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Employee-Manager Alliances and Shareholder Returns from Acquisitions

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Abstract

We examine the potential for management-worker alliances when employees have substantial voting rights, and how such alliances affect the balance of power between managers and shareholders. We find that substantial employee voting rights exacerbate the manager-shareholder conflicts. Specifically, they entrench incumbent managers and allow them to pursue value-destroying acquisitions by undercutting the disciplinary influence of the corporate control market. Importantly, employee support for managers is conditional on favorable treatment of employees. Our findings are consistent with Pagano and Volpin's (2005) theory of worker-management alliances and highlight the potential risks associated with large employee voting power.

Keywords: Market for Corporate Control, Takeover Protection, Worker-Manager Alliance, Employee Stock Ownership Plan, Acquisition Profitability, Agency Problems, Employee Treatment

JEL Classifications: G34, J31, J32

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1. Introduction

A central theme of the corporate governance literature is the existence of serious conflicts of interest between managers and shareholders at public corporations. While managers and shareholders are important actors in this agency relationship, the firm's nature as a nexus of contracts between many parties (Jensen and Meckling (1976)) dictates that their interactions with other stakeholders also matter. One important class of stakeholders whose welfare is particularly sensitive to managerial decisions and who can potentially alter the balance of power between managers and shareholders is a firm's employees. Not surprisingly, there has been a growing interest in understanding the importance of employees in corporate policies and outcomes.[1] However, most extant studies directly focus on the employee-shareholder conflicts without considering the separate incentives of managers, who are the primary decision makers in dispersedly held firms. In this study, we enhance our understanding of employee influence in firms by taking a broader perspective on the dynamics among these three key corporate stakeholders and their distinct economic interests. More specifically, we recognize the potential conflicts of interests between shareholders and managers when interacting with employees. We explore the possibility for workers and managers to form alliances and examine how such alliances affect the agency relationship between managers and shareholders.

We use corporate acquisitions as an informative laboratory for our investigation because they are among the largest investments a firm can make, and as a consequence they can heighten the conflicts of interest between managers and shareholders. There is ample evidence that managers of acquiring firms can often obtain private benefits in acquisitions that destroy shareholder value (e.g., Morck, Shleifer, and Vishny (1988), Bliss and Rosen (2000), and Harford and Li (2007)). At the same time, acquisitions carry significant consequences for employees as well, given their potential to drastically alter a firm's financial

[1] An incomplete list of studies in this literature include Bronars and Deere (1991), DeAngelo and DeAngelo (1991), D'Souza, Jacob, and Ramesh (2001), Faleye, Mehrotra, and Morck (2006), Anatassov and Kim (2009), Klasa, Maxwell, and Ortiz-Molina (2009), Matsa (2010), Bae, Kang, and Wang (2011), Agrawal (2012), Agrawal and Matsa (2013), Kim and Ouimet (2014), Simintzi, Vig, and Volpin (2015), Huang, Jiang, Lie, and Que (2017), and John, Knyazeva, and Knyazeva (2015).

and business risk. In addition, large-scale layoffs may ensue when acquisitions generate business overlaps and excess capacity at the combined firm (Dessaint, Golubov, and Volpin (2017)) or when acquisitions underperform and trigger restructuring (Kaplan and Weisbach (1992)).

We explore the potential for manager-worker alliances when employees have substantial voting power due to their equity ownership in their firm. Such equity positions arise primarily from employee stock ownership plans (ESOP) and 401(k) plans, and occasionally from profit sharing plans and stock bonus plans as well. They can provide workers with substantial cash flow and voting rights.[2] The cash flow rights give workers residual claims to firm profits, partially aligning their interests with shareholders. Employee voting rights, on the other hand, can be a key factor in determining the likelihood of a firm becoming a takeover target as well as for the outcomes of such control contests (Gordon and Pound (1990), Chaplinsky and Niehaus (1994), and Rauh (2006)). Together, employees' ownership of cash flow rights and voting rights makes them an important force that can affect corporate governance and firm policies.

In corporate acquisition decisions, the effect of employee equity ownership on managerial behavior can be difficult to predict. On the one hand, employee equity ownership can enable managers to make ill-advised acquisitions. The theory on management-worker alliances developed by Pagano and Volpin (2005) suggests that when workers control substantial voting rights, they can use their power to protect managers from hostile takeover attempts, so long as management ensures that workers enjoy favorable wages, working conditions and greater job security. As managers form alliances with employees with major voting rights and become less concerned about the discipline of the market for corporate control, they are more likely to pursue unprofitable empire-building acquisitions that destroy shareholder value.

Another factor that aligns manager and worker interests is that they both hold undiversified portfolios and a large portion of their wealth (e.g., wage income, benefits, and human capital) is tied to the firm employing them. Thus, they share a preference for acquisitions that reduce firm risk and increase

[2] The tender rights and voting rights of employer securities held in defined contribution retirement plans, such as ESOPs and 401(K) plans, are typically passed through to plan participants, i.e., employees (Stabile (1998)).

employment security, even at the expense of shareholder value. Equity ownership in an employer makes employees more undiversified, enhancing their preferences for risk-reducing and diversifying acquisitions.

On the other hand, employee ownership may compel managers to eschew empire-building value-destroying acquisitions. The negative stock price impact of such transactions can result in large losses in the value of employee shareholdings, which can lead to adverse consequences for firms and managers through several channels. For example, firms can experience declines in employee morale, decreases in productivity, and increases in voluntary employee turnover, all of which can lower firms' operating efficiency and performance. Also, as employee financial wealth is damaged by bad acquisitions, managers may find employees more demanding at times of contract renewals and renegotiations. More contentious labor relations can lead to temporary work stoppage or prolonged strikes and cause disruptions to a firm's operations. Even absent any work stoppages, a strained relationship between employees and management can make employees unwilling to support incumbent managers and cost managers an important ally in the event of unsolicited takeover attempts. These considerations should discourage empire-building acquisitions that depress stock price and hurt the value of employee stock ownership. However, this mechanism can be rendered ineffective when employees receive large benefits from the labor-friendly policies of incumbent managers that outweigh the losses in their share value.

To test these predictions, we construct a sample of 3,778 acquisitions made by firms in the ISS (formerly RiskMetrics) database during the period between 1996 and 2009. Controlling for an array of firm and deal characteristics, we find that acquirers with large employee equity ownership (at least 5% of shares outstanding) experience lower abnormal stock returns on acquisition announcements. This result is significant both statistically and economically and suggests that firms with employee block ownership are more likely to engage in shareholder value reducing acquisitions. We further find that employee block ownership significantly reduces the likelihood of empire-building acquirers receiving a takeover bid within three years following the acquisition. This is consistent with a white-squire role played by employee blockholders (Pagano and Volpin (2005)), where they insulate managers from the discipline of the market for corporate control, thereby encouraging empire-building behavior.

We next investigate employee incentives to use their voting rights to protect managers and allow them to make bad acquisitions with seeming impunity. The worker-management alliance theory of Pagano and Volpin (2005) argues that workers are motivated to support incumbent managers when they enjoy favorable employment policies, such as long-term contracts, high wages, generous benefits and infrequent layoffs. We also expect employees to have stronger incentives to form alliances with empire-building managers when their employment status is more secure and less susceptible to adverse consequences of poor acquisitions. Under these conditions, managers have stronger incentives to pursue empire-building acquisitions without fear of market discipline. The results of our analysis confirm this prediction and lend direct support for the Pagano and Volpin (2005) theory. Specifically, the negative relation between employee block ownership and acquirer shareholder returns is concentrated in firms with better employee treatment, more unionized workforces, abnormally high employee wages, and in diversifying acquisitions. These findings highlight a key difference between employee ownership and other takeover defenses such as staggered boards and poison pills in that its support for management is conditional on whether employees receive sufficient quid pro quo benefits in its alliance with management.

Identification is a major challenge for studies in corporate governance. We conduct a battery of tests to establish causality in the relation between employee block ownership and acquirer shareholder returns. First, we draw upon economic theory to identify and control for a number of potential omitted variables that may affect the distribution of employee stock ownership across firms. This helps us rule out the influence of an acquirer's corporate governance (including takeover defenses, board structure, and institutional ownership), CEO quality, growth prospects, uniqueness, and human capital importance as omitted variables. For a subsample of acquisitions made by repeat acquirers, we also control for acquirer fixed effects to rule out any unobservable time-invariant acquirer characteristics as omitted variables.

Second, we exploit exogenous state-level variations in business combination statutes (BCS). We show that our results are concentrated in deals where acquirers are incorporated in states with precisely the type of BCS that gives employee blockholders the legal standing to potentially block unwanted takeover attempts. Given that cross-state differences in BCS features are plausibly exogenous to any individual firm

(Bertrand and Mullainathan (2003)), this evidence bolsters our confidence in a causal interpretation of the role of employee block ownership in firm acquisition decisions.[3]

Third, we employ a two-stage least squares (2SLS) regression to address concerns about selection biases associated with employee block ownership. We instrument for employee block ownership with two variables based on economic incentives that encourage employee equity ownership. These incentives are related to state income tax savings by employees and employee retention, and they are unlikely to have any direct bearing on corporate acquisition decisions and especially their profitability. The first instrument is defined as a weighted average of the state-level top individual income tax rates faced by a firm's employees. The weights are based on the state-by-state distribution of a firm's employees, which we obtain from the Lexis-Nexis Corporate Affiliates Database. The rationale for this instrument is that shares allocated to employee accounts in retirement plans such as ESOPs or 401(k) plans are not taxable until employees leave the company or retire (Chaplinsky and Niehaus (1990)). Given the tax deferral benefits of stock compensation, workers facing higher individual income tax rates have greater incentives to accept employer stock in lieu of cash compensation. Thus, we expect the average state individual income tax rate faced by firm employees to be positively related to the firm's employee equity ownership.

Our second instrument is a labor mobility measure specific to a firm's industry and the locations of its operations. Higher labor mobility makes it more difficult for a firm to retain employees. As a result, the firm has stronger incentives to use employee equity ownership as a retention device. Similar to Kim and Ouimet (2014), we define our labor mobility measure as the level of concentration of employees within each industry-state cluster. The intuition is that if workers in an industry-state cluster are dispersed across a large number of employers, labor mobility is higher and employee retention is a more pressing issue for employers in this industry-state cluster. Therefore, employers are more likely to use stock compensation to retain employees. Since a firm can have operations in multiple states, we compute a weighted-average labor mobility measure based on the distribution of a firm's employees across states.

[3] Firms that change their state of incorporation in our sample period are excluded from this analysis to avoid endogeneity concerns.

Our first-stage regression shows that both instruments are significantly related to employee block ownership with the expected signs, supporting their economic relevance. As noted earlier, there do not appear to be any direct theoretically predicted links between a firm's acquisition profitability and these two instruments. In the second-stage regression, we continue to find a significantly negative relation between employee blockholdings and acquirer returns, suggesting that our results are robust after we correct for the endogeneity of employee blockholdings. It is also noteworthy that our findings are insensitive to using the two instruments together or either one of them by itself in the 2SLS regressions.

Fourth, we adopt a propensity score matching approach, in which we create a matched sample of acquirers that differ in employee block ownership, but otherwise are indistinguishable from each other in firm characteristics known to be related to acquisition announcement returns. Both univariate and multiple regression analyses continue to show that acquirers with employee block ownership are associated with significantly lower abnormal stock returns around acquisition announcements.

Finally, we explore cross-sectional variations in the negative relation between employee block ownership and acquirer returns. We find that it is concentrated in firms with less product market competition and lower managerial equity incentives. These results suggest that managers and workers are more likely to form an alliance to exploit shareholders when there is more slack and managerial interests are less aligned with those of shareholders.

Our study contributes to a growing body of research examining the influence of labor on major corporate policies and outcomes (see footnote 1). Studies in this literature generally focus on employee rights arising from unionization or legal protection and explore the implications of these rights in creating employee-shareholder conflicts. In contrast, we emphasize employee power that their equity ownership provides and when it can exacerbate the manager-shareholder conflicts. As a result of this shift in focus, our investigation differs from most of the prior research by explicitly incorporating both the incentives of managers and employees to explore the conditions under which manager-worker alliances are likely to arise. Our evidence suggests that substantial employee voting rights can provide a catalyst for managers and workers to form implicit alliances to realize reciprocal benefits at shareholders' expense.

In this regard, our investigation is related to Atanassov and Kim (2009), who explore in a cross-country setting how labor protection and investor protection affect restructuring decisions at poorly performing firms. They find that a combination of stronger labor protection and weaker investor protection provides managers with incentives to form alliances with employees and engage in shareholder value-reducing restructuring activities that help secure their own positions as well as those of workers. We complement and extend their findings by showing that even in a developed country like the U.S. with strong investor protections and weak labor protections,[4] workers can still wield their influence through large equity ownership positions and have a sizable impact on manager-shareholder conflicts and corporate decisions. In addition, by focusing on acquisitions, rather than restructuring activities, our analysis suggests that potential worker-management alliances should also be a concern to shareholders of financially robust firms.

In a more recent study, John, Knyazeva, and Knyazeva (2015) examine the effect of employee rights on labor-shareholder conflicts in the context of corporate acquisitions. They use the absence of right-to-work laws at the state level as a measure of stronger employee rights and find that firms in states without such laws tend to make worse acquisitions, suggesting that stronger employee rights exacerbate labor-shareholder conflicts and reduce shareholder gains from acquisitions. Our study differs from John et al. (2015) in several important respects. First, on a conceptual level, the fundamental question we examine is whether employee power influences manager-shareholder conflicts of interest. As a result of this focus, we explicitly consider different aspects of managerial incentives and the potential for managers and workers to form alliances at the expense of shareholders. In John et al (2015), managers play no explicit role because their study is about employee-shareholder conflicts. Second, because of the importance and uncertainty of worker-manager alliances, we find that the effect of employee voting rights on managerial entrenchment and acquirer shareholder returns hinges critically on the likelihood of manager-worker alliances. This distinguishing feature suggests that the underlying economic forces and channels driving our findings are

[4] The U.S. has the 13th highest anti-self-dealing index out of the 72 countries studied by Djankov et al. (2008), but it is ranked 76th and 77th out of 85 countries in the employment laws index and collective relations (union) laws index (Botero et al. (2004)).

distinctly different from those in John et al (2015). Third, as further assurance that the two studies are unlikely to capture the same underlying economic mechanisms, our findings are robust to controlling for whether the acquirer's state has a right-to-work law.[5]

Our investigation also extends prior research that finds employee stock ownership reduces a firm's takeover vulnerability (Chaplinsky and Niehaus (1994), and Rauh (2006)). However, it is unclear from these studies whether employee stock ownership is beneficial or harmful to shareholder value because a stronger takeover posture can improve a target firm's bargaining position and allow managers to negotiate a higher takeover premium. By relating employee block ownership to shareholder wealth effects and types of acquisitions, we speak directly to the implications of employee stockholdings for managerial incentives and shareholder value. Importantly, our findings suggest that employee block ownership strengthens managerial entrenchment under specific conditions, which is a key distinction that sets this takeover defense apart from the takeover defenses studied by Gompers, Ishii, and Metrick (2003) and Bebchuk, Cohen, and Ferrell (2009). That is, the takeover protection afforded by employee block ownership is not unconditional; but depends critically on whether management pursues policies favorable to incumbent employees. This evidence of a reciprocal relationship between managers and employees is consistent with the worker-manager alliance theory of Pagano and Volpin (2005), and portrays a more complex and nuanced picture of the interactions among managers, workers, and shareholders. Our results raise concerns about the potential for large employee ownership positions to undercut shareholder value rather than aligning employee interests with those of outside shareholders.

2. Sample description

We start our sample construction with all single-class companies covered in the ISS database during the period between 1996 and 2009.[6] Dlugosz, Fahlenbrach, Gompers, and Metrick (2006, DFGM hereafter)

[5] See Section 3.2.3 and Table 6.

[6] Firms in the ISS databases are large firms in the S&P 500 index and annual lists of the largest corporations published by Fortune, Forbes, and BusinessWeek. They represent more than 90% of the aggregate U.S. market value of publicly listed stocks.

collect information on blockholders from proxy filings of firms in the ISS universe over the 1996-2001 sample period. Blockholders are defined as individuals or entities that hold at least 5% of a company's common stock. DFGM further classify all blockholders into five categories: company officers, non-executive directors, employees (as a group), entities affiliated with an officer or director, and outside blockholders. Following DFGM, we manually collect employee blockholder information for the 2002-2009 period and combine this with DFGM's employee blockholder data.[7] We focus on employee block ownership as a measure of worker influence, since it confers substantial cash flow and voting rights.[8]

We also extract from the Thomson Reuters's SDC Mergers and Acquisitions database all completed acquisitions of U.S. companies made by firms in the ISS database during the 1996-2009 period.[9] For each acquisition, we require that (i) the deal value disclosed by SDC is more than $1 million and is at least 1% of the acquirer's market capitalization measured at the end of the 11th trading day prior to the acquisition announcement date,[10] (ii) the acquirer does not hold any target shares prior to the acquisition announcement and owns more than 50% of target shares after the transaction, and (iii) the acquirer has annual financial statement information available from COMPUSTAT and stock return data from 210 trading days prior to the acquisition announcement to 5 trading days afterwards available from CRSP. These criteria generate a sample of 3,780 acquisitions. In 306 of these deals, acquirers have employee block holdings at the acquisition announcement. As previously mentioned, the voting rights of stocks held in defined contribution

[7] SEC only requires companies to disclose in their proxy statements beneficiary owners of at least 5% of shares outstanding. Given that we are only able to observe employee equity ownership of at least 5% due to SEC disclosure regulations, employee ownership of less than 5% is treated as zero in our analysis. This is consistent with existing studies of blockholders. In addition, to the extent that there is no material difference in worker influence and incentives between a 5% ownership and an ownership just below that, treating the latter as zero biases our study against finding significant effects of employee block ownership.

[8] We do not include employee stock options in employee equity ownership because they do not carry voting rights. As a robustness check, we include an acquirer's non-executive employee stock option ownership as a separate control variable in the acquirer returns regression. Following Lindsey and Hochberg (2010), the non-executive employee stock option ownership is computed as a firm's total outstanding options minus the outstanding options held by top executives. Information on the former is from the ISS Dilution database and available for the period of 1997 to 2005, while information on the latter is from the ExecuComp database. We find that the non-executive employee option ownership has an insignificant coefficient and its inclusion does not affect our primary results.

[9] Some of our analyses require information from the three-year period following an acquisition.

[10] SDC defines deal value as the total value of consideration paid by the acquirer, excluding fees and expenses. The dollar value includes the amount paid for all common stock, common stock equivalents, preferred stock, debt, options, assets, warrants, and stake purchases made within six months of the announcement date of the transaction.

retirement plans for employees, such as ESOPs and 401(K) plans, are typically passed through to plan participants, i.e., employees (Stabile (1998)). We review the description of each employee share ownership vehicle found in firm proxy statements and exclude two cases where management has sole voting control over employee blockholdings.[11] Our final sample consists of 3,778 acquisitions made by 1,415 firms.[12]

Table 1 presents the sample distribution by acquisition announcement year. During our sample period, the frequency of acquisitions initially rose from 1996 to 1998, when it reached its peak. It then declined sharply in the early 2000s with the end of the "tech bubble". M&A deal activity recovered in the 2003 – 2007 period, but then dropped significantly in the last two years of our sample period, as the U.S. stock market collapsed during the 2008-2009 global financial crisis. This trend is consistent with that documented by Moeller, Schlingemann, and Stulz (2004) and Golubov, Petmezas and Travlos (2012). Based on Fama and French's 48-industry classification, the top 5 acquirer industries over our sample period are business services, banking, electronic equipment, petroleum and natural gas, and trading, which account for 12.55%, 11.65%, 8.28%, 5.03, and 4.39% of the acquisition sample respectively. All our regressions control for announcement-year and industry fixed-effects.

3. Empirical results

3.1. The effect of employee blockholdings on acquirer returns

In this section, we examine how employee blockholdings affect the profitability of firm acquisition decisions by estimating regressions of acquirer abnormal stock returns around M&A announcements. We measure an acquisition's profitability by the acquirer stock's cumulative abnormal returns (CAR) over a 5-day window encompassed by event days (-2, +2), where event day 0 is the acquisition announcement date

[11] In 18 other cases, management only has voting control over any shares unallocated to employees in employee stock ownership plans. Proxy statements do not provide information on the percentage of shares that are unallocated. Our results are robust to excluding these cases from our analysis.

[12] In untabulated results, we estimate a probit model to investigate whether firms with employee block ownership display a stronger or weaker tendency to make acquisitions and find that employee block ownership has a positive but insignificant effect on a firm's acquisitiveness. To correct for any potential sample selection bias due to our focus on acquisitions, we construct an Inverse Mills' ratio (IMR) from the probit model and include it in later regressions. All our results continue to hold.

taken from SDC.[13] The abnormal returns are computed from the residuals of a one-factor market model where the market return is measured by the CRSP value-weighted return and the model is estimated over event days -210 to -11.

Our key explanatory variable is the equity blockholdings held by company employees. We measure employee block ownership in two ways. In the first approach, we construct a set of binary variables indicating whether employee block ownership is at least 5% (the threshold where companies are required to disclose employee ownership), 10%, or 15%. In the second approach, we measure employee block ownership as a continuous variable.

Following the prior literature (Moeller, Schlingemann, and Stulz (2004) and Masulis, Wang, and Xie (2007)), we control for a number of acquirer and deal characteristics. The first category includes firm size, firm age, Tobin's Q (market-to-book ratio), leverage, return on assets (ROA), and management stock ownership, all of which are measured at the fiscal year-end prior to the acquisition announcement. The second category includes relative deal size, target ownership status (public, private, or subsidiary), the method of payment (percentage of deal value paid with stock), and whether an acquisition is classified as diversifying, hostile, a tender offer, or have multiple bidders.

Panels A, B, and C of Table 2 present the summary statistics for the full sample. Acquirer CARs have a sample mean of 0.141% and median of 0.056%, neither of which is statistically different from zero at conventional significance levels. In 304 (8%) of our sample acquisitions, acquirers have employee blockholdings of at least 5%. In 122 (56) of these deals, employee block ownership in the acquirer exceeds 10% (15%). Conditional on the presence of acquirer employee-blockholders, total employee equity ownership averages 10.77% with a median level of 9%. Shareholdings of this size give workers substantial

[13] For a random sample of 500 acquisitions from 1990 to 2000, Fuller, Netter, and Stegemoller (2002) find that the announcement dates provided by SDC are correct for 92.6% of the sample and are off by no more than two trading days for the remainder. Thus, using a 5-day window over event days (-2, 2) captures most, if not all, of the announcement effect, without introducing substantial noise into our analysis. Nevertheless, all our results are robust to measuring acquirer returns over a 3-day event window (-1, 1) or an 11-day event window (-5, 5).

voting rights that can determine the outcomes of many corporate control contests. Whether and how workers use their voting power can have significant impacts on corporate policies and decisions.

The average (median) acquirer has an equity market value of $8.529 (2.328) billion, which is measured on the 11th trading day prior to the acquisition announcement date, a leverage ratio of 0.153 (0.128), a ROA of 0.127 (0.127), a Tobin's Q of 2.050 (1.541), and management stock ownership level of 2.713% (0.646%). It appears that our sample of acquirers are financially healthy, well performing firms. The average (median) acquisition in our sample has a deal value of $1,039 (161) million and a relative deal size of 17% (6.1%). About 31%, 38% and 31% of these acquisitions involve public, private and subsidiary targets respectively, while 5.5%, 39.3% and 1.6% of deals are tender offers, diversifying deals or involve multiple bidders. On average, 26.2% of deal value is paid in acquirer stock, although the median amount of stock used is zero.

In Panel D of Table 2, we report the summary statistics for the subsamples of acquirers with and without employee block ownership. There are many differences between the subsamples. Specifically, acquirers with (without) employee block ownership experience significantly negative (positive) announcement-period abnormal returns. Acquirers with employee blockholdings also tend to be more levered and have lower Tobin's Q and management stock ownership than acquirers without employee blockholdings. Acquisitions made by firms with employee blockholdings are larger, more likely to be diversifying deals and to employ tender offers, whereas they are less likely to involve private targets.

In Table 3 we present the results from acquirer return regressions. The dependent variable is the acquirer's 5-day CAR around the acquisition announcement, measured in percentage points. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity (White (1980)) and acquirer clustering (Petersen (2009)). In the first three columns, the key explanatory variables are indicator variables for the presence of employee block ownership of at least 5%, 10%, and 15% respectively. We find that all three binary variables have significant negative coefficients. These results suggest that acquirers with employee block ownership experience significantly lower announcement-period abnormal stock returns. This evidence supports the worker-manager alliance hypothesis that employee block ownership insulates

managers from the discipline of the takeover market and thereby allows managers to consume more private benefits through empire-building acquisitions.

We also find that both the economic magnitudes (-0.859, -1.388, and -2.429) and statistical significance (*p*-value: 0.018, 0.004, and 0.001) of the coefficients of the three indicator variables increase as the minimum employee ownership threshold rises. This evidence is consistent with the notion that employee influence rises with the percentage of firm voting rights that workers control. In particular, when employees control more than 15% of shares, they can effectively block any unwanted takeover attempts at firms incorporated in states with common business combination statutes (Gordon and Pound (1990), Chaplinsky and Niehaus (1994), Rauh (2006), and Kim and Ouimet (2014)).

In light of the results from columns (1) to (3), we use a continuous measure of employee block ownership as the key explanatory variable in column (4). We find that it also has a significantly negative relation to acquirer returns with a coefficient estimate of -0.089 and a *p*-value of 0.001.[14] While the results in columns (1) to (4) show that employee block ownership reduces acquirer returns, column (5) presents regression results of a probit model where the dependent variable is equal to one if an acquisition destroys shareholder value as indicated by negative acquirer announcement returns, and zero otherwise. We find that employee block ownership has a significant positive coefficient, suggesting that firms with large employee blockholdings are significantly more likely to make shareholder value destroying bids.[15]

Regarding the economic significance of our results, we find that ceteris paribus, the presence of a 5%, 10%, or 15% employee block ownership reduces acquirer returns by about 0.859%, 1.388%, and 2.429%, respectively. These are economically large effects given the miniscule average acquirer CAR in our sample, and they represent substantial losses in shareholder wealth of $73 million, $118 million, and $207 million respectively, based on the average market capitalization of our acquirer sample. Acquirer

[14] We also include a quadratic form of employee block ownership as an additional explanatory variable in the acquirer returns regression in order to detect any non-monotonicity in the employee ownership-acquirer returns relation. However, we did not find any significant coefficient on the quadratic term of employee block ownership while its linear term continues to have a significantly negative effect on acquirer returns.

[15] To the extent that some of the firm and deal-level controls are potentially endogenous, we re-estimate the regressions in Table 3 excluding firm and deal characteristics. Our results are robust (see Table IA.1 in the internet appendix).

announcement returns decline by 0.295% per one standard deviation increase in the proportion of employee block ownership. This drop in acquirer returns is equivalent to a loss of $25 million in shareholder value for an average acquirer.

As for control variables, their coefficients are largely consistent with those documented in prior studies such as Moeller et al. (2004) and Masulis et al. (2007). In particular, we find that acquirer returns are significantly lower when acquirers are larger and a larger proportion of deal value is paid in acquirer stock, and are significantly higher for tender offers and subsidiary-target deals (compared to public or private target deals).[16]

3.2. Identification

Although the results from the previous section are consistent with the hypothesis that workers controlling large equity blocks protect managers against hostile takeovers and thus, enable them to pursue empire building acquisitions, a causal interpretation could be problematic due to the potential endogeneity of employee ownership. For example, our finding could be driven by reverse causality, i.e., firms building up large employee ownership in anticipation of making empire building acquisitions. Alternatively, some unobservable firm characteristics could be responsible for both employee shareholdings in the firm and the profitability of the firm's acquisitions. As a result, the empirical relation we identify between employee block ownership and acquisition profitability could be spurious.

We take multiple approaches to deal with the causality issue. First, we address the reverse causality concern by lagging the employee equity ownership by up to 3 years, since firms are unlikely to plan for acquisitions this far in advance. In unreported analysis, we find that our results continue to hold. Second, we draw upon economic theory to identify and rule out a battery of potential omitted variables that could be related to the distribution of employee stock ownership across firms. We also control for acquirer fixed

[16] In untabulated results, we find that the effect of employee block ownership is robust to controlling for the equity ownerships by officer blockholders, affiliated blockholders, non-officer director blockholders, and outside blockholders, respectively.

effects in a subsample of acquisitions by repeat acquirers. Third, we exploit exogenous state-level variations in business combination statutes (BCS) to further alleviate omitted variable concerns. Fourth, we employ two-stage least squares (2SLS) regressions to correct for the endogeneity of employee block ownership. Fifth, we use propensity score matching (PSM) to analyze matched pairs of firms that are similar in many important observable dimensions, except employee block ownership.

3.2.1. Controlling for potential omitted variables and acquirer fixed effects

One set of potential omitted variables that could explain the relation between employee block ownership and acquisition profitability are acquirer corporate governance characteristics. It is possible that managers at poorly governed firms have both the latitude to pursue unprofitable empire-building acquisitions and the incentives to encourage employee block ownership to further entrench the CEO. To address this concern, we control for an acquirer's level of takeover defenses, board size, board independence, board chairman/CEO duality, and institutional ownership. We lose 240 observations due to missing data on board and institutional ownership characteristics. Consistent with Masulis, Wang, and Xie (2007), we find that the number of acquirer takeover defenses, measured by the E-index of Bebchuk, Cohen, and Ferrell (2009), has a significantly negative relation to acquirer returns, but the coefficients of the other new controls are not significant (see columns (1) and (2) in Panel A of Table 4).[17] More importantly, employee block ownership continues to exhibit a significantly negative relation to acquisition profitability.

Another possible omitted variable is the quality of acquirer management. It is conceivable that incompetent CEOs, who understandably worry about their job security, promote actions that raise employee block ownership and then subsequently form alliances with workers through generous employment policies. Their general ineptitude also leads to shareholder value destroying acquisitions, which have the

[17] The E-index is based on the six most important anti-takeover provisions: staggered boards, limits to shareholder bylaw amendments, limits to shareholder charter amendments, supermajority requirements for mergers, poison pills, and golden parachutes (Bebchuk, Cohen, and Farrell (2009)). Given that the acquirer's E-index has a significantly negative coefficient and controlling for it does not result in any observation loss, we include it as an additional control in subsequent acquirer return regressions.

added benefit of increasing firm size, making unsolicited takeover bids more costly. We follow Morck, Shleifer, and Vishny (1990) and measure acquirer CEO quality by the firm's industry-adjusted operating income growth over the 3 years prior to the acquisition announcement. We re-estimate the acquirer returns regression with the CEO quality measure included as an additional control. The model estimates presented in column (3) of Panel A in Table 4 indicate that acquirer returns have a significantly positive association with CEO quality, which is consistent with the evidence in Morck et al. (1990) that more competent CEOs make more profitable acquisitions. More importantly, we continue to find a significantly negative relation between employee block ownership and acquisition performance. Thus, our earlier results do not appear to be driven by the omission of a management quality variable.

Inadequate controls for firm growth prospects could complicate the interpretation of our results. It is possible that firms with better growth opportunities grant more stock and options to employees for incentive and retention purposes. Acquisition announcements by such firms could send a negative signal to the market about their internal growth opportunities drying up. This could then lead to more negative acquisition announcement abnormal returns (Humphrey-Jenner, Masulis, and Swan (2015)).

We address this concern in two ways. First, we compare several growth metrics for acquirers with and without employee block ownership. We find that acquirers with employee block ownership actually exhibit significantly worse sales and assets growth and lower Tobin's Q prior to their acquisitions compared to acquirers without employee blocks. This is inconsistent with the alternative explanation that firms with employee stock ownership have better growth prospects, so that their acquisition announcements are a negative surprise to investors. Second, we add acquirer sales growth and asset growth over the three years prior to the acquisition announcements as additional control variables in the acquirer returns regressions.[18] Column (4) of Panel A in Table 4 shows that the 3-year sales growth rate has an insignificant coefficient, but the 3-year asset growth rate has a significant negative coefficient, providing some support for the notion

[18] Tobin's Q is already a control in the acquirer returns regression.

that acquisition announcements by faster growing companies are greeted more negatively by the market. More importantly, the coefficient on employee block ownership remains negative and significant.

Yet another possible explanation for our findings is that firms with large employee stock ownership may produce unique products and services that require employees with specialized skills and experience, and these firms are more likely to use equity to attract and retain such employees. Given the unique goods and services they produce, such firms may have fewer profitable merger opportunities. Thus, acquisitions made by these firms may on average be associated with lower acquirer returns. We address this concern by augmenting acquirer return regressions with proxies for a firm's uniqueness. Specifically, we control for a firm's R&D intensity and whether it is in a high-tech industry. To the extent that firms with higher R&D intensity and coming from high-tech industries require more specialized human capital to produce their unique products and services, employee block ownership may be more likely. We alternatively control for product uniqueness using the ratio of selling expenses to total sales (Titman and Wessels (1988)). The results in column (5) of Panel A in Table 4 show that even in the presence of these added controls, employee block ownership continues to significantly reduce acquirer returns.

Given that it is infeasible to identify and measure all possible omitted variables, especially those unobservable to econometricians, we control for acquirer fixed effects in a subsample of acquisitions made by repeat acquirers. This approach can help us rule out unobservable time-invariant acquirer characteristics as potential drivers of our results. Given the infrequent nature of acquisitions as a major corporate investment, 41% of the acquiring firms in our sample appear only once, and only 37% of the acquiring firms in our sample appear at least three times. This sample characteristic, coupled with the fact that ownership variables tend to be slow changing over time, can give rise to low statistical power for regression specifications that control for acquirer fixed effects.

To mitigate these econometric issues, we create a subsample of 1,886 acquisitions by requiring that an acquirer appear at least twice, i.e., make at least two acquisitions, in our sample, and that the acquisitions be in at least two different years so that it is even possible to have within-firm variation in employee block ownership. We reestimate the acquirer returns regressions with acquirer fixed effects in this subsample, and

report the results in Panel B of Table 4. We find that the employee block ownership continues to have a significantly negative coefficient, even when we control for acquiring firm fixed effects. This result holds regardless of whether we control for additional firm and deal characteristics.

3.2.2. Exploiting cross-state variations in BCS

Employee block ownership makes workers more influential in corporate control contests, particularly for firms incorporated in states with BCS that gives non-insider owners with a minority equity stake (e.g., 15% in the case of Delaware) the power to block a takeover for a number of years (Gordon and Pound (1990), Chaplinsky and Niehaus (1994), Rauh (2006), and Kim and Ouimet (2014)). Courts have established employee blockholders as non-management affiliated stockholders. Following Kim and Ouimet (2014), we term such BCS as blockholder-friendly, to differentiate them from board-friendly BCS that require board approval for any takeover. One potentially powerful test for identification purposes is to utilize the adoption of BCS by states and perform a difference-in-differences analysis on the effect of employee block ownership on acquirer returns. Unfortunately, all BCS were adopted prior to the start of our sample period and the only instance of a state changing its BCS occurred prior to our sample period. As a consequence, we take the alternative route of exploiting cross-state differences in BCS features, which are plausibly exogenous to an individual firm (Bertrand and Mullainathan (2003)). We examine whether the negative relation between employee block ownership and acquirer profitability is more pronounced in firms incorporated in states with blockholder-friendly BCS.

Acquirers in 70% (2,645) of our deal sample are incorporated in states with blockholder-friendly BCS at the time of acquisition announcement. In the other 30% of deals, acquirers are incorporated in states without such BCS protections (either with no BCS at all or with only board-friendly BCS). We estimate acquirer return regressions separately for the two subsamples and present the results in Table 5. Consistent with our conjecture, employee block ownership has a significantly negative relation to acquirer returns in the subsample of acquirers subject to blockholder-friendly BCS. In the other subsample, the coefficient of employee block ownership is still negative, but it is not statistically significant. The stark contrast of these

subsample results provides yet another piece of evidence that our findings are not driven by some omitted variables, such as poor governance, firm uniqueness, or human capital importance, because there is no compelling reason for these variables' relations to acquirer returns to vary with the specific type of BCS adopted by the acquirer's incorporation state. Instead, the evidence points to a causal interpretation of the role of employee block ownership in firm acquisition decisions.

3.2.3. 2SLS regression

Given that it is infeasible to identify and control for every conceivable omitted variable, we next employ a two-stage least squares (2SLS) regression to further alleviate the endogeneity concern. We choose two instruments for employee blockholdings based on the economic benefits that employee stock ownership confers. As discussed in the introduction, the first instrument is the weighted average of the top state individual income tax rates faced by an acquirer's employees.[19] It aims to capture employee incentives to accept stock compensation in lieu of cash pay to defer their income tax liabilities. We use the weighted average state income tax rate for a firm's employees, rather than the tax rate in a firm's headquarters state, because a firm's employees can be spread over multiple states and are subject to different state income tax rates. The weight given to a state is based on the percentage of a firm's employees located in the state. Information on the state-by-state distribution of a firm's employees comes from the Lexis-Nexis Corporate Affiliations database.

Our second instrument is motivated by the use of employee stock ownership as a retention device. Following Kim and Ouimet (2014), we compute an industry and location-specific labor mobility measure that is equal to one minus the Herfindahl index of employees for each industry-state cluster.[20] The underlying logic is that if workers in a particular industry and state are dispersed over a large number of

[19] During our sample period, the top individual income tax rates across states range from 0 to 10.3%, with a median of 5.63%.

[20] Kim and Ouimet (2014) use the employee information at the business establishment level from the Longitudinal Business Database, access to which is restricted. We compute a Herfindahl index for each industry-state cluster based on state-employee information whenever it is available in Lexis-Nexis Corporate Affiliation database and otherwise, we use all publicly traded firms with employee information from Compustat.

employers, it should be easier for workers to switch employers and thus, firms should face higher employee retention concerns. As a result, these firms should find employee stock ownership plans more attractive. Again, because a firm can have operations in multiple states, we compute a weighted-average labor mobility measure based on the state-by-state distribution of a firm's employees.

Although no obvious theoretical link appears to exist between the two instruments and a firm's acquisition profitability, to further ensure that our instruments satisfy the exclusion restriction, we include several state-level variables as additional controls in both stages of the 2SLS regression. Specifically, we control for the acquirer headquarters state's GDP per capita and personal income per capita to capture the state's economic development level. We also control for state-level anti-takeover statutes and right-to-work laws as proxies for the state's regulatory, business, and labor environments.[21]

We present the 2SLS regression results in Table 6. In the first stage, we find as expected, that the coefficients of both instruments are positive and significant, which supports the instruments meeting the relevance condition. Also, the Sargan-Hansen over-identification test is unable to reject the null that the instruments satisfy the exclusion restriction (Hansen's *J*-statistic: 0.41; *p*-value: 0.52). While no direct test for the exclusion restriction exists, this test is at least reassuring. In the second stage, we find that the instrumented version of employee block ownership continues to have a significant and negative relation to acquirer returns. Thus, we conclude that our findings are robust to this endogeneity correction method. We also note that our results are robust to only using one of the two instruments in the 2SLS regression.

3.2.4. Propensity score matching

To further alleviate endogeneity concerns, we perform a propensity score matching (PSM) analysis. Specifically, for each acquirer with employee block ownership, we find a matching acquirer without employee block ownership that has the closest propensity score estimated from a probit model of the

[21] The state-level anti-takeover provisions are from the Gompers, Ishii, and Metrick (2003) index and include anti-greenmail laws, business combination laws, cash-out laws, directors' duties laws, fair price laws, and share acquisition laws.

determinants of employee blockholdings.[22] The dependent variable in our probit model is equal to one if an acquirer has employee blockholdings, and zero otherwise. For explanatory variables, we include the state- and firm-characteristics from the first-stage model of the 2SLS regression in Table 5. We exclude deal-level characteristics because they are outcome variables and unlikely to determine whether a firm has employee block ownership.

Panel A of Table 7 presents a comparison of PSM-matched acquirers with and without employee block ownership. We find that all the observable differences in firm characteristics between the two subsamples disappear. For example, we observe earlier that acquirers with employee blockholders are larger, more levered, and have lower Tobin's Q and management stock ownership levels than acquirers without employee blockholders (see Panel D of Table 2). After the PSM procedure, none of these differences is statistically significant. More importantly, acquirers with employee blockholders continue to have significantly lower announcement returns than matching acquirers without employee blockholders.

To address the possibility that the difference in acquirer announcement returns is driven by deal-level characteristics, we regress acquirer announcement returns against employee block ownership in the PSM-matched sample of acquisitions, with deal-level characteristics included as control variables. The results in Panel B of Table 7 show that there is a robust and significantly negative relation between employee block ownership and acquirer returns, regardless of whether we measure employ block ownership by an indicator variable (column (1)) or by the actual fractional size of the block (column (2)).

3.3. The effect of employee ownership on the likelihood of bad acquirers becoming good targets

The collective evidence in Sections 3.1 and 3.2 is consistent with a causal interpretation that employee blockholders protect managers against hostile takeovers by playing the role of white squires (Pagano and Volpin (2005)), and thereby encourage CEOs to extract more private benefits through empire building acquisitions. To bolster confidence in this interpretation, we examine whether employee block

[22] Results presented in the paper are based on matching without replacement. Matching with replacement produces qualitatively similar results.

ownership could disrupt the subsequent operation of the takeover market by reducing the probability of empire-building managers being disciplined by the market for corporate control.

To test this prediction, we estimate a probit regression of an acquirer's likelihood of receiving a change-in-control takeover bid within three years of its last acquisition, where we take into account the acquisition's profitability. For each acquisition in our sample, we track the acquirer for three years after the acquisition completion date and obtain all the change-in-control bids received by the acquirer during this period from the SDC M&A database. Of the 3,778 acquisitions in our sample, 648 acquirers later become targets of change-in-control takeover bids.[23]

In the probit model, the dependent variable equals one if the acquirer receives a change-in-control takeover bid in the following 3 years, and zero otherwise. The explanatory variables include the acquirer's announcement CAR, employee block ownership, the interaction between acquirer CAR and employee block ownership, and acquirer characteristics such as firm size, Tobin's Q, leverage, and ROA. These firm characteristics are measured at the fiscal year-end immediately prior to the post-acquisition takeover bids for acquirers that subsequently become takeover targets, and at the fiscal year-end immediately after the acquisition completion date for acquirers that receive no change-in-control bids.

In Table 8, we present the results for the probit regression model described above. Consistent with Mitchell and Lehn (1990), we find that an acquirer's CAR has a significantly negative effect on the probability of the acquirer subsequently becoming a target, suggesting that firms making bad acquisitions are more likely to be disciplined by the takeover market. We also find that employee block ownership has a significantly negative association with the takeover probability, echoing the evidence from prior studies of employee ownership (Chaplinsky and Niehaus (1994) and Rauh (2006)). Unique to our investigation, the interaction term between employee block ownership and the acquirer CAR has a significantly positive coefficient. This result indicates that employee blockholdings reduce the propensity of shareholder value-

[23] Of the 648 change-in-control bids received by our sample acquirers, only 97 were unsuccessful. Our probit regression results are robust to excluding these unsuccessful bids.

destroying acquirers becoming takeover targets and as such, it encourages managers to extract greater private benefits through unprofitable empire building acquisitions.

Given the difficulty in interpreting the coefficients of the interaction terms in probit and logit models (Powers (2005)), we use an alternative approach to examine the impact of employee block ownership on a firm's probability of becoming a takeover target after making a shareholder value-destroying acquisition. This alternative approach also has the added advantage of shedding light on the economic significance of the effect of employee block ownership. Specifically, we focus on acquisitions whose announcement abnormal returns fall in the bottom quartile of our sample, i.e. acquisitions with CARs below -2.984%, which capture the most unprofitable acquisitions. Among these 944 value-destroying acquisitions, the average probability of receiving a takeover bid within three years after an acquisition is 0.191 (or 19.1%) for acquirers without employee blockholdings and 0.056 (or 5.6%) for acquirers with employee blockholdings. The 13.5% difference in probability is statistically significant with a *p*-value of below 0.01, and it is also economically meaningful given the unconditional probability of an acquirer receiving a takeover bid in the following 3 years is 17.2%.[24]

In addition to the external market for corporate control, empire-building managers also face potential discipline from internal governance mechanisms. Lehn and Zhao (2006) find a strong negative relation between acquirer returns and the probability of subsequent acquirer CEO forced turnover, suggesting that CEOs are more likely to be replaced after making shareholder value destroying acquisitions. Therefore, we examine whether employee block ownership can also help entrench managers by reducing the likelihood of termination following poor acquisition decisions. Toward this end, we estimate a probit regression similar to that in Table 8. The dependent variable is equal to one if an acquirer's CEO is fired within 3 years after an acquisition and zero otherwise. The key explanatory variables are the acquirer's

[24] We also confirm the managerial entrenchment role of employee block ownership in a comprehensive sample consisting of all firms (acquirers and non-acquirers) in the ISS database during our sample period. Specifically, we estimate a probit model similar to that in Table 8, except that we replace acquirer CAR with a firm's past-one-year buy-and-hold abnormal stock returns. The regression results show that employee block ownership significantly reduces a firm's unconditional probability of becoming a takeover target, and it also significantly weakens the sensitivity of takeover probability to low abnormal stock returns (see Table IA.2 in the internet appendix).

CAR and its interaction with the acquirer's employee block ownership. In untabulated results, we find that the acquirer's CAR has a significantly negative coefficient, indicating that acquirer CEOs are significantly more likely to be fired following bad acquisitions (Lehn and Zhao (2006)). We also find that the coefficient on the interaction between acquirer CAR and employee block ownership is positive, but it is only significant (*p*-value: 0.048) when we use an indicator for employee block ownership of 5% or more. This provides evidence that employee block ownership protects managers against termination risk by reducing the sensitivity of CEO forced turnover to acquisition performance.

3.4. The foundation of worker-manager alliances

Our results so far are consistent with the interpretation that workers use the voting rights from their equity ownership to deter outside control challenges, thereby allowing managers to consume more private benefits at shareholder expense. However, it may seem puzzling why workers would align themselves with managers and allow empire-building acquisitions to occur, especially considering that such acquisitions can cause employee shareholdings to lose value and even undermine employee job security if they lead to restructurings and layoffs.

To answer this question, we turn to the management-worker alliance theory of Pagano and Volpin (2005). An important element of their theory is that the formation of worker-manager alliance is predicated on workers benefiting from the policies and strategies pursued by incumbent managers; otherwise, workers would have no incentive to support managers in future corporate control contests. Consequently, we investigate whether the negative relation between employee block ownership and acquirer returns is concentrated in firms where workers stand to gain relatively more from existing corporate policies or managerial actions and as a result are willing to use their voting power to entrench incumbent managers. We investigate this important issue in the next several sections.

3.4.1. Employee treatment

In our first test, we follow Bae, Kang, and Wang (2011) and use the employee treatment ratings from MSCI's KLD database as a measure of the overall friendliness of a firm's labor policies and practices.[25] These ratings cover five categories of employee relations, including union relations, cash profit sharing, employee involvement, retirement benefits strength, and health and safety strength.[26] KLD assigns a 0/1 value for each category and we construct an overall employee treatment index as the sum of the ratings for the five categories. A higher value of the index corresponds to better employee treatment. Consistent with this interpretation, Bae, Kang, and Wang (2011) report that firms with positive employee treatment index values provide workers with higher compensation and more generous retirement benefits.

The KLD data are only available for S&P 500 firms prior to 2003 and for firms in the Russell indices from 2003 onward. After merging our full sample of acquisitions with the KLD database, we obtain a sample of 2,624 deals with acquirer employee treatment data. Given the loss of observations, we first re-estimate the acquirer returns regression for this smaller sample to confirm that employee block ownership remains significantly and negatively related to acquirer announcement stock returns (see column (1) of Table 9). We split the sample based on whether an acquirer's employee treatment index has a positive or zero value. Based on the worker-manager alliance theory of Pagano and Volpin (2005), we expect to find a more pronounced negative relation between employee block ownership and acquirer returns in firms that treat employees better. To examine this conjecture, we estimate the acquirer returns regression separately for the two subsamples and present the results in columns (2) and (3) of Table 9. We find employee block ownership has a significantly negative coefficient for firms that treat their employees better, but it has an insignificant relation to acquirer returns in the other subsample. These results are consistent with the notion that only in firms that practice labor-friendly policies do workers have incentives to use their voting power to entrench managers and enable them to enjoy more private benefits.

[25] The KLD data have also been used in many other studies, such as Turban and Greening (1997), Cronqvist, Low, and Nilsson (2009), and Landier, Nair, and Wulf (2009).

[26] According to KLD, the employee involvement category is about whether or not a company strongly encourages worker involvement or ownership through stock option plans that it makes available to a majority of its employees. Even though our employee stock ownership measure does not include stock options, we ensure that our results are robust when we exclude this category from the construction of the employee treatment index below.

3.4.2. Union presence

We next use the labor union presence in a firm's industry to identify the extent to which workers enjoy labor friendly employment policies. Prior studies show that by negotiating employment contracts with firms through the collective bargaining process, unions traditionally are able to make pay cuts and layoffs more difficult and thus less likely (McLaughlin and Fraser (1984), Abraham and Medoff (1984), Gramm and Schnell (2001), and Chen, Kacperczyk, and Ortiz-Molina (2011)). Thus, employees in more unionized firms enjoy not only more generous compensation and benefits, but also more job security, which makes them less concerned about the prospect of restructuring and layoffs following bad acquisition decisions. Thus, we use the presence of a more unionized workforce as defined below to capture labor-friendly firm employment policies. We expect the effect of employee block ownership on acquisition profitability to be more pronounced when acquirers have a more unionized workforce.

To test this conjecture, we partition our full sample of acquirers based on whether an acquirer's industry unionization rate prior to its acquisition announcement is above or below the sample median. The unionization rate is defined as the percentage of workers employed in an industry who are covered by union collective bargaining agreements.[27] Merging the industry unionization data with our sample reduces the number of observations to 2,925.

Table 10 reports acquirer returns regressions for the two subsamples. The acquirer industry's unionization coverage rate has a significantly positive correlation with employee block ownership (ρ: 0.11; p-value: <0.01). To ensure the effect of employee block ownership that we identify is not an artifact of a unionized workforce, we first re-estimate the acquirer return regression in the full sample, while controlling for the acquirer industry's unionization rate. The results in column (1) indicate that the industry unionization

[27] Industry unionization data are from the Union Membership and Coverage Database maintained by Barry Hirsch and David Macpherson, and available at the level of Census Industry Classification (CIC) industries, which roughly correspond to 3-digit SIC industries. Please see Hirsch and Macpherson (2003) for more details about the database.

rate has an insignificant coefficient, suggesting that it does not have a direct effect on acquirer returns. On the other hand, the coefficient on employee block ownership continues to be significantly negative.

Columns (2) and (3) of Table 10 present the subsample regression results. We find that employee block ownership has a significantly negative coefficient for acquirers in industries with higher unionization rates. For acquirers in industries with lower unionization rates, the coefficient of employee block ownership is insignificant, albeit still negative. These results are consistent with the worker-manager alliance hypothesis and suggest that employees have greater incentives to form alliance with managers and support their empire-building activities when they enjoy favorable employment policies and their employment status is less vulnerable to adverse repercussions from poor managerial decisions.

3.4.3. Excess employee wage

We examine whether employees receive abnormally high wages, as a further indicator of a firm's labor friendly employment practices. For this analysis, we construct and estimate an expected employee wage model to infer the excess or abnormal component of worker wages in each firm year. Because Compustat does not have a separate data item for worker wages, we follow prior studies (e.g., Hanka (1998), Bae, Kang, and Wang (2011), and Chemmanur, Cheng, and Zhang (2013)) and use labor related expense per employee (XLR/EMP) as the dependent variable in the wage regression model. We require firms to have at least 100 employees to rule out the possibility that this measure is dominated by top executive pay. We use the full Compustat sample of firms with available labor cost data to estimate excess worker wages. Since many firms in the Compustat database, especially small firms, do not disclose labor expenses, we have employee wage information for 15,306 firm-years in our 1995–2009 sample period. The average (median) firm in this sample has over 16,000 (1,400) employees. The mean worker wage is $54,235, and the median is $48,790.

In the regression model of worker wages, we control for firm size, Tobin's Q, leverage, and ROA. Following Hanka (1998) and Chemmanur et al. (2013), we also control for average worker wage in the same Fama-French 48 industry to capture the industry norm, a firm's book value of assets per employee to

measure its capital/labor ratio, and the fraction of a firm's assets that are depreciated to measure its life cycle stage. We include sales per employee (SALE/EMP) as a measure of employee productivity.

Panel A of Table 11 presents the coefficient estimates of the determinants of employee wages. Consistent with the results from Hanka (1998) and Chemmanur et al. (2013), we find that workers receive higher wages at larger firms and firms with greater capital/labor ratios, a larger proportion of depreciated assets, and more productive employees. The average wage per worker is lower at firms with higher leverage, higher Tobin's Q, and better operating performance. The adjusted R-squared of our wage model is 51.25%, which is similar to those reported by earlier studies.

We measure employee excess wages by the residuals from our estimated wage model. We classify firms with positive residuals from the wage regression as overpaying their workers and those with negative residuals as underpaying their workers. For 655 acquisitions in our sample, acquirers report employee wage data, which enables us to determine whether they are paying their workers abnormally high wages. In 72 of these deals, acquirers have employee block ownership. Despite the significantly reduced sample size, employee block ownership continues to have a significantly negative coefficient in the acquirer announcement return regression, as shown in column (1) of Panel B in Table 11.

Next, we partition this sample of 655 acquisitions into two subsamples based on whether abnormal employee wages in acquirers are above or below zero. In 240 of these acquisitions, acquirers are classified as overpaying their workers, while in 415 of the acquisitions, acquirers are classified as underpaying their workers. Employee block ownership occurs in 34 (14.2%) of the subsample with abnormally high employee pay and 38 (9.2%) of the subsample with abnormally low employee pay. We estimate the acquirer return regression for the two subsamples and find that employee block ownership has a significantly negative coefficient only in the subsample of acquirers overpaying their workers (see columns (2) and (3)). These results are again consistent with the argument that managers can forge an alliance with workers by offering them generous wages and in return workers are willing to use their substantial voting rights to protect managers from unfriendly takeover bids. As a result, managers appear to act as if they can pursue value destroying acquisitions with little concern about being disciplined by the market for corporate control.

We further examine whether it is in fact beneficial for employees to support managers' empire building acquisitions, by taking into account both the expected loss in the value of their shareholdings and the present value of the excess wages they expect to receive. Toward this end, we focus on the 72 acquirers that have employee block ownership. For each of these acquirers, we first compute the total dollar value loss experienced by employee shareholders due to an acquisition by multiplying the 5-day announcement-period abnormal returns by the pre-bid market value of the employee block ownership.[28] We then calculate the dollar value loss suffered by each employee by dividing the total dollar value loss for the entire employee block by the number of employees. We find that for the average acquirer, each employee loses $88 as a result of the acquisition's negative effect on employee shareholdings. However, for the same average acquirer, each employee receives $2,383 per year in excess wages. Based on our estimates, it is clear that on average employees are better off supporting empire-building managers.

3.4.3. Diversifying acquisitions

In addition to a labor-friendly employment environment, certain types of acquisitions are less threatening to employee-management alliances. In particular, employees are more likely to support managers in making diversifying acquisitions since they have the potential to reduce firm risk and are less likely to result in overlapping operations and excess capacity, which may lead to layoffs. Given the undiversified nature of workers' human capital and wage income, workers tend to favor diversifying acquisitions over horizontal ones. Similarly, because managers have a large fraction of their human capital and wealth tied up in the fortunes of their employer, they are also likely to prefer a diversifying acquisition due to its risk-reducing effects. In addition, because diversifying acquisitions can lower the probability of financial distress or debt covenant violations, which can result in a loss of control to creditors, managers have further reasons to pursue such acquisitions.

[28] The market value of the employee block ownership is computed as the percentage ownership of employee blockholding multiplied by the acquirer's market value of equity prior to the acquisition.

The benefits of diversifying acquisitions for workers and managers tend to come at the expense of shareholders, as these deals often fail to create shareholder value (Morck, Shleifer and Vishny (1990)).[29] Given the need for employee support in a control contest, managers are more likely to pursue diversifying acquisitions at shareholder expense as employee voting power rises. Thus, we expect the negative relation between employee block ownership and acquirer returns to be more pronounced in diversifying deals.

To test this conjecture, we first verify whether firms with employee block ownership indeed are more likely to undertake diversifying acquisitions. For that purpose, we estimate a probit model in which the dependent variable is equal to one if the acquirer and target are not in the same Fama-French 48 industry, and zero otherwise. The key explanatory variable is the size of employee block ownership. We control for the same acquirer characteristics used in the acquirer return regression.

Panel A of Table 12 reports the results. Consistent with our expectation, employee block ownership has a significantly positive coefficient with a *p*-value of less than 1%. Economically, a one-standard-deviation increase in employee block ownership increases the probability of a diversifying acquisition by 2%. We then separately estimate the acquirer returns regression for the diversifying and non-diversifying deals in Panel B of Table 12. We find that while employee block ownership has a negative relation to acquirer returns in both subsamples, the relation is only significant for diversifying acquisitions. This evidence is consistent with the notion that employee voting rights exacerbate manager-shareholder conflicts in acquisitions where worker-manager alliances are more likely to exist.

3.5. Sources of shareholder value destruction: Acquisition synergy, takeover premium, and operating performance changes

In light of the evidence that worker-manager alliances allow self-serving managers to engage in more shareholder value destroying acquisitions, we next examine the sources of the value destruction

[29] One notable exception is when acquirer CEOs have expertise in the target industry, which leads to improved acquirer returns from diversifying acquisitions according to Custodio and Metzeger (2013). They also find that acquirer returns in such acquisitions are lower when the acquirer CEO does not have target industry expertise.

associated with these acquisitions. Harford, Humphery-Jenner, and Powell (2012) point out that even though all value destruction by acquisitions involves overpayment, there is a difference between acquisitions where synergy is low or non-existent and acquisitions with positive expected synergies where acquirers simply overpay. To investigate these possibilities, we examine how acquisition synergy is related to the presence of employee block ownership at the acquirer.

Following the methodology of Bradley, Desai, and Kim (1988), we measure acquisition synergy as the abnormal returns of the value-weighted portfolio of acquirer and target stocks over the event window (-5, 5) around the acquisition announcement.[30] Since we need both acquirer and target stock return data to estimate expected acquisition synergies, our sample is reduced to 1,054 acquisitions of publicly listed targets.[31] We regress observed acquisition synergies against acquirer employee blockholdings, while controlling for the same acquirer and deal characteristics used in Table 3. The coefficient estimates in column (1) of Table 13 show that on average acquisition synergies have a significant and negative relation to acquirer employee block ownership, suggesting that employee block ownership allows managers to pursue empire-building acquisitions that are less likely to create synergy.

We also estimate a takeover premium regression to determine whether acquisitions made by firms with employee block ownership destroy shareholder value by simply overpaying for targets. We use the takeover premium from SDC, defined as the difference between the offer price and the target stock price 4 weeks prior to the acquisition announcement date divided by the latter. Results in column (2) of Table 13 show that on average the takeover premium rises with acquirer employee block ownership, which is consistent with the overpayment explanation, although the relation lacks statistical significance.

We supplement the acquisition synergy and takeover premium analyses by examining whether announcement returns reflect anticipated changes in the acquirer's operating performance from before to after the acquisition. We measure operating performance using return on sales (ROS) instead of return on

[30] The acquisition synergy is estimated over a wider event window since target stock prices often start to increase well before the acquisition announcement, likely due to rumors and information leakage (Schwert (2000)).
[31] We verify that the relation between employee block ownership and acquirer returns continues to be significantly negative even in the subsample of public-target deals.

assets (ROA), as the book value of assets post-acquisition can be influenced by a firm's acquisition accounting choice of purchase versus pooling methods. The change in operating performance is defined as the difference between its three-year average industry-adjusted ROS post-acquisition and its industry-adjusted ROS in the pre-acquisition year. Requiring an acquirer to have the necessary accounting data to compute operating performance changes around acquisitions reduces the sample size by 80 observations. We regress acquirer operating performance changes against employee block ownership and other explanatory variables included in the acquirer returns regressions. Column (1) of Table 14 presents the results. The coefficient of employee block ownership is negative, but it lacks statistical significance.

Our earlier findings suggest that when manager and worker incentives are closely aligned diversifying acquisitions are more likely. Since diversifying acquisitions are less likely to create improved operating efficiency, it seems likely that the negative effect of employee blockholdings on post-acquisition operating performance changes is concentrated in the subsample of diversifying acquisitions. To investigate this possibility, we restrict our sample to diversifying acquisitions and re-estimate the operating performance change regression. Results presented in column (2) of Table 14 show that the coefficient of employee voting power becomes significantly negative with a p-value of 0.064, consistent with diversifying acquisitions being more problematic to shareholder wealth creation.

3.6. Additional analysis

3.6.1. Cross-sectional variations in the employee block ownership-acquirer returns relation

In this section we provide further evidence for the worker-manager alliance hypothesis. Specifically, we examine whether the relation between employee block ownership and acquirer returns displays any cross-sectional variation that supports a causal interpretation.

Takeover vulnerability

We investigate whether the effect of employee block ownership on acquirer returns varies with a firm's vulnerability to takeovers. If the channel through which employee blockholdings lead to lower

acquirer returns is by serving as a white squire and protecting managers from hostile takeovers, then we expect its effect to be more pronounced when a firm does not have a lot of other takeover defenses and thus is more vulnerable to hostile takeovers. We measure the strength of a firm's takeover defense by its entrenchment index (E-index) and partition our sample acquirers into those more (less) vulnerable to takeovers based on whether a firm's E-index is below (above) the sample median of 2.

We estimate acquirer return regressions for the two subsamples and present the results in Table IA.3. We find that employee blockholdings have a significantly negative coefficient only in the subsample of acquirers that are more vulnerable to takeovers based on the E-index. While the coefficient of employee ownership is still negative in the subsample of acquirers with stronger takeover defenses, its magnitude is small and its statistical significance is low. These findings suggest that employee blockholder support is more valuable to managers when firms face more serious ex ante takeover threats.

Manager-shareholder incentive alignment

A prediction of the Pagano and Volpin (2005) model is that managers with a lower equity ownership in their firms have more incentives to form an alliance with workers and consume more private benefits at shareholder expense. This theoretical result implies that the negative effect of employee block ownership on acquirer return should be stronger when there is a greater misalignment between the interests of managers and shareholders. To test this conjecture, we use the sensitivity of CEO wealth to stock price (*delta*) to capture the interest alignment between shareholders and managers. A CEO with higher wealth sensitivity to her company's stock price is more aligned with shareholders and less likely to seek alliance with workers and extract private benefits. We obtain CEO compensation data from ExecuComp and follow the Core and Guay (2002) methodology to estimate *delta*.[32] The additional data requirements for *delta* estimation reduce our acquisition sample from 3,778 to 3,597. In untabulated results, we find that employee block ownership continues to have a significantly negative effect on acquirer returns in this smaller sample.

[32] It is worth noting that the CEO's *delta* comes from both her stock and stock option holdings, which is different from management stock ownership that we control for in the acquirer returns regressions.

Table IA.4 presents the results from subsample regressions of acquirer returns where the acquirer CEO's *delta* is above or below the sample median. While the coefficient on employee block ownership is negative for both subsamples, it is statistically significant only in the lower-CEO-delta subsample. These findings suggest that CEOs whose interests are less aligned with those of shareholders are more likely to form alliance with employee blockholders, so that they can make empire building acquisitions while facing a reduced threat of discipline by the market for corporate control.

Product market competition

Finally, we explore whether the employee block ownership-acquirer returns relation varies with the product market competition that an acquirer faces. Extending the implications of the Pagano-Volpin (2005) model, we posit that worker-manager alliances are less likely to emerge in firms facing more product market competition since there is less room for managers and workers to extract rents at shareholder expense. We measure the product market competition faced by a firm using the product market fluidity metric developed by Hoberg, Phillips, and Prabhala (2014). This measure is based on a textual analysis of firms' business descriptions in their 10-K filings and captures changes in a firm's product space due to moves made by the firm's rivals. The idea is that firms operating in more fluid product markets face greater competitive threats.

We create two subsamples based on whether an acquirer's product market fluidity is above or below the sample median and estimate the acquirer returns regression within each subsample. Results in Table IA.5 show that employee block ownership has a significantly negative coefficient only in the subsample of acquirers that face lower product market fluidity and thus, less competitive pressure. This evidence supports our conjecture that product market competition reduces the potential for worker-manager alliances.[33]

[33] Alternatively, we also measure the product market competition faced by firms using each industry's Herfindahl-Hirschman index (HHI), which is computed based on the annual sales of industry firms included in Compustat. We then create two subsamples based on whether the acquirer industry's HHI is above or below the sample median and estimate the acquirer returns regression within each subsample. In unreported results, we find that employee block ownership has a significantly negative coefficient in both subsamples, and the magnitude of the coefficient is larger for acquirers in less competitive industries (those with higher HHI). The coefficient difference, however, is not statistically significant.

3.6.2. Other robustness checks

In addition to the robustness analysis noted elsewhere in the study, our results are also robust to the following variations in our empirical design: (1) excluding acquirers in the regulated industries (financial and utilities) defined as those with a 1-digit SIC code of 6 and 2-digit SIC code of 49, (2) retaining only the first acquisition made by a firm during our sample period, (3) excluding firms with a concentrated ownership structure defined as firms with insider ownership of at least 10%, (4) excluding firms that changed headquarters state, (5) trimming or winsorizing the abnormal stock returns of acquisition announcements at the 1st and 99th percentiles, and (6) using median regressions.

4. Conclusion

We examine the effect of employee influence and worker-management alliances on agency conflicts between managers and shareholders. Using acquisition decisions of U.S. firms as the laboratory for our investigation, we provide evidence that potential worker-management alliances should be of concern to shareholders, even in economic regimes with relatively strong investor protections and weak employee protections. Specifically, we find that managers at U.S. firms with employee block ownership are more prone to make shareholder value reducing acquisitions, and ex post are less likely to be disciplined by the market for corporate control for their poor acquisition decisions. Moreover, we find that the negative effect of employee block ownership on acquirer shareholder returns is concentrated in situations where workers benefit from the policies and strategies implemented by managers, making worker-manager alliances more likely to develop. These results are consistent with the Pagano and Volpin (2005) theory that managers can secure employee support through labor friendly policies and employees can later use their influence (voting rights from large equity ownership) to shield managers from outside attempts to change control. This enables managers to extract larger private benefits (in terms of empire-building acquisitions) without facing the punitive consequences of the market for corporate control.

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Appendix: Variable Definitions

Variable	Definition
Acquisition performance measures	
CAR (-2,+2)	5-day cumulative abnormal return (in percentage points) calculated using the market model. The market model parameters are estimated using the return data for the period (-210, -11). The market index is the CRSP value-weighted return.
Acquisition synergy	11-day cumulative abnormal return (in percentage points) for a value-weighted portfolio of the acquirer and target. The weights for the acquirer and the target are based on their market value of equity measured at the 11th day prior to the acquisition announcement date.
Takeover premium	The difference between the offer price and the target stock price 4 weeks prior to the acquisition announcement date divided by the latter.
Acquirer operating performance change	The difference between the acquirer's three-year average industry-adjusted return on sales (ROS) after the completion of the acquisition and its industry-adjusted ROS in the pre-merger year. ROS is defined as operating income before depreciation (OIBDP) scaled by sales (SALE).
Employee block ownership measures	
Employee block ownership	The percentage of equity ownership held by employee blockholders.
Employee block (Indicator)	Indicator variable: 1 if employee block ownership is at least 5%, 0 otherwise.
Firm characteristics used in acquirer return regressions	
Market value of equity	Number of shares outstanding multiplied by the stock price on the 11th trading day prior to acquisition announcement.
Tobin's Q	Market value of assets over book value of assets: (AT – CEQ + CSHO × PRCC) / AT.
Leverage	Book value of debts (DLTT + DLC) over book value of total assets (AT).
Return on assets (ROA)	Operating income before depreciation (OIBDP) scaled by book value of total assets (AT).
Management ownership	The percentage of equity ownership held by top executives.
E-index	Taken from BCF (2009), based on 6 anti-takeover provisions. Higher index levels correspond to more anti-takeover provisions.
Acquirer CEO quality	Industry-adjusted operating income (OIBDP) growth over the 3 years prior to the acquisition announcement.
Acquirer sales growth	Acquirer's sales (SALE) growth over the 3 years prior to the acquisition announcement.
Acquirer asset growth	Acquirer's asset (AT) growth over the 3 years prior to the acquisition announcement.
Acquirer R&D	R&D (XRD) over sales (SALE).
Acquirer product uniqueness	Selling expenses (XSGA) over sales (SALE).
High-tech acquirer (Indicator)	Indicator variable: 1 if the acquirer is from high tech industries defined by Loughran and Ritter (2004), 0 otherwise.
E-index	Taken from Bebchuk, Cohen, and Farrell (2009), based on six anti-takeover provisions: staggered boards, limits to shareholder bylaw amendments, limits to shareholder charter amendments, supermajority requirements for mergers, poison pills, and golden parachutes.
Board size	Number of directors on the acquirer's board.
Board independence	Number of independent directors divided by board size.

CEO/Chairman duality	Indicator variable: 1 if acquirer CEO is also the Chairman of the board, 0 otherwise.
Institutional ownership	Percentage of acquirer shares held by institutional shareholders.
<u>Deal characteristics used in acquirer return regressions</u>	
Relative deal size	Deal value (from SDC) over acquirer market capitalization, defined above.
Public target (Indicator)	Indicator variable: 1 for public targets, 0 otherwise.
Private target (Indicator)	Indicator variable: 1 for private targets, 0 otherwise.
Subsidiary target (Indicator)	Indicator variable: 1 for subsidiary targets, 0 otherwise.
Stock financing percentage	Percentage of deal value paid with acquirer stock (from SDC).
Diversifying acquisition (Indicator)	Indicator variable: 1 if acquirer and target do not share a Fama-French 48-industry classification, 0 otherwise.
Tender offer (Indicator)	Indicator variable: 1 for tender offers, 0 otherwise.
Competed deal (Indicator)	Indicator variable: 1 for competed deals, 0 otherwise.
Target industry M&A activity	The value of all corporate control transactions for $1 million or more reported by SDC for each prior year and target Fama-French industry divided by the total book value of assets of all Compustat firms in the same Fama-French industry and year.
<u>Variables used in wage regressions</u>	
Labor expense per employee	Labor related expenses (XLR) divided by number of employees (EMP).
Assets per employee	Book value of total assets (AT) divided by number of employees (EMP)
Assets depreciated	Fraction of a firm's plant and equipment that are depreciated: (PPEGT-PPENT)/PPEGT,
Sales per employee	Sales (SALE) divided by number of employees (EMP).
<u>Variables used to partition the sample</u>	
CEO delta	The dollar change in the value of a CEO's stock and option portfolio per 1% change in stock price, estimated using the algorithm developed by Core and Guay (2002).
High (low) product market threats (Indicator)	Indicator: 1 if the acquirer's product market fluidity measure as constructed by Hoberg, Phillips, and Prabhala (2014) is above (or below) the sample median.

Table 1. Distributions of sample acquisitions by announcement year

The sample consists of 3,778 U.S. acquisitions between 1996 and 2009 made by firms in the ISS database.

Year	Number of acquisitions	Percentage of sample	Mean (median) deal value ($mil)	Mean (median) relative size
1996	250	6.62	658 (152)	0.202 (0.063)
1997	282	7.46	633 (180)	0.179 (0.071)
1998	462	12.23	1,218 (143)	0.187 (0.068)
1999	349	9.24	1,473 (228)	0.222 (0.066)
2000	276	7.31	1,665 (267)	0.237 (0.079)
2001	240	6.35	870 (167)	0.127 (0.059)
2002	201	5.32	620 (121)	0.124 (0.055)
2003	284	7.52	567 (116)	0.137 (0.062)
2004	271	7.17	784 (128)	0.153 (0.065)
2005	303	8.02	1,326 (168)	0.151 (0.060)
2006	277	7.33	1,333 (183)	0.148 (0.051)
2007	271	7.17	738 (170)	0.163 (0.057)
2008	195	5.16	1,010 (135)	0.166 (0.056)
2009	117	3.10	1,476 (130)	0.109 (0.038)
Total	3,778	100	1,039 (161)	0.170 (0.061)

Table 2. Summary Statistics

The sample consists of 3,778 U.S. acquisitions between 1996 and 2009 made by firms in the ISS database. Variable definitions are in the Appendix.

	Mean	Std	Q1	Median	Q3
Panel A: Acquirer cumulative abnormal returns					
CAR (-2, +2) (%)	0.141	6.974	-2.984	0.056	3.283
Panel B: Acquirer characteristics					
Employee block (Indicator)	0.080	0.272	0	0	0
Employee block ownership (%)	0.867	3.354	0	0	0
Employee block ownership (%) (when employee block indicator = 1)	10.774	5.754	6.600	9.000	12.935
Market value of equity ($mil)	8,529	22,796	918	2,328	6,283
Leverage	0.153	0.134	0.043	0.128	0.233
ROA	0.127	0.099	0.063	0.127	0.183
Management stock ownership (%)	2.713	6.280	0.210	0.646	1.978
Tobin's Q	2.050	1.857	1.194	1.541	2.179
Panel C: Deal characteristics					
Deal value ($mil)	1,039	4,484	54	161	490
Relative size	0.170	0.321	0.026	0.061	0.162
Public target (Indicator)	0.310	0.463	0	0	1
Private target (Indicator)	0.379	0.485	0	0	1
Stock financing percentage (%)	26.235	40.403	0	0	57
Diversifying acquisition (Indicator)	0.393	0.488	0	0	1
Tender offer (Indicator)	0.055	0.227	0	0	0
Competed deal (Indicator)	0.016	0.127	0	0	0

Panel D: Comparison between acquirers with and without employee block ownership				
		(1) Acquirers with employee block ownership (N=304)	(2) Acquirers without employee block ownership (N=3,474)	*p*-value for mean/median difference
CAR(-2,+2) (%)	Mean	-0.595*	0.205*	0.016
	Median	-0.034*	0.072*	0.041
Market value of equity ($mil)	Mean	9,416	8,452	0.450
	Median	2,823	2,293	0.003
Leverage	Mean	0.194	0.150	<0.001
	Median	0.178	0.121	<0.001
ROA	Mean	0.125	0.127	0.695
	Median	0.124	0.127	0.716
Management ownership (%)	Mean	1.384	2.829	<0.001
	Median	0.529	0.663	0.009
Tobin's Q	Mean	1.526	2.095	<0.001
	Median	1.358	1.556	<0.001
Deal value ($mil)	Mean	1,615	989	0.075
	Median	286	154	<0.001
Relative deal size	Mean	0.239	0.164	0.004
	Median	0.079	0.061	0.001
Public target (Indicator)	Mean	0.336	0.308	0.330
	Median	0	0	0.320
Private target (Indicator)	Mean	0.286	0.387	<0.001
	Median	0	0	<0.001
Stock financing percentage (%)	Mean	23.859	26.443	0.273
	Median	0	0	0.246
Diversifying acquisition (Indicator)	Mean	0.461	0.387	0.014
	Median	0	0	0.007
Tender offer (Indicator)	Mean	0.089	0.052	0.027
	Median	0	0	0.006
Competed deal (Indicator)	Mean	0.026	0.016	0.254
	Median	0	0	0.156

Table 3. Baseline regression of acquirer returns

The sample consists of 3,778 U.S. acquisitions between 1996 and 2009 made by firms in the ISS database. The dependent variable in columns (1) to (4) is the 5-day acquirer cumulative abnormal returns (CAR, in percentage points) around the announcement date. In column (5), the dependent variable is an indicator variable that is equal to one if the 5-day acquirer CAR is negative and zero otherwise. The key explanatory variables are indicator variables for employee block ownership of at least 5%, 10%, and 15% in columns (1) to (3) and the continuous measure of employee block ownership (in percentage points) in columns (4) and (5). Definitions of other independent variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) Probit
Employee ownership>=5% (Indicator)	-0.859**				
	(0.018)				
Employee ownership>=10% (Indicator)		-1.388***			
		(0.004)			
Employee ownership>=15% (Indicator)			-2.429***		
			(0.001)		
Employee block ownership				-0.089***	0.011*
				(0.001)	(0.091)
Log(Market value of equity)	-0.397***	-0.401***	-0.398***	-0.395***	0.059***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
Tobin's Q	-0.072	-0.069	-0.069	-0.073	-0.005
	(0.622)	(0.634)	(0.636)	(0.617)	(0.677)
Leverage	0.184	0.182	0.163	0.211	-0.265
	(0.869)	(0.871)	(0.884)	(0.850)	(0.179)
Return on assets	2.624	2.636	2.635	2.646	-0.561**
	(0.158)	(0.156)	(0.157)	(0.155)	(0.025)
Management ownership	-0.017	-0.016	-0.016	-0.017	0.002
	(0.425)	(0.436)	(0.442)	(0.413)	(0.630)
Relative deal size	-0.842	-0.853	-0.819	-0.820	0.088
	(0.147)	(0.139)	(0.154)	(0.155)	(0.208)
Public target (Indicator)	-2.451***	-2.452***	-2.449***	-2.465***	0.319***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Private target (Indicator)	-0.839***	-0.834***	-0.831***	-0.842***	0.122**
	(0.004)	(0.004)	(0.004)	(0.004)	(0.019)
Stock financing percentage	-0.013***	-0.013***	-0.013***	-0.013***	0.002***
	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)
Diversifying acquisition (Indicator)	-0.102	-0.104	-0.102	-0.094	-0.033
	(0.696)	(0.691)	(0.694)	(0.717)	(0.487)
Tender offer (Indicator)	1.069*	1.065*	1.036*	1.070*	-0.046
	(0.058)	(0.060)	(0.066)	(0.057)	(0.671)
Competed (Indicator)	-0.491	-0.543	-0.561	-0.517	0.295*
	(0.622)	(0.584)	(0.571)	(0.603)	(0.086)
Target industry M&A activity	-1.744	-1.658	-1.796	-1.750	0.275
	(0.290)	(0.315)	(0.273)	(0.287)	(0.392)
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Acquirer industry fixed effects	Yes	Yes	Yes	Yes	Yes
Number of Observations	3,778	3,778	3,778	3,778	3,778
Adjusted/Pseudo R^2	5.06%	5.08%	5.13%	5.12%	4.24%

Table 4. Regressions of acquirer returns: Controlling for potential omitted variables and acquirer fixed effects

In Panel A, we augment the acquirer returns regressions in Table 3 by adding additional control variables. In Panel B, we control for acquirer fixed effects in the acquirer returns regressions in a subsample of acquisitions made by frequent acquirers. To create this subsample, we require that an acquirer make at least two acquisitions during the sample period and that the acquisitions be in at least two different years. The dependent variable in both panels is the 5-day acquirer cumulative abnormal returns (in percentage points) around the announcement date. The key explanatory variable is the continuous measure of employee block ownership (in percentage points). Definitions of other independent variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A: Controlling for potential omitted variables					
	(1)	(2)	(3)	(4)	(5)
Employee block ownership	-0.079***	-0.075***	-0.070***	-0.087***	-0.078***
	(0.003)	(0.005)	(0.008)	(0.001)	(0.003)
E-index	-0.292***	-0.268***	-0.330***	-0.274***	-0.295***
	(0.003)	(0.007)	(0.002)	(0.005)	(0.003)
Acquirer board size		-0.034			
		(0.393)			
Acquirer board independence		-1.030			
		(0.210)			
Acquirer CEO/Chairman duality		0.058			
		(0.823)			
Acquirer institutional ownership		-0.691			
		(0.403)			
Acquirer CEO quality			0.005***		
			(0.000)		
Acquirer 3-year sales growth				0.054	
				(0.584)	
Acquirer 3-year asset growth				-0.110***	
				(0.000)	
Acquirer R&D					-0.305
					(0.185)
Acquirer product uniqueness					0.391
					(0.500)
High-tech acquirer (Indicator)					-0.486
					(0.477)
Other control variables	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Acquirer industry fixed effects	Yes	Yes	Yes	Yes	Yes
Number of Observations	3,778	3,538	3,194	3,679	3,778
Adjusted R^2	5.34%	5.73%	6.03%	5.80%	5.31%

Panel B: Controlling for acquirer fixed effects		
	(1)	(2)
Employee block ownership	-0.247**	-0.260***
	(0.011)	(0.008)
Log(Market value of equity)		-1.852**
		(0.013)
Tobin's Q		0.283**
		(0.026)
Leverage		3.557
		(0.489)
Return on assets		-0.017
		(0.998)
Management ownership		-0.062
		(0.569)
Relative deal size		-3.030***
		(0.005)
Public target (Indicator)		-2.190**
		(0.012)
Private target (Indicator)		0.096
		(0.869)
Stock financing percentage		-0.011*
		(0.091)
Diversifying acquisition (Indicator)		0.264
		(0.644)
Tender offer (Indicator)		0.480
		(0.670)
Competed (Indicator)		0.643
		(0.755)
Target industry M&A activity		-1.033
		(0.767)
Year fixed effects	Yes	Yes
Acquirer fixed effects	Yes	Yes
Number of Observations	1,886	1,886
Adjusted R^2	8.67%	13.62%

Table 5. Regressions of acquirer returns: Exploring exogenous state-level variations in business combination statutes

The dependent variable is the 5-day acquirer cumulative abnormal returns (in percentage points) around the announcement date. The key explanatory variable is the continuous measure of employee block ownership (in percentage points). Definitions of other independent variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively. Both regressions control for year and industry fixed effects, whose coefficient estimates are suppressed for brevity.

	(1) Acquirers incorporated in states with block-based BCS	(2) Acquirers incorporated in states without block-based BCS
Employee block ownership	-0.112***	-0.053
	(0.004)	(0.180)
E-index	-0.258**	-0.290*
	(0.037)	(0.059)
Log(Market value of equity)	-0.478***	-0.320*
	(0.000)	(0.060)
Tobin's Q	-0.099	-0.014
	(0.550)	(0.956)
Leverage	-0.722	2.114
	(0.596)	(0.275)
Return on assets	1.577	6.891
	(0.417)	(0.182)
Management ownership	-0.031	-0.001
	(0.206)	(0.976)
Relative deal size	-0.971	-1.109
	(0.158)	(0.280)
Public targets (Indicator)	-2.413***	-2.374***
	(0.000)	(0.000)
Private targets (Indicator)	-0.669*	-1.306**
	(0.057)	(0.013)
Stock financing percentage	-0.020***	-0.000
	(0.000)	(0.943)
Diversifying acquisition (Indicator)	-0.063	-0.380
	(0.838)	(0.409)
Tender offer (Indicator)	0.924	1.038
	(0.148)	(0.377)
Competed (Indicator)	-0.119	-1.732
	(0.929)	(0.160)
Target industry M&A activity	-0.727	-1.538
	(0.751)	(0.539)
Year fixed effects	Yes	Yes
Acquirer industry fixed effects	Yes	Yes
Number of Observations	2,645	1,133
Adjusted R^2	6.06%	5.73 %

Table 6. Two-stage least square (2SLS) regression analysis of acquirer returns

This table presents results from the 2SLS regression of acquirer returns. The first stage is a prediction model of employee blockholdings, where the dependent variable is employee block ownership (measured in percentage points). The dependent variable in the second stage is the 5-day acquirer cumulative abnormal returns (in percentage points) around the announcement date. We use two instrument variables. The first IV is the weighted-average of states' top personal income tax rates faced by a firm's employees, where the weight is the proportion of the firm's employees in each state. The second IV is the weighted-average labor mobility faced by a firm, where the weight is the proportion of the firm's employees in each state. Following Kim and Ouimet (2014), the labor mobility measure for each industry-state pair is computed as one minus the Herfindahl index of workers employed by firms in an industry and located in a state. Definitions of other independent variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

	(1) First stage Dependent variable: Employee block ownership	(2) Second stage Dependent variable: CAR(-2,+2)
Employee block ownership		-1.265**
		(0.036)
Weighted average top state personal income tax	0.052***	
	(0.003)	
Weighted average labor mobility	0.475**	
	(0.027)	
Log(State GDP per capita)	0.661	0.331
	(0.458)	(0.817)
Log(State personal income per capita)	-0.536	1.034
	(0.663)	(0.558)
State anti-takeover laws	0.007	-0.027
	(0.898)	(0.812)
State right-to-work laws	0.045	0.022
	(0.755)	(0.946)
E-index	0.238***	0.020
	(0.000)	(0.910)
Log(Market value of equity)	0.192***	-0.080
	(0.000)	(0.574)
Tobin's Q	-0.040**	-0.233
	(0.031)	(0.118)
Leverage	0.628	1.497
	(0.247)	(0.209)
Return on assets	0.716*	3.074
	(0.077)	(0.101)
Management ownership	-0.018***	-0.043*
	(0.000)	(0.061)
Relative deal size	0.632**	0.077
	(0.028)	(0.911)
Public targets (Indicator)	-0.446***	-3.056***
	(0.004)	(0.000)
Private targets (Indicator)	-0.070	-0.891***
	(0.616)	(0.002)
Stock financing percentage	0.000	-0.013***
	(0.838)	(0.001)
Diversifying acquisition (Indicator)	0.167	0.060
	(0.213)	(0.825)
Tender offer (Indicator)	0.512*	1.656***

	(0.054)	(0.008)
Competed (Indicator)	0.020	-0.568
	(0.960)	(0.567)
Target industry M&A activity	-0.264	-2.294
	(0.736)	(0.170)
Year fixed effects	Yes	Yes
Acquirer industry fixed effects	Yes	Yes
Number of Observations	3,778	3,778
Adjusted R^2	9.59%	4.97%

Table 7. Acquirer returns regressions using propensity score matched acquirers with and without employee block ownership

Panel A presents a comparison between the 304 acquirers with employee block ownership and 304 propensity score-matched acquirers without employee block ownership. The propensity scores are estimated from a probit model of the determinants of employee block ownership. The dependent variable of the probit model is equal to one if an acquirer has employee blockholdings, and zero otherwise. For independent variables, we include the state- and firm-characteristics from the first-stage model of the 2SLS regression in Table 5. Panel B presents the results of acquirer return regression estimated using the matched sample of 608 acquirers in Panel A. The dependent variable is the 5-day acquirer cumulative abnormal returns (in percentage points) around the announcement date. The key independent variable is either an indicator for or the level of employee block ownership at the acquirer. Definitions of other independent variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A: Comparison between acquirers with and without employee block ownership following PSM

		(1) Acquirers with employee block ownership (N=304)	(2) Acquirers without employee block ownership (N=304)	*p*-value for mean/median difference
CAR(-2,+2) (%)	Mean	-0.595*	0.638*	0.007
	Median	-0.034*	0.159*	0.019
Market value of equity ($mil)	Mean	9,416	9,067	0.388
	Median	2,823	3,168	0.714
Leverage	Mean	0.194	0.193	0.911
	Median	0.178	0.190	0.820
ROA	Mean	0.125	0.131	0.322
	Median	0.124	0.132	0.274
Management ownership (%)	Mean	1.384	1.663	0.304
	Median	0.529	0.447	0.438
E-index	Mean	2.81	2.84	0.754
	Median	3	3	0.847
Tobin's Q	Mean	1.526	1.562	0.479
	Median	1.358	1.398	0.137

Panel B: Acquirer return regressions	Dep var: CAR(-2,+2) in percentage points	
Employee block (Indicator)	-1.425***	
	(0.003)	
Employee block ownership		-0.129***
		(0.001)
Relative deal size	-1.257	-1.198
	(0.220)	(0.230)
Public targets (Indicator)	-2.173***	-2.268***
	(0.007)	(0.004)
Private targets (Indicator)	-0.614	-0.654
	(0.322)	(0.289)
Stock financing percentage	-0.016*	-0.015*
	(0.077)	(0.092)
Diversifying acquisition (Indicator)	0.103	0.169

	(0.858)	(0.771)
Tender offer (Indicator)	1.277	1.305
	(0.269)	(0.258)
Competed (Indicator)	-0.153	-0.251
	(0.929)	(0.883)
Target industry M&A activity	-0.469	-0.205
	(0.908)	(0.960)
Year fixed effects	Yes	Yes
Acquirer industry fixed effects	Yes	Yes
Number of Observations	608	608
Adjusted R^2	13.76%	13.30%

Table 8. Probit regression of an acquirer's likelihood of becoming a takeover target post acquisition

The sample consists of 3,778 U.S. acquisitions between 1996 and 2009 made by firms in the ISS database. The dependent variable is equal to one if an acquirer receives a takeover bid over the three years after its acquisition or zero otherwise. Employee block ownership is the percentage of shares held by employee blockholders (in percentage points). Definitions of other independent variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

	Probit
Acquirer CAR(-2,+2)	-0.007*
	(0.059)
Employee block ownership	-0.019*
	(0.069)
Acquirer CAR(-2,+2)×Employee block ownership	0.004***
	(0.007)
Log(Market value of equity)	-0.018
	(0.514)
Tobin's Q	-0.141**
	(0.026)
Leverage	1.116***
	(0.000)
Return on assets	-0.542
	(0.167)
Year fixed effects	Yes
Acquirer industry fixed effects	Yes
Number of Observations	3,778
Pseudo R^2	8.79%

Table 9. Acquirer return regressions conditional on acquirer employee treatment index

The sample consists of 2,624 U.S. acquisitions between 1996 and 2009 made by firms in the ISS database that have employee treatment ratings available from the KLD database. The dependent variable is the 5-day acquirer cumulative abnormal returns (in percentage points) around the announcement date. The key explanatory variable is the continuous measure of employee block ownership (in percentage points). Definitions of other independent variables are given in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

	(1) Full sample	(2) Acquirers with KLD employee treatment index greater than 0	(3) Acquirers with KLD employee treatment index equal to 0
Employee block ownership	-0.062*	-0.120**	-0.038
	(0.077)	(0.031)	(0.415)
E-index	-0.320***	-0.078	-0.333***
	(0.002)	(0.662)	(0.009)
Log(Market value of equity)	-0.467***	-0.514***	-0.391***
	(0.000)	(0.004)	(0.005)
Tobin's Q	-0.019	-0.140	0.024
	(0.883)	(0.345)	(0.915)
Leverage	-0.260	-3.528*	0.567
	(0.821)	(0.060)	(0.704)
Return on assets	1.787	-0.399	2.883
	(0.424)	(0.884)	(0.391)
Management ownership	-0.052**	-0.089***	-0.048*
	(0.026)	(0.001)	(0.080)
Relative deal size	-1.683**	-3.759***	-0.900
	(0.018)	(0.001)	(0.349)
Public targets (Indicator)	-2.226***	-1.151	-2.829***
	(0.000)	(0.117)	(0.000)
Private targets (Indicator)	-0.899***	-0.317	-1.205***
	(0.005)	(0.631)	(0.001)
Stock financing percentage	-0.016***	-0.020***	-0.014**
	(0.001)	(0.008)	(0.027)
Diversifying acquisition (Indicator)	-0.059	-0.804	0.267
	(0.826)	(0.111)	(0.395)
Tender offer (Indicator)	0.284	1.234	-0.180
	(0.628)	(0.204)	(0.812)
Competed (Indicator)	0.396	-0.567	1.284
	(0.660)	(0.753)	(0.245)
Target industry M&A activity	-0.991	-9.944**	1.969
	(0.622)	(0.023)	(0.382)
Year fixed effects	Yes	Yes	Yes
Acquirer industry fixed effects	Yes	Yes	Yes
Number of Observations	2,624	839	1,785
Adjusted R^2	6.14%	9.64%	6.54%

Table 10. Acquirer return regressions conditional on acquirer industry unionization rate

The sample consists of 2,925 U.S. acquisitions between 1996 and 2009 made by firms in the ISS database that have industry-level unionization rate information available. The dependent variable is the 5-day acquirer cumulative abnormal returns (in percentage points) around the announcement date. The key explanatory variable is the continuous measure of employee block ownership (in percentage points). Definitions of other independent variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

	(1) Full sample	(2) Acquirers from more unionized industries	(3) Acquirers from less unionized industries
Employee block ownership	-0.072***	-0.096***	-0.031
	(0.005)	(0.004)	(0.488)
Acquirer industry unionization rate	0.005	0.002	-0.152
	(0.667)	(0.915)	(0.324)
E-index	-0.228**	-0.304**	-0.087
	(0.021)	(0.036)	(0.527)
Log(Market value of equity)	-0.484***	-0.541***	-0.442***
	(0.000)	(0.000)	(0.003)
Tobin's Q	-0.254	-0.358	-0.170
	(0.139)	(0.166)	(0.417)
Leverage	0.985	-0.504	2.046
	(0.381)	(0.775)	(0.145)
Return on assets	1.835	2.393	1.499
	(0.335)	(0.445)	(0.528)
Management ownership	0.007	0.016	0.002
	(0.781)	(0.625)	(0.960)
Relative deal size	-1.357**	-0.778	-2.418*
	(0.048)	(0.300)	(0.091)
Public targets (Indicator)	-2.054***	-1.152**	-2.918***
	(0.000)	(0.030)	(0.000)
Private targets (Indicator)	-0.655**	-1.212***	-0.203
	(0.047)	(0.005)	(0.686)
Stock financing percentage	-0.014***	-0.014**	-0.012*
	(0.001)	(0.019)	(0.052)
Diversifying acquisition (Indicator)	-0.018	0.328	-0.433
	(0.944)	(0.331)	(0.288)
Tender offer (Indicator)	0.627	0.342	0.647
	(0.314)	(0.696)	(0.458)
Competed (Indicator)	-0.893	-2.903**	1.539
	(0.390)	(0.034)	(0.383)
Target industry M&A activity	-1.514	1.379	-6.888**
	(0.420)	(0.557)	(0.025)
Year fixed effects	Yes	Yes	Yes
Acquirer industry fixed effects	Yes	Yes	Yes
Number of Observations	2,925	1,454	1,471
Adjusted R^2	6.05%	6.04%	7.33%

Table 11. Acquirer return regressions conditional on excess wages of acquirer employees

The wage regression in Panel A is based on 15,306 firm-years in Compustat from fiscal year 1995 to 2009 that have available information on the dependent variable, labor-related expense ($1000s) per employee (defined as XLR/EMP). The acquirer return regression in Panel B is based on 655 acquisitions in which acquirers have excess worker wage measure available, computed as the residual from the wage regression in Panel A. The dependent variable is the 5-day acquirer cumulative abnormal returns (in percentage points) around the announcement date. The key explanatory variable is the continuous measure of employee block ownership (in percentage points). All variable definitions are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and firm-level clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A: Wage regression	Dep var: Labor-related expense ($1000s) per employee
Industry average wage	0.010**
	(0.035)
Log(Market value of equity)	2.894***
	(0.000)
Tobin's Q	-0.507***
	(0.000)
Leverage	-3.559**
	(0.045)
Return on assets	-15.795***
	(0.000)
Assets per employee	0.001***
	(0.000)
Assets depreciated	28.516***
	(0.000)
Sales per employee	0.002*
	(0.097)
Year fixed effects	Yes
Industry fixed effects	Yes
Number of Observations	15,306
Adjusted R^2	51.25%

Panel B: Acquirer return regressions	Dep var: CAR(-2,+2) in percentage points		
	(1) All acquisitions with excess worker wage measure available	(2) Excess worker wage below zero	(3) Excess worker wage above zero
Employee block ownership	-0.147*	-0.027	-0.180*
	(0.098)	(0.845)	(0.067)
E-index	0.011	0.077	-0.284
	(0.946)	(0.715)	(0.235)
Log(Market value of equity)	-0.264	-0.228	-0.165
	(0.169)	(0.413)	(0.522)
Tobin's Q	-0.504	-1.339	0.340
	(0.533)	(0.286)	(0.685)
Leverage	0.153	-0.317	0.477
	(0.928)	(0.877)	(0.861)
Return on assets	2.887	-4.373	22.558**
	(0.734)	(0.816)	(0.017)
Management ownership	0.042	0.034	0.033
	(0.469)	(0.630)	(0.603)
Relative deal size	-1.814	0.166	-5.216***
	(0.222)	(0.944)	(0.000)
Public targets (Indicator)	-3.037***	-3.909**	-2.681**
	(0.001)	(0.010)	(0.048)
Private targets (Indicator)	-1.940**	-2.800**	-1.215
	(0.019)	(0.028)	(0.338)
Stock financing percentage	-0.004	-0.007	-0.001
	(0.482)	(0.299)	(0.899)
Diversifying acquisition (Indicator)	-0.657	-0.534	-0.744
	(0.183)	(0.412)	(0.389)
Tender offer (Indicator)	-1.323	-1.989	-0.882
	(0.316)	(0.484)	(0.530)
Competed (Indicator)	0.803	-4.237**	4.455
	(0.779)	(0.015)	(0.323)
Target industry M&A activity	-7.505**	-10.751***	-1.615
	(0.021)	(0.001)	(0.821)
Year fixed effects	Yes	Yes	Yes
Acquirer industry fixed effects	Yes	Yes	Yes
Number of Observations	655	415	240
Adjusted R^2	12.31%	14.55%	18.62%

Table 12. Worker-manager alliance, diversifying acquisitions, and acquirer returns

The sample consists of 3,778 U.S. acquisitions between 1996 and 2009 made by firms in the ISS database. Panel A presents the coefficient estimates of a probit regression of the probability of diversifying acquisitions, where the dependent variable is equal to 1 if an acquirer makes a diversifying acquisition and zero otherwise. Panel B presents the coefficient estimates of acquirer returns regressions in the subsamples of diversifying and non-diversifying deals. The dependent variable is the 5-day acquirer cumulative abnormal returns (in percentage points) around the announcement date. Definitions of explanatory variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A: Probit regression of the likelihood of diversifying acquisitions	Dep. Var: 1 for diversifying acquisitions, 0 otherwise
Employee block ownership	0.020***
	(0.005)
E-index	0.021
	(0.396)
Log(Market value of equity)	-0.039*
	(0.084)
Tobin's Q	-0.024
	(0.236)
Leverage	-0.085
	(0.743)
Return on assets	0.911**
	(0.019)
Management ownership	-0.001
	(0.893)
Year fixed effects	Yes
Acquirer industry fixed effects	Yes
Number of Observations	3,778
Pseudo R^2	7.51%

Panel B: Acquirer returns regressions		
	(1) Diversifying acquisitions	(2) Non-diversifying acquisitions
Employee block ownership	-0.094***	-0.056
	(0.007)	(0.176)
E-index	-0.443***	-0.199*
	(0.003)	(0.095)
Log(Market value of equity)	-0.422***	-0.411***
	(0.008)	(0.001)
Tobin's Q	-0.299	0.015
	(0.299)	(0.917)
Leverage	0.719	0.323
	(0.669)	(0.826)
Return on assets	5.979**	1.353
	(0.015)	(0.568)
Management ownership	-0.011	-0.024
	(0.712)	(0.378)
Relative deal size	-0.957	-0.539
	(0.301)	(0.473)
Public targets (Indicator)	-1.567**	-2.924***
	(0.013)	(0.000)
Private targets (Indicator)	-0.687*	-0.914**
	(0.091)	(0.024)
Stock financing percentage	-0.018***	-0.010*
	(0.006)	(0.058)
Tender offer (Indicator)	0.180	1.427*
	(0.828)	(0.063)
Competed (Indicator)	0.081	-0.556
	(0.959)	(0.639)
Target industry M&A activity	0.761	-4.402
	(0.728)	(0.161)
Year fixed effects	Yes	Yes
Acquirer industry fixed effects	Yes	Yes
Number of Observations	1,484	2,294
Adjusted R^2	4.75%	5.60%

Table 13. The relations of employee blockholdings with acquisition synergies and takeover premium

The dependent variable in column (1) is the 11-day cumulative abnormal return (in percentage points) for a value-weighted portfolio of the acquirer and target. The weights for the acquirer and the target are based on their market value of equity measured at the 11th day prior to the acquisition announcement date. The dependent variable in column (2) is the takeover premium from SDC, computed as the difference between the offer price and the target stock price 4 weeks prior to the acquisition announcement date divided by the latter. The key explanatory variable is the continuous measure of employee block ownership (in percentage points). Definitions of other independent variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively. Both regressions control for year and industry fixed effects, whose coefficient estimates are suppressed for brevity.

	(1) Dependent variable: Acquisition synergy	(2) Dependent variable: Takeover premium
Employee block ownership	-0.155*	0.374
	(0.051)	(0.525)
E-index	0.017	-2.132
	(0.930)	(0.162)
Log(Market value of equity)	-0.645***	-3.070*
	(0.001)	(0.082)
Tobin's Q	-0.344*	0.812
	(0.084)	(0.472)
Leverage	2.502	-3.934
	(0.337)	(0.816)
Return on assets	3.605	-2.016
	(0.425)	(0.917)
Management ownership	-0.029	-0.131
	(0.628)	(0.616)
Relative deal size	1.267	-10.246***
	(0.100)	(0.000)
Stock financing percentage	-0.028***	-0.081
	(0.000)	(0.170)
Diversifying acquisition (Indicator)	-0.334	0.499
	(0.604)	(0.881)
Tender offer (Indicator)	-0.561	4.963
	(0.480)	(0.433)
Competed (Indicator)	-1.824	14.926**
	(0.296)	(0.019)
Target industry M&A activity	-3.642	8.849
	(0.297)	(0.602)
Year fixed effects	Yes	Yes
Acquirer industry fixed effects	Yes	Yes
Number of Observations	1,054	1,054
Adjusted R^2	9.33%	5.54%

Table 14. The relation of employee blockholdings to post-acquisition operating performance changes

This table present results from the analysis of the effect of employee blockholdings on changes in operating performance. The dependent variable is the difference between the acquirer's three-year average industry-adjusted return on sales (ROS) after the completion of the acquisition and its industry-adjusted ROS in the pre-merger year. The key explanatory variable is the continuous measure of employee block ownership (in percentage points). Column (1) present the regression results based on the whole sample, while the regression in column (2) only uses the subsample of diversifying acquisitions. Definitions of other independent variables are in the Appendix. In parentheses are two-sided p-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively. Both regressions control for year and industry fixed effects, whose coefficient estimates are suppressed for brevity.

	(1) Whole sample	(2) Sample of diversifying acquisitions
Employee block ownership	-0.0003	-0.0005*
	(0.247)	(0.064)
E-index	0.001	0.001
	(0.262)	(0.421)
Log(Market value of equity)	0.003***	0.004***
	(0.000)	(0.001)
Tobin's Q	-0.001	-0.003**
	(0.115)	(0.025)
Leverage	0.009	0.007
	(0.305)	(0.581)
Return on assets	-0.219***	-0.225***
	(0.000)	(0.000)
Management ownership	0.000	0.000
	(0.653)	(0.998)
Relative deal size	-0.013***	-0.012***
	(0.000)	(0.006)
Public targets (Indicator)	-0.001	0.001
	(0.776)	(0.791)
Private targets (Indicator)	-0.002	-0.001
	(0.294)	(0.600)
Stock financing percentage	-0.000	-0.000
	(0.263)	(0.488)
Diversifying acquisition (Indicator)	0.001	
	(0.612)	
Tender offer (Indicator)	-0.010***	-0.012**
	(0.008)	(0.031)
Competed (Indicator)	0.010*	0.009
	(0.058)	(0.306)
Target industry M&A activity	-0.004	-0.008
	(0.737)	(0.535)
Year fixed effects	Yes	Yes
Acquirer industry fixed effects	Yes	Yes
Number of Observations	3,698	1,459
Adjusted R^2	24.12%	21.48%

Internet Appendix

We report three sets of results in this internet appendix.

1. In Table IA.1, we show that our acquirer returns regression results are robust to excluding potentially endogenous firm and deal characteristics as control variables.
2. In Table IA.2, we confirm the managerial entrenchment role of employee block ownership in a comprehensive sample consisting of all firms (acquirers and non-acquirers) in the ISS database during our sample period. Specifically, we estimate a probit model similar to that in Table 8, except that we replace acquirer CAR with a firm's past-one-year buy-and-hold abnormal stock returns. The regression results show that employee block ownership significantly reduces a firm's unconditional probability of becoming a takeover target, and it also significantly weakens the sensitivity of takeover probability to low abnormal stock returns.
3. In Tables IA.3-5, we provide additional evidence for the worker-manager alliance hypothesis by examining whether the relation between employee block ownership and acquirer returns displays any cross-sectional variations that support a causal interpretation. Section 3.6.1 discusses these results in more details.

Table IA.1. Baseline regressions of acquirer returns without controlling for firm and deal characteristics

The sample consists of 3,778 U.S. acquisitions between 1996 and 2009 made by firms in the ISS database. The dependent variable in columns (1) to (4) is the 5-day acquirer cumulative abnormal returns (CAR, in percentage points) around the announcement date. In column (5), the dependent variable is an indicator variable that is equal to one if the 5-day acquirer CAR is negative and zero otherwise. The explanatory variables are indicator variables for employee block ownership of at least 5%, 10%, and 15% in columns (1) to (3) and the continuous measure of employee block ownership (in percentage points) in columns (4) and (5). In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. The symbols ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) Probit
Employee ownership>=5% (Indicator)	-0.893**				
	(0.016)				
Employee ownership>=10% (Indicator)		-1.221**			
		(0.012)			
Employee ownership>=15% (Indicator)			-2.324***		
			(0.001)		
Employee block ownership				-0.085***	0.010*
				(0.002)	(0.097)
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Acquirer industry fixed effects	Yes	Yes	Yes	Yes	Yes
Number of Observations	3,778	3,778	3,778	3,778	3,778
Adjusted/Pseudo R^2	0.95%	0.93%	0.99%	0.99%	1.18%

Table IA.2. The managerial entrenchment effect of employee block ownership: Larger sample evidence

The table presents results from probit regressions of the likelihood of receiving a takeover bid. The sample consists of 14,648 firm-year observations in the ISS database between 1996 and 2009. The dependent variable is equal to one if a firm receives a takeover bid during a fiscal year and zero otherwise. Employee block ownership is the percentage of shares held by employee blockholders (in percentage points). "BHAR" is a firm's past one-year buy-and-hold abnormal returns. "Low BHAR" is an indicator for firms with past one-year buy-and-hold abnormal returns that are in the bottom quartile of the sample. Two-sided *p*-values based on standard errors adjusted for heteroskedasticity and firm clustering are shown in parentheses. The symbols ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

	(1)	(2)
Employee block ownership	-0.014***	-0.010**
	(0.005)	(0.020)
BHAR	-0.085**	
	(0.038)	
Low BHAR		0.130***
		(0.005)
Employee block ownership × Low BHAR		-0.016**
		(0.020)
Log(Market value of equity)	-0.019	-0.015
	(0.135)	(0.200)
Tobin's Q	-0.054***	-0.056***
	(0.006)	(0.005)
Leverage	0.209**	0.202**
	(0.014)	(0.022)
Return on assets	-0.209	-0.179
	(0.128)	(0.186)
Year fixed effects	Yes	Yes
Acquirer industry fixed effects	Yes	Yes
Number of Observations	14,648	14,648
Pseudo R^2	3.47%	3.57%

Table IA.3. Acquirer returns regression: Subsample analysis based on ATP indices

The sample consists of 3,778 U.S. acquisitions between 1996 and 2009 made by firms in the ISS database. The dependent variable is the 5-day acquirer cumulative abnormal returns (in percentage points) around the announcement date. The key explanatory variable is the continuous measure of employee block ownership (in percentage points). Definitions of other independent variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively.

	(1) E-index<=2	(2) E-index>=3
Employee block ownership	-0.130***	-0.058
	(0.007)	(0.123)
E-index	-0.512**	-0.151
	(0.033)	(0.521)
Log(Market value of equity)	-0.346**	-0.453***
	(0.010)	(0.000)
Tobin's Q	-0.071	-0.324
	(0.633)	(0.173)
Leverage	-1.527	1.904
	(0.338)	(0.245)
Return on assets	3.310	2.992
	(0.136)	(0.382)
Management ownership	0.006	-0.071***
	(0.819)	(0.006)
Relative deal size	-0.299	-1.272
	(0.733)	(0.125)
Public targets (Indicator)	-3.253***	-1.760***
	(0.000)	(0.000)
Private targets (Indicator)	-0.884*	-0.790**
	(0.058)	(0.012)
Stock financing percentage	-0.013*	-0.013***
	(0.053)	(0.002)
Diversifying acquisition (Indicator)	0.018	-0.188
	(0.963)	(0.650)
Tender offer (Indicator)	2.352***	-0.313
	(0.003)	(0.618)
Competed (Indicator)	-0.476	-0.548
	(0.740)	(0.653)
Target industry M&A activity	-3.682	0.751
	(0.103)	(0.804)
Year fixed effects	Yes	Yes
Acquirer industry fixed effects	Yes	Yes
Number of Observations	1,903	1,875
Adjusted R^2	5.18%	6.04%

Table IA.4. Acquirer returns regressions: Subsample analysis based on acquirer CEO delta

The dependent variable is the 5-day acquirer cumulative abnormal returns (in percentage points) around the announcement date. The key explanatory variable is the continuous measure of employee block ownership (in percentage points). Definitions of other independent variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively. Both regressions control for year and industry fixed effects, whose coefficient estimates are suppressed for brevity.

	(1) CEO delta is below sample median	(2) CEO delta is above sample median
Employee block ownership	-0.117***	-0.055
	(0.010)	(0.120)
E-index	-0.190	-0.380***
	(0.213)	(0.004)
Log(Market value of equity)	-0.567***	-0.219
	(0.001)	(0.159)
Tobin's Q	0.207	-0.209
	(0.443)	(0.246)
Leverage	2.874*	-1.400
	(0.090)	(0.356)
Return on assets	0.294	4.903*
	(0.888)	(0.081)
Management ownership	-0.008	-0.021
	(0.837)	(0.420)
Relative deal size	0.200	-2.280***
	(0.821)	(0.008)
Public targets (Indicator)	-2.812***	-2.447***
	(0.000)	(0.000)
Private targets (Indicator)	-0.745*	-0.951**
	(0.065)	(0.031)
Stock financing percentage	-0.015**	-0.010*
	(0.019)	(0.096)
Diversifying acquisition (Indicator)	-0.309	0.123
	(0.423)	(0.749)
Tender offer (Indicator)	1.033	0.667
	(0.241)	(0.322)
Competed (Indicator)	0.550	-1.241
	(0.771)	(0.275)
Target industry M&A activity	1.095	-2.916
	(0.714)	(0.163)
Year fixed effects	Yes	Yes
Acquirer industry fixed effects	Yes	Yes
Number of Observations	1,799	1,798
Adjusted R^2	4.27%	6.48%

Table IA.5. Acquirer returns regressions: Subsample analysis based on product market threats

The dependent variable is the 5-day acquirer cumulative abnormal returns (in percentage points) around the announcement date. An acquirer is defined as facing high (or low) product market threats if its product market fluidity measure as constructed by Hoberg, Phillips, and Prabhala (2014) is above (or below) the sample median. The key explanatory variable is the continuous measure of employee block ownership (in percentage points). Definitions of other independent variables are in the Appendix. In parentheses are two-sided *p*-values based on standard errors adjusted for heteroskedasticity and acquirer clustering. ***, **, and * stand for statistical significance at the 1%, 5%, and 10% level, respectively. Both regressions control for year and industry fixed effects, whose coefficient estimates are suppressed for brevity.

	(1) High product market threats	(2) Low product market threats
Employee block ownership	-0.059	-0.145***
	(0.224)	(0.004)
E-index	-0.213	-0.314**
	(0.194)	(0.043)
Log(Market value of equity)	-0.374**	-0.365**
	(0.018)	(0.013)
Tobin's Q	-0.137	0.391
	(0.465)	(0.180)
Leverage	0.633	0.878
	(0.730)	(0.638)
Return on assets	1.046	-1.449
	(0.682)	(0.688)
Management ownership	-0.058**	-0.001
	(0.046)	(0.960)
Relative deal size	-2.110**	-0.047
	(0.022)	(0.962)
Public targets (Indicator)	-2.577***	-2.675***
	(0.000)	(0.000)
Private targets (Indicator)	-0.694	-0.823**
	(0.180)	(0.038)
Stock financing percentage	-0.015**	-0.017**
	(0.037)	(0.018)
Diversifying acquisition (Indicator)	-0.134	-0.284
	(0.771)	(0.462)
Tender offer (Indicator)	0.912	1.246
	(0.316)	(0.186)
Competed (Indicator)	-1.514	1.040
	(0.293)	(0.531)
Target industry M&A activity	-2.897	0.126
	(0.236)	(0.964)
Year fixed effects	Yes	Yes
Acquirer industry fixed effects	Yes	Yes
Number of Observations	1,581	1,581
Adjusted R^2	5.05%	4.76%

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