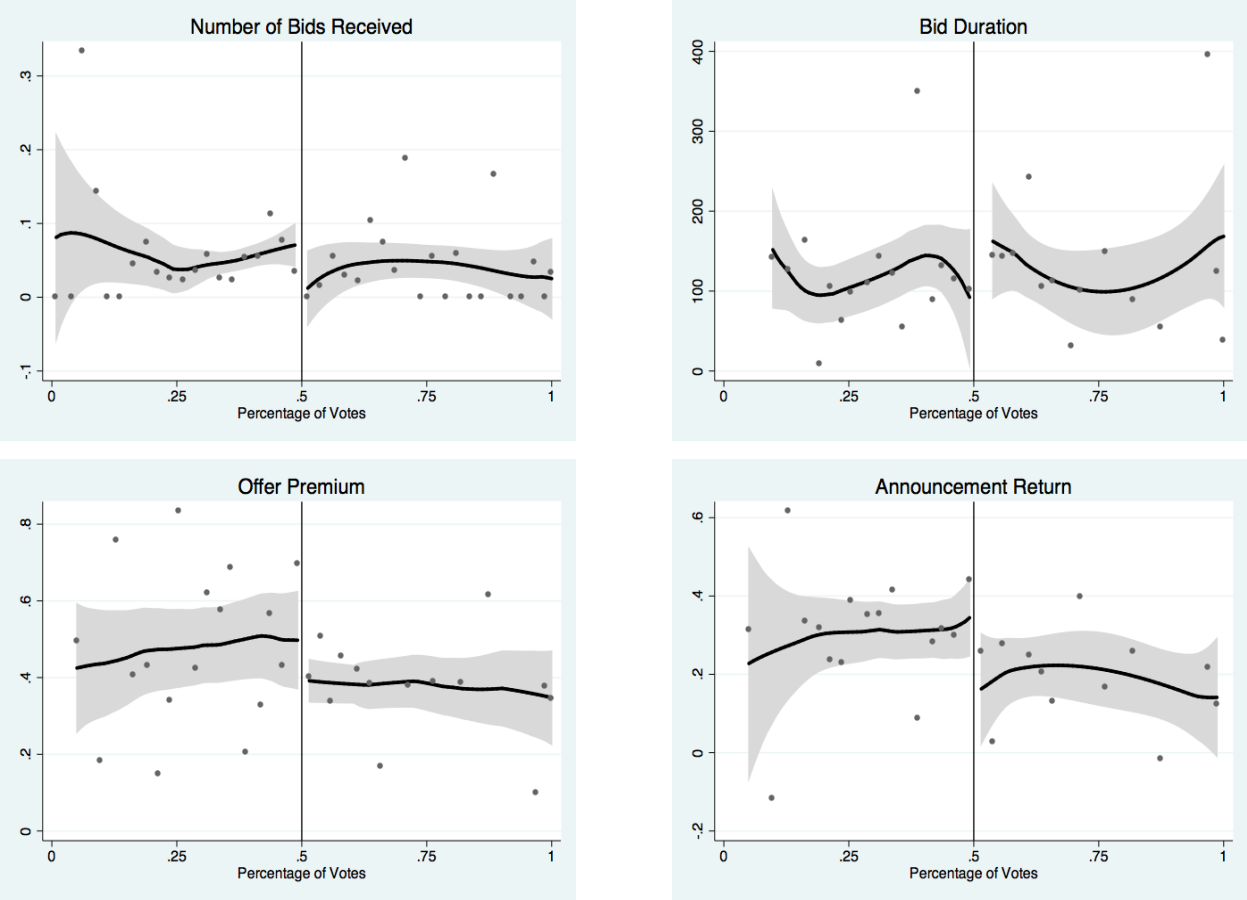


Figure 5
Falsification tests

This figure plots a histogram of the distribution of RDD estimates from the falsification test, in which we assume a fictitious cutoff to determine the election outcomes. The x-axis represents the RDD estimates from the falsification tests that assume different fictitious thresholds other than 50%. The dashed vertical line represents the RDD estimate using the true 50% threshold. Union election results are from the National Labor Relations Board (NLRB) over 1978 to 2004. Takeover data are from the SDC database over 1978 to 2008.

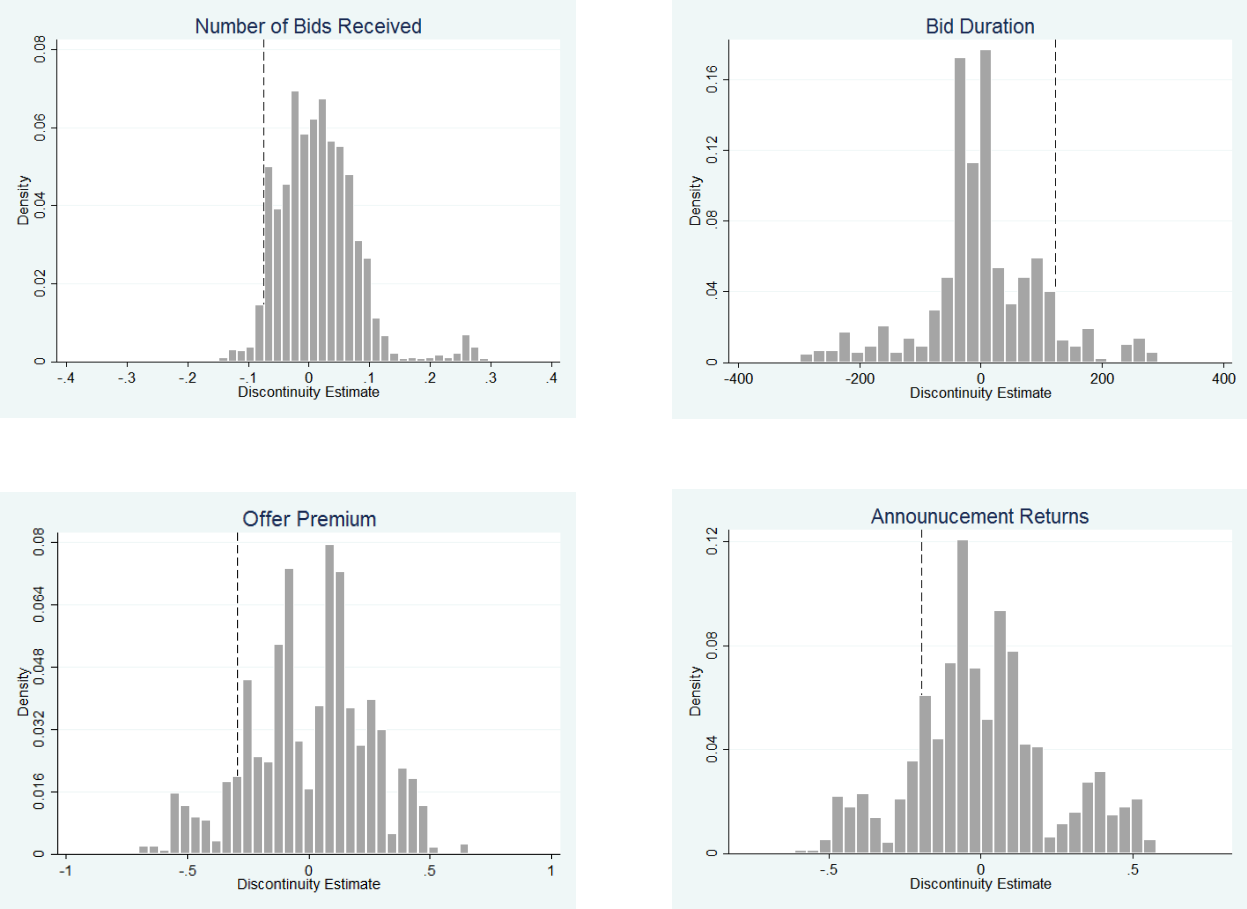


Table 1

Summary statistics

This table presents summary statistics of our sample. We report union election statistics and takeover statistics. "Vote for union" is the total number of votes in favor of unionization divided by total votes in a given election. "Passage" is an indicator variable that equals one if a firm is unionized as a result of an election and otherwise zero. "Offer premium" is defined as the bid price per share divided by the price of target stock 4 weeks before takeover announcement. "Tar 3-Day Ann. Ret." is the target's 3-day CAR around the bid announcement, computed using the market model. "Tar 4-Wk Run-up" is the target's 4-week price run-up before the bid announcement, computed using the market model. "Tar Run-up + Ann. Ret." is the sum of target's 3-day CAR and 4-week price run-up. "Bid duration" is the number of days between the bid announcement and bid completion or withdrawal for all single-bidder bids. "Bid completion rate" is the number of completed bids divided by the total number of all bids. "Cash bids" is the number of all-cash bids divided by the total number of bids whose methods of payment are available. "Equity bids" is the number of all-equity bids divided by the total number of bids whose methods of payment are available. Union election results are from the National Labor Relations Board (NLRB) over 1978 to 2004. Takeover data are from the SDC database over 1978 to 2008.

	Obs.	Mean	Std. Dev.	Median
Union election statistics				
Vote for union	1,814	0.44	0.21	0.39
Passage	1,814	0.30	0.46	0.00
Takeover statistics (bids received by firms in our sample)				
Offer premium	96	0.45	0.26	0.43
Tar 3-Day Ann. Ret.	96	0.19	0.19	0.16
Tar 4-Wk Run-up	96	0.09	0.16	0.07
Tar Run-up + Ann. Ret.	96	0.28	0.22	0.26
Bid duration (days)	95	134	127	99
Bid completion rate	119	0.76	0.35	1.00
Cash bids	82	0.45	0.50	0.00
Equity bids	82	0.15	0.35	0.00
Takeover statistics (all merger bids for US public targets from 1978 to 2008)				
Offer premium	7,490	0.43	0.35	0.35
Tar 3-Day Ann. Ret.	7,604	0.20	0.19	0.15
Tar 4-Wk Run-up	7,604	0.09	0.17	0.06
Tar Run-up + Ann. Ret.	7,604	0.29	0.26	0.26
Bid duration (days)	9,282	142	122	121
Bid completion rate	10,306	0.80	0.39	1.00
Cash bids	8,848	0.40	0.49	0.00
Equity bids	8,848	0.34	0.47	0.00

Table 2
Difference in observable characteristics between unionized and non-unionized firms

This table shows differences in observable characteristics between firms that participate in union elections and win versus those that lose by a small margin (vote shares within the interval of [48%, 52%]). Union election results are from the National Labor Relations Board (NLRB) over 1978 to 2004. Firm characteristics are from Compustat, measured at one year prior to the union election close date. Market Cap is firm market equity in million dollars. ROA is the return on assets. Leverage is the book debt to total assets ratio, Q is the ratio of market-to-book value of assets, where market assets are defined as total assets plus market value of common stock minus book common equity and deferred taxes. Cash/Asset is cash and short-term investments scaled by the total assets. PPE/Asset is property, plant, and equipment, scaled by the total assets. BLOCK is a dummy variable equal to one if (at least) one institutional investor holds more than 5% of the company stock and zero otherwise. Industry Bid equals one if there was a takeover in a firm's industry in the prior year. Staggered board, Golden parachute, Poison pills, and Supermajority in approving M&As are dummy variables that equal one if certain provisions are adopted by the firms.

	Win = 1	**Win = 0**	**Difference**	**P-Value**
Market Cap	1363.0	1341.5	21.5	0.976
ROA	0.041	0.024	0.017	0.541
Leverage	0.432	0.394	0.038	0.590
Q	1.193	1.293	-0.010	0.442
Cash/Asset	0.074	0.070	0.004	0.862
PPE/Asset	0.401	0.350	0.051	0.300
BLOCK	0.581	0.529	0.051	0.684
Industry Bid	0.806	0.764	0.042	0.688
Staggered board	0.600	0.714	-0.114	0.653
Golden parachute	0.500	0.571	-0.071	0.788
Poison pills	0.500	0.571	-0.071	0.788
Supermajority in approving a M&A	0.100	0.428	-0.328	0.131

Table 3
Regression discontinuity: Nonparametric local linear regression

This table presents nonparametric local linear RDD regression results using the optimal bandwidth following Imbens and Kalyanaraman (2012) and alternative bandwidths. Results using triangular kernels (panel A) and rectangular kernels (panel B) are reported. The dependent variables are the number of bids received within two or three years post union election, offer premium, target firm announcement returns, and bid duration. Union election data are from the National Labor Relations Board (NLRB) over 1978 to 2004. Takeover data are from the SDC database over 1978 to 2008.

Panel A: Coefficients of Unionization (Triangular Kernel)					
	Average number of bids received		**Announcement returns**	**Offer premium**	**Bid duration (days)**
	2 Yrs	3 Yrs			
Optimal bandwidth	-0.075***	-0.072**	-0.196**	-0.245**	88.3**
	(-3.02)	(-2.26)	(-2.45)	(-2.49)	(1.98)
75% Optimal bandwidth	-0.072***	-0.078**	-0.205**	-0.280***	104.4**
	(-2.76)	(-2.18)	(-2.38)	(-2.56)	(1.99)
125% Optimal bandwidth	-0.074***	-0.071**	-0.250***	-0.181*	67.2*
	(-3.18)	(-2.43)	(-3.15)	(-1.72)	(1.70)

Panel B: Coefficients of Unionization (Rectangular Kernel)					
	Average number of bids received		**Announcement returns**	**Offer premium**	**Bid duration (days)**
	2 Yrs	3 Yrs			
Optimal bandwidth	-0.089***	-0.058*	-0.219***	-0.297***	99.0*
	(-3.15)	(-1.73)	(-2.56)	(-2.89)	(1.70)
75% Optimal bandwidth	-0.078***	-0.088**	-0.220**	-0.262**	194.7*
	(-2.68)	(-2.35)	(-2.33)	(-2.13)	(1.69)
125% Optimal bandwidth	-0.072***	-0.072**	-0.218***	-0.140	56.2
	(-2.76)	(-2.44)	(-2.73)	(-0.95)	(1.00)

Table 4
Right-to-work legislation

This table presents nonparametric local linear RDD regression results using the optimal bandwidth proposed by Imbens and Kalyanaraman (2012) for firms whose union elections are held in states with right-to-work legislation (panel A) and those in states without right-to-work legislation (panel B). Results using a triangular kernel are reported. The dependent variables are the number of bids received within two or three years post union election, offer premium, target firm announcement return, and bid duration. Union election data are from the National Labor Relations Board (NLRB) over 1978 to 2004. Takeover data are from the SDC database over 1978 to 2008.

Panel A: State with Right-to-work legislation					
	Average number of bids received		**Announcement return**	**Offer premium**	**Bid duration (days)**
	2 Yrs	3 Yrs			
Unionization	-0.038	0.023	-0.121	0.006	-73.0
	(-1.58)	(0.34)	(-0.98)	(0.03)	(-0.23)

Panel B: State without Right-to-work legislation					
	Average number of bids received		**Announcement return**	**Offer premium**	**Bid duration (days)**
	2 Yrs	3 Yrs			
Unionization	-0.088**	-0.115***	-0.281**	-0.289*	94.6**
	(-2.45)	(-2.90)	(-1.98)	(-1.67)	(2.04)

Table 5
State Successor Statutes

This table presents nonparametric local linear RDD regression results using the optimal bandwidth following Imbens and Kalyanaraman (2012) for the subsample of the states with less union-friendly successor statutes. Results using a triangular kernel are reported. The dependent variables are the number of bids received within two or three years post union elections, offer premium, target firm announcement return, and bid duration. Union election data are from the National Labor Relations Board (NLRB) over 1978 to 2004. Takeover data are from the SDC database over 1978 to 2008.

States with Less Union-Friendly Successor Statutes					
	Average number of bids received		**Announcement return**	**Offer premium**	**Bid duration (days)**
	2 Yrs	3 Yrs			
Unionization	-0.071***	-0.075*	-0.081	-0.112	-22.1
	(-2.52)	(-1.79)	(-1.02)	(-0.92)	(-0.60)

Table 6
Horizontal mergers

This table presents nonparametric local linear RDD regression results using the optimal bandwidth following Imbens and Kalyanaraman (2012) for non-horizontal (panel A) and horizontal mergers (panel B). Horizontal mergers are defined as the mergers and acquisitions in which acquirers and targets are in the same industry, and non-horizontal acquisitions are defined as the mergers and acquisitions in which acquirers and targets are in different industries. Results using a triangular kernel are reported. The dependent variables are the number of bids received within two or three years post union election, offer premium, target firm announcement return, and bid duration. Union election data are from the National Labor Relations Board (NLRB) over 1978 to 2004. Takeover data are from the SDC database over 1978 to 2008.

Panel A: Non-Horizontal Mergers					
	Average number of bids received		**Announcement return**	**Offer premium**	**Bid duration (days)**
	2 Yrs	3 Yrs			
Unionization	-0.040**	-0.029	-0.087	-0.141	66.5
	(-2.05)	(-0.97)	(-0.87)	(-1.38)	(1.15)

Panel B: Horizontal Mergers					
	Average number of bids received		**Announcement return**	**Offer premium**	**Bid duration (days)**
	2 Yrs	3 Yrs			
Unionization	-0.045***	-0.035*	-0.236***	-0.281***	81.7
	(-2.90)	(-1.69)	(-4.28)	(-3.27)	(0.77)

Table 7
Union size

This table presents nonparametric local linear RDD regression results using the optimal bandwidth following Imbens and Kalyanaraman (2012) for firms with small (panel A) and large unions (panel B). Results using a triangular kernel are reported. The dependent variables are the number of bids received within two or three years post union election, offer premium, target firm announcement return, and bid duration. Union election data are from the National Labor Relations Board (NLRB) over 1978 to 2004. Takeover data are from the SDC database over 1978 to 2008.

Panel A: Firms with Small Union Elections

	Average number of bids received		Announcement return	Offer premium	Bid duration (days)
	2 Yrs	3 Yrs			
Unionization	-0.075**	-0.077**	0.010	0.149	18.9
	(-2.26)	(-2.25)	(0.09)	(1.01)	(0.21)

Panel B: Firms with Large Union Elections

	Average number of bids received		Announcement return	Offer premium	Bid duration (days)
	2 Yrs	3 Yrs			
Unionization	-0.070**	-0.070*	-0.203**	-0.273**	52.7
	(-2.01)	(-1.72)	(-2.20)	(-2.11)	(1.00)

Table 8
Who acquire unionized targets

This table presents nonparametric local linear RDD regression results using the optimal bandwidth following Imbens and Kalyanaraman (2012). Results using a triangular kernel are reported. The dependent variables are the acquirers' experiences in past M&A deals and the potential threat of unions these acquirers face. We measure acquirers' M&A experiences by the number of M&A deals they have conducted before the current bids (experienced acquirers are the acquirers that conducted more than 5 deals in the past 15 years) and their performance in these past deals, including the relative share of total gains accrued to acquirers, changes in the combined firms' operating performance (ROA) and changes in the combined firms' market valuation (Q) post mergers in these deals. We measure the potential union threat to acquirers by the number of union elections the acquirers have experienced by the time of making the current bids, the total number of participants in these union elections, the number of passed elections that lead to existing unions in the acquiring firms, and the total eligible employees covered by these existing unions. Union election data are from the National Labor Relations Board (NLRB) over 1978 to 2004. Takeover data are from the SDC database over 1978 to 2008.

Panel A: Acquirers' Experiences in Mergers and Acquisitions

	Experienced acquirer	**Acquirer's relative share**	**Change in ROA**	**Change in Q**
Unionization	0.465**	0.221**	0.079**	0.310
	(1.99)	(2.03)	(2.01)	(0.40)

Panel B: Union Threat to Acquirers

	Implicit Threat		**Explicit Threat**	
	Number of past elections	**Total election participants**	**Number of existing unions**	**Total eligible employees**
Unionization	-1.231***	-211.7**	-0.166	-43.2*
	(-2.55)	(-1.98)	(-1.04)	(-1.67)

Appendix

A. Anecdotes of union conflicts in mergers

Table A1. This table presents anecdotal evidence regarding union conflicts and union protests in mergers and acquisitions. These examples are collected from news search through Factiva, LexisNexis, and Google which cover reports in different media sources. No restrictions on country, territory, or industry are imposed.

Mergers	Year	Industry	Events
American Airlines – Reno Air	1999	Airlines	AA pilot union staged a 10-day sick-out to fight against the merger, leading to a cancellation of more than 6,000 flights.
Kookmin – Housing and Commercial	2000	Financial	16,000 union workers began a strike to protest the merger between the two largest Korean banks, which the unions fear will lead to big layoffs
American Airlines – Trans World Airlines	2001	Airlines	TWA flight attendants were unsatisfied with AA even six years after the merger and picketed in 2006.
Gaumont – Pathe	2001	Entertainment	Union reps at Gaumont, unhappy with the merger, called for a national strike to be held on the first day of France's Fete du Cinema.
US Airways – America West	2005	Airlines	Rival unions fight for representing the 8,000 baggage handlers at the new US Airways. Former America West pilots fight over the seniority and the battle threatened to disrupt the following merger between US Airways and AA in 2012.
Delta – Northwest	2008	Airlines	Flight attendants from Delta and Northwest continued to work under separate contracts, each with their own work rules, and they cannot be scheduled to fly on the same airplanes, which negatively affected the integration.
Continental – United	2010	Airlines	In Sep 2011, More than 700 Continental and United Continental pilots took to Wall Street to protest slow contract negotiations and misinformation regarding merger integration. Even by 2013, it had yet to complete union negotiations.

			The significant differences in labor contracts between United and Continental, along with the majority of employees belonging to unions, caused the difficulty.
US Airways – American Airlines	2012	Airlines	Machinists union demanded US Airways negotiate a fair contract with IAM members before any merger talks. The union for American and US Airways pilots criticized management's contract offer and request more profit sharing. Dealing with the employees proved to be one of the most difficult steps in integrating the airlines. 24,000 flight attendants from the two carriers narrowly rejected a joint labor contract, which delayed the integration process.
Cooper Tire & Rubber – Apollo Tyres	2013	Manufacture	The deal faced opposition as workers at Cooper's U.S. and Chinese factories raised hurdles .The latest hurdle arose after a U.S. arbitrator, acting on a complaint filed by the Steelworkers union, ordered Cooper Tire to refrain from selling or transferring its Texarkana, Ark., and Findlay plants unless Apollo recognized the union as bargaining agent for the plants' workers and set employment terms that would be implemented at the closing of a merger.
LaFarge – Holcim	2014	Manufacture	International worker unions protested the transaction, claiming it would cost thousands of jobs. Members of Nigeria's Construction and Civil Engineering Senior Staff Association joined workers of Holcim and Lafarge in at least 22 countries, calling for the deal's suspension until job-security issues raised by unions are addressed. Jyrki Raina, general secretary of IndustriALL Global Union, said, "Workers are demanding respect, and the first step would be for Holcim and Lafarge management to include workers and trade unions as the merger moves forward."
Philadelphia Gas Works – UIL	2014	Utility	Philadelphia Local 686 defeated the city administration and a well-funded private utility in a privatization effort of Philadelphia Gas Works

B. State-level successor statutes

Table B1. This table summarizes the state-level successor statutes that are considered to be union-friendly. States that are covered by successor statutes in the table are considered to provide stronger protection to unionized employees in takeover target firms, and states that are not covered by any successor statutes in the table are considered to provide weak protection.

Successor Statutes	Regulation Description	States Covered	Citation to Statutes
Successor clause	1. Make the successor liable for the obligation of the predecessor's CBA where that agreement contains a successor clause. 2. Place an affirmative duty upon a selling employer to disclose the existence of a collective bargaining agreement with a successor clause to a purchaser.	Illinois, Minnesota	ILL. ANN. STAT. ch. 48, para. 2571-72 (Smith-Hurd Supp. 1991). MINN. STAT. ANN. § 338.01 (West Supp. 1995)
Blanket statutes	1. Make the successor liable for the predecessor's CBA regardless of whether the CBA itself contains a successor clause	Delaware, Massachusetts, Pennsylvania, Rhode Island	DEL. CODE ANN. tit. 19, § 706 (1990); MASS. GEN. LAWS ANN. ch. 149, § 20E (West Supp. 1991); PA. LAWS 36 § 2585-88; R.I. GEN. LAWS § 28-7-19.1 (1991).
Other statutes	1. Make the successor liable for the predecessor's CBA, provided the purchaser was conducting the same or similar business at the same facilities	California, Ohio, Massachusetts	CAL. LAB. CODE § 1127 (Deering 1991) (enacted 1975); OHIO REV. CODE ANN. § 4113.30 (Page 1991) (enacted 1978); MASS. GEN. LAWS ANN. ch. 149, § 179C (West 1996) (enacted 1979).