# **Cross-Border Acquisitions and Employee Relations**\*

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#### **Abstract**

Using novel firm-level data on employee relations in an international sample of M&A deals, we find that shareholders react positively to an acquirer's provision of employee-friendly policies around domestic acquisitions, but negatively in cross-border acquisitions. These effects are primarily driven by the provision of monetary incentives, and cannot be explained by country-level labor regulations or by target-level employee relations, and are concentrated on the acquirer's returns rather than the target's returns. Our findings suggest that acquirer shareholders view treating employees well favorably, as this can potentially reduce labor adjustment costs during a firm's reorganization, but they dislike such generous employment benefits in cross-border acquisitions when uncertainties regarding post-merger integration are high.

Keywords: employee relations, labor protection, monetary incentives, takeovers, cross-border mergers and acquisitions.

JEL Classifications: G34, M14, J24

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# **Cross-Border Acquisitions and Employee Relations**

#### 1. INTRODUCTION

Cross-border merger and acquisition (M&A) volume has boomed over the past 20 years—from 23% of the total deal value in 1998 to more than 50% of total value in 2016—with some individual transaction values being close to that of a small country's GDP. Cross-border acquisitions enable firms to expand their boundaries across national borders and provide new sources of value creation resulting from cross-country differences in product markets (DeGiovanni, 2005), regulations and governance standards (Bris and Cabolis, 2008; Chari, Ouimet, and Tesar, 2010), taxation regimes (Huizinga and Voget, 2009), currencies (Erel, Liao, and Weisbach, 2012), industry specialization (Frésard, Hege, and Phillips, 2017), and degree of development of the financial system (Alquist, Mukherjee, and Tesar, 2014). However, cross-country takeover also induce significant frictions that reduce merger gains. Indeed, recent studies have attempted to explain the marked differences in merger gains between domestic and cross-border takeovers using factors such as language and cultural distance (Ahern, Daminelli, and Fracassi, 2015), economic nationalism (Dinc and Erel, 2013), geography and bilateral trade (Erel et al., 2012), investor protection and corporate governance (Rossi and Volpin, 2004; Bris and Cabolis, 2008), as well as government ownership (Karolyi and Liao, 2017). Despite these frictions and the related negative announcement returns to the acquirers, companies worldwide are increasingly acquiring abroad.

A widely recognized yet largely unexplored friction related to cross-border acquisitions is the significant risks and difficulties in post-merger integration, especially with regard to integration of employees (e.g., Datta, 1991). Employees are crucial to the firm's performance: they are involved in the firm's daily operations and have contractual claims on the company in the form of salaries and bonuses. Their relations with the firm are believed to be one of the most important determinants of returns around M&As, as M&As involve restructuring, integrating, and reconfiguring the firm's workforce with the aim of reducing costs and profiting from larger economies of scale and scope (Maksimovic, Phillips, and

Prabhala, 2011). A growing literature on employees and labor markets as a source of friction focuses on how country- or state-level employment protection regulations and union forces can affect merger synergies and the efficiency of integration, concluding that stronger employment protection reduces takeover activity and merger synergies (John, Knyazeva, and Knyazeva, 2015; Tian and Wang, 2016; Dessaint, Golubov, and Volpin, 2017; although the opposite is found by Alimov (2015)). However, labor market regulation and employment protection can only set the lower bound regarding the treatment of employees in the context of M&As, and do not paint a complete picture of the supply and the demand for employee welfare at the firm level. Arguably, a more significant part of the labor effect may result from the firm's *own* investment in implementing employment policies and incentivizing employees, over and beyond the regulatory requirements.

Motivated by the increasing recognition of labor and human capital's importance in M&As and the lack of firm-level evidence on employee relations, this paper focuses on how a firm's treatment of its employees—voluntary policies and practices that aim to enhance a firm's human capital and employee relations by providing higher compensation and job security—differentially affects value generation in domestic and cross-border takeovers. Although some recent studies investigate firm-level labor relations (Pagano and Volpin, 2005; Cronqvist et al., 2009; Masulis, Wang, and Xie, 2016), they mostly focus on the agency aspects of investing in employee relations i.e., the detrimental effect of manager-employee alliances on shareholder value. Moreover, they are limited to samples of US firms, in which the roles of labor during the reorganization process are different from the rest of the world (Atanassov and Kim, 2009). To date, there is little evidence on the effect of firms' voluntary investment in employee relations on deal performance on a global scale.

The lack of research is partially due to the lack of data with detailed information on firm-level investment in employee relations, especially in a multi-country context. We utilize a newly assembled global dataset on firm-level corporate investment in employee-related issues to investigate how cross-firm heterogeneity in employee relations (that is distinct from country-level labor regulations) translates into short- and long-run firm performance when conducting domestic and foreign acquisitions. Underlying our

empirical investigation is the recognition that acquirers usually experience negative market reactions due to market frictions such as overbidding (Eckbo, 2009) and expensive labor adjustment costs (Antanassov and Kim, 2009; Ghaly, Dang, and Stathopoulos, 2017), if resulting in great uncertainties about the success of post-merger integration. However, treating employees well and providing generous employment benefits can—even prior to the merger—reduce some of these costs and increase investors' beliefs about post-merger integration success. This can happen because the acquirer avoids the large costs associated with dissatisfaction and replacement of its own employees during the post-merger integration process, and because target employees can also benefit from the acquirer's employee friendly culture, smoothing the integration process. Nevertheless, investors of acquiring firms may be concerned with their management offering generous employment benefits when the uncertainties regarding post-merger integration are high, which is *a key issue in cross-border M&A deals*. Consequently, acquirer shareholders perceive generous policies as a waste of money and outweigh their costs, which may result in negative shareholder reactions around cross-border M&A deals, despite target employees welcoming these policies.

What frictions may arise in cross-border deals that affect the returns to shareholders and firm value when investing in employee relations?<sup>iii</sup> Obviously, managing the integration of employee policies in different national, cultural, and organizational contexts is likely to create a host of uncertainties (Aguilera and Dencker, 2004). In addition, in most jurisdictions, a buyer of a firm cannot legally change the human capital employed at a target company nor can it change the contracts that a target firm has adopted, which limits its ability to implement and integrate its own employment policies in the target firm.<sup>iv</sup> We therefore argue that, although acquirer shareholders view treating employees well favourably as it can reduce labor adjustment costs and enhance firm performance in domestic takeovers, these shareholders may view such generous employment benefits negatively in a cross-border acquisition, where uncertainties about post-merger workforce integration are systematically higher.

Based on a global sample of 2,009 acquiring firms from 48 countries engaging in 4,565 M&A deals, we find that there is considerable heterogeneity in *firm-level* policies of and investment in

employee relations that are distinct from state-imposed country-level labor regulations. We show that the acquirer's employee treatment in terms of monetary benefits and job security is positively related to the takeover deal's announcement returns and long-term performance when acquiring a domestic target, but that this effect reverses when acquiring a foreign target. A one-standard deviation increase in industryadjusted investment in employee relations results in a 22 basis points increase in CARs in domestic deals, but a 43 basis points decrease in cross-border deals. This finding holds even after controlling for crosscountry differences in labor regulations and other macroeconomic factors, as well as acquirer-level fixed effects in a sample of firms that acquire both domestically and internationally, indicating that our results are not driven by time-invariant acquirer characteristics. In addition, we show that this finding stems neither from the fact that cross-border deals on average destroy value, as these deals have higher announcement returns than domestic deals, nor from other workforce-related dimensions (such as health and safety, workforce diversity, or training and development), but that it is mainly driven by the acquirer's (and not the target's) provision of generous employee benefits. Our results are also robust to a propensity score matching approach to control for observable deal, firm, country, and industry-level characteristics. Moreover, the results on long-run post-merger performance are in line with those from the CARs estimations. We also show that our findings are mainly driven by the acquirer's investment in pecuniary incentives and monetary compensation, and less so by factors representing job security factors such as employment retention and trade union relations, consistent with human relations theories (Herzberg, 1959; 1964; 1966).

We explore a few potential channels through which labor-related frictions in cross-border acquisitions may account for the relationship between firm-level employee treatment and deal performance. We show that factors such as acquisition experience and some characteristics of the workforce can reduce labor-related frictions in cross-border deals. The negative correlation is weaker when the acquirer has takeover experience in the target's country, when social security laws and economic nationalism in the target's country are low, when strong labor unions in the acquirer's and target's countries are absent, and when both parties are in low-tech industries.

We further show that, for a subsample of deals for which we have both acquirer- and target-level data on employee relations, our results are not likely to be driven by the target's, but rather by the acquirer's level of investment in employee relations. These effects concentrate in the acquirer's CARs instead of in the target's CARs, indicating that our results are not driven by a value redistribution effect. We also rule out a host of alternative explanations including the levels of or differences in country-level labor regulations, firms' decisions to engage in a domestic or cross-border M&A, geographical distance between acquirer and target, differences in their countries' economic development, the target employees' receptiveness towards job security incentives, or a back-firing effect of an acquirer over-investing in employee relations. Our results are robust to a propensity-score matching approach, to excluding serial acquirers, targets from developing countries, and US acquirers, and to an instrumental variable (IV) approach which uses the salaries and wage expenses in the acquirer's peers as an IV for employee relations.

Of course, these results should be interpreted with caution. We do not claim that what drives the effect of employee relations is simply whether the target is domestic or foreign. Arguably, there are many frictions such as regulatory and cultural differences that may shape how a firm employs, transfers, and integrates its human capital during its reorganization, which we have tried to take into account in our analyses using various control variables and fixed effects. Instead, our findings highlight the importance of firm-level treatment of employees to explain the marked differences in deal performance and shareholder value redistribution between domestic and cross-border M&As around the world.

# 2. DATA AND METHOD

### 2.1 Data

We measure a firm's employee relations using data from Thomson Reuters' ASSET4

Environmental, Social, and Corporate Governance (ESG) database. This firm-level database provides information and ratings on firms' practice on social, corporate governance, economic, and environmental issues ("pillars") and covers more than 4,000 companies worldwide, including the members of the S&P

500, Russell 1000, NASDAQ 100, MSCI Europe, FTSE 250, ASX 300, STOXX 600, the MSCI World Index, and the MSCI Emerging Market, index since 2002. The ASSET4 data is obtained from publicly available sources such as annual reports, 10-K statements, and CSR reports, which reduces concerns regarding self-reporting biases that may be present in survey-based data. The ASSET4 ratings consist of more than 750 ESG sub-dimensions (data points). Every data point results from a multi-step verification process, including a series of data entry checks, automated quality rules, and historical comparisons. Each data point is constructed by means of more than 280 key performance indicators and are rated as both a normalized score (0 to 100, with 50 as the industry mean) and the actual computed value. The equally-weighted average is then normalized by ASSET4 so that each firm is given a score relative to the performance of all firms in the same industry around the world. All ratings are provided on a yearly basis. For all companies, at least three years of history are available, and most companies are covered from 2005 onward. Firms are rated on the basis of their ESG compliance (regulatory requirements) and their ESG engagement (voluntary initiatives). Therefore, the ESG ratings reflect a comprehensive evaluation of how a firm engages in stakeholder issues and complies with regulations.

Our main focus is on the variables related to the firm's workforce under the "social" ("S") pillar, in particular those describing the firms' commitment and effectiveness with regard to the provision of high-quality employment benefits and job security, which we label as *Employment Quality*. Employment Quality is an equally-weighted average of a set of underlying elements. It consists of measures of the firm's salary level, wage distribution, trade union relations, bonus plans for at least middle management, fringe benefits such as health insurance provision, employment awards, employment creation, personnel turnover, lay-offs, management departures, strikes, job security policies, and employment controversies in the media such as strikes. This way we can test the importance the aggregate measure of employment quality, but also go one level deeper and test the monetary incentive factors as well as job security factors on shareholder returns around M&A announcements. As employment quality is the main empirical proxy for an acquirer's employee relations, we use these two terms interchangeably throughout the paper.

The *Employment Quality* score is, as are all other ESG scores mentioned above, normalized by ASSET4 such that each firm is given a z-score relative to the performance of all firms in the same industry. The normalization to a scale of 100 implies that, by construction, firms with scores higher than 50 perform above the median in terms of employee relations. These measures enable us to assess a firm's orientation towards employee issues relative to the industry benchmark, and provide us with a natural yardstick to gauge whether the firm excessively engages in employee relations. This way, we can compare corporate employee relations across firms with a similar demand for labor skills and operating in similar labor markets but with a different geographical focus in takeovers.

We obtain data on M&A deals from the SDC Mergers and Acquisitions database. In order to be included in our sample, the transactions should meet the following criteria: (1) the deal was announced between January 1<sup>st</sup>, 2002 and December 31<sup>st</sup>, 2014 and the SDC database contains detailed information on this transaction; (2) the acquiring firm is publicly listed and its accounting and stock return data are available in Datastream; (3) the acquiring firm owns less than 50% of the target's shares before the offer and makes an offer with the intention to own more than 50% of the target's shares subsequent to a successful acquisition; (4) the acquiring firm has data available in ASSET4 for the fiscal year before the deal announcement; and (5) labor protection data for both the acquirer's and target's countries are available in the Botero et al. (2004) labor regulation indices.

Merging the information from ASSET4 with our sample of M&A deals from SDC results in a final sample of 4,565 deals by 2,009 acquiring firms from 48 countries. Of these deals, 2,550 (56%) are domestic and 2,015 (44%) are cross-border. The descriptions of our key variables are given in Appendix A. Appendix B shows the sample distribution by acquirer industry and year. The acquiring firms in our sample are mostly active in Business Services (10%), Trading (8%), and Banking (7%) industries. Appendix C shows the sample distribution by acquirer country. Acquiring firms originate mainly from the US (27%), Japan (15%), and the UK (13%). In addition, Appendices D1 and D2 respectively offer an overview of our employee relations scores by country and industry.

#### 2.2 Empirical Strategy

To assess shareholders' reactions to M&A announcements and thus draw inferences on shareholder value, we follow the convention and calculate cumulative abnormal stock returns (CARs) for the acquiring firm in the three days surrounding the deal announcement [-1,+1], where abnormal returns are defined as the difference between the firm's actual and expected returns. These expected returns are obtained from the market model estimated over a period starting 100 days before the announcement date until 30 days before this date:  $R_{it} = \alpha_i + \beta_i * R_{mt} + \varepsilon_{it}$ , where  $R_{it}$  is the actual return for firm i on day t, and  $R_{mt}$  is the return on the primary stock market of the country in which the firm's headquarter is located. The estimated coefficients enable us to calculate the returns expected for the case without a takeover offer. We then calculate the CARs by summing the abnormal returns in the three days around the announcement date. We necessarily focus on the acquiring firms' CARs because studying the combined CARs of both acquirers and targets makes us lose more than 80% of our sample (as the number of public target firms in our sample is limited). Similarly, we confine our analysis to the acquiring firms' employee relations as the availability of data for firm-level employee relations and stock information for target firms is also very limited (less than 10% of the sample). The content of the sample is correctly in the correctly of the sample).

Acquirer CAR 
$$[-1, +1]_i$$
  
=  $\alpha_i + \beta_1 Employee Relations_{i,t-1} + \beta_2' X_{ij} + \beta_3' Lab. Reg. Index_c + \beta_4' \gamma + \varepsilon_i$ 

where *Employee Relations*<sub>j,t-1</sub> measures the acquiring firm's investment in employment quality in terms of monetary benefits and job security for the fiscal year prior to the deal announcement, and  $X_{ij}$  indicates a set of standard deal- and firm-level control variables including acquirer ROA, acquirer leverage, acquirer size, a serial acquirer dummy, relative deal size, and dummies for toeholds, multiple bidders, all-cash financed deals, hostile deals, diversifying deals, and public targets. *Lab. Reg. Index*<sub>c</sub> is a set of four (target and/or acquirer) country-level labor regulation indices from Botero et al. (2004), which have been widely used in studies on the role of labor protection in corporate investment (e.g. Atanassov and Kim, 2009; Levine et al., 2015). These indices consist of (1) an employment laws index, which

measures the protection of labor and employment contracts; (2) a collective relations laws index, which measures the statutory protection and power of labor unions as well as protection of workers during collective disputes; (3) a social security laws index, which measures social security benefits related to old age, disability, death, sickness, and unemployment; and (4) a civil rights index, which captures the degree of statutory protection of vulnerable groups against employment discrimination. As our goal is to examine the role of firm-level employee relations, it is important to control for these country-level labor regulation variables so as to disentangle the firm-level effects of (voluntary) labor-orientation from the effects resulting from country-level (mandatory) labor protection regulations. Finally,  $\gamma$  is a set of year, acquirerand target-industry fixed effects, and "acquirer-region  $\times$  target-region" fixed effects that we include to further reduce concerns related to a potential omitted variable bias in the relationship between corporate employee relations and stock returns around M&A announcements.

In addition, we explore the potential mechanisms that account for the differential relations between employee relations and shareholder returns in domestic and cross-border deals by considering a set of sub-dimensional factors of our main *Employment Quality* score (e.g. monetary incentives such as bonus plans for at least middle management, fringe benefits such as health insurance, the wage ratio of employees/CEO, trade union relations policies, employment growth/loss, job security policies, etc.). We also interact these employee relations measures with country- and firm-level variables that capture labor-related frictions. Definitions of all variables are available in Appendix A.

#### 3. RESULTS

# 3.1 Descriptive Statistics

Panel A in Table 1 reports descriptive statistics for our main measure of firm-level employee relations for the acquiring firms in domestic and cross-border deals, respectively. Our main explanatory variable on firm-level employee relations is *Employment Quality* in terms of monetary incentives and job security. It is measured by means of industry-adjusted normalized scores (ranging from 0 to 100) and captures a firm's employee relations relative to its industry peers. In domestic deals, *Employment Quality* 

is close to the sample mean (of 50), whereas in cross-border deals, it is considerably higher than the sample mean. The difference of 9 points on a scale of 100 is both economically and statistically significant (Table I, Panel A). The other variables shown in Panel A represent a set of sub-dimensional factors used to construct the *Employment Quality* score (see Appendix A for variable descriptions); in domestic deals, an average of 39% of the acquiring firms offer a bonus plan to their employees, 43% provide fringe benefits such as pension funds or health insurance, the average acquirer increased its workforce by 3.5% in the year prior to the acquisition, 18% of the acquiring firms has a policy in place for maintaining good relations with trade unions, and 6% of firms have policy to enhance job security. In contrast, acquirers engaging in cross-border deals are more likely to offer a bonus plan to their employees (48%), are more likely to have a policy for maintaining good relations with trade unions (32%), and are more likely to have a job security policy in place (11%). Overall, these results suggest that firms conducting cross-border acquisitions are different from those conducting domestic acquisitions in terms of their relations with employees, and also appear to have above-average employee relations.

Panel B reports descriptive statistics for deal-level characteristics, starting with the acquirer's CARs over the window [-1, 1]. Consistent with findings in the literature, acquirer shareholders in domestic deals do not gain from M&A deals: the mean and median CARs are -25 and -22 basis points, respectively. About 41% of our sample consists of cross-border deals, and in these deals acquirer shareholders earn positive mean and median returns of 16 and 3 basis points, respectively. Although shareholders of acquirers conducting cross-border deals earn more positive returns on average, the median return is close to zero. Cross-border acquirers are less likely to acquire public targets, make all-cash offers, and acquire toehold stakes. Cross-border deal values are comparable to domestic deal values (16% of the acquirer's market capitalization in cross-border deals and 17% in domestic deals). The firm-level variables in Panel C show that firms acquiring domestically are comparable to firms acquiring cross-border targets in terms of leverage and profitability (as, although the difference in means is statistically significant, it is economically small), but are smaller in size and are less likely to be serial acquirers. Panels D and E

compare the acquirer's and target's country-level labor protection indices: acquiring firms in domestic deals tend to be located in countries with slightly lower protection in terms of employment, collective relations, and social security, but with stronger civil rights than acquiring firms in cross-border deals.

Also, targets in cross-border deals have a higher employment laws index than acquirers in domestic deals. These statistics are consistent with Alimov (2015).

We can derive some interesting insights from our descriptive statistics: compared to acquirers in domestic deals, those engaging in cross-border deals have on average more generous employment policies at the firm-level, and their deals also earn higher announcement returns compared to domestic acquirers. However, they also differ on a number of deal-, firm-, and country-level characteristics. It is thus not clear whether the higher announcement returns in cross-border deals are causally related to better employee relations, which as we will show below, is in fact not likely the case.

We also show similar descriptive statistics for target firms, but only for the small subsample for which employee relations data (*Employment Quality* score) are available, as ASSET4 mostly covers large firms included in the major global equity indices. Again, target firms' *Employment Quality* score is higher for cross-border deals than for domestic deals. Consistent with the M&A literature, target firms also enjoy positive announcement CARs, which are higher for cross-border deals. Targets are smaller in size compared to acquirers, but they are more profitable. The relative deal size is much larger in this small subsample compared to the full sample in Table I, which is of course due to ASSET4 only covering large publicly-listed firms. Overall, the descriptive statistics in Tables I and II indicate that there are substantial differences in employee relations and firm characteristics between acquirers and targets, and between domestic deals and cross-border deals.

#### 3.2 Employee Relations and Shareholder Returns in Domestic and Cross-Border Takeovers

We now formally test the relation between firm-level employee relations and acquirer returns. As we argue above, a firm's treatment of its employees can reduce labor adjustment costs, which is perceived favorably by its investors. However, investors' perception can be reversed when an acquisition takes

place across national borders, which increases uncertainty about post-merger workforce integration. In contrast to domestic deals, cross-border deals face additional risks and labor adjustment costs resulting from the transfer and integration of employment policies across borders. We test this hypothesis in Table III, where we consider two subsamples for domestic and cross-border deals in Panel A, and interact a cross-border deal dummy with the firm's *Employment Quality* score on the full sample in Panel B. Using these two types of models enables us to include different types of fixed effects that would otherwise absorb, for example, the cross-border deal indicator. All models include the firm- and deal-level controls specified in Section II (acquirer ROA, leverage, size, a serial acquirer indicator, relative deal size, and dummies for toeholds, multiple bidders, all-cash financed deals, hostile deals, diversifying deals, and public targets), along with acquirer and target country-level labor protection indices or country fixed effects, and year, acquirer- and target-industry, and acquirer region by target region fixed effects.

Models (1) and (2) in Panel A indicate that a higher level of employment quality in terms of monetary incentives and job security is positively related to shareholder returns around domestic deal announcements. This is consistent with the notion that providing high-level incentives can reduce labor adjustment costs during the firm's reorganization process and is viewed favorably by shareholders. We find that the effect reverses in cross-border deals, consistent with our conjecture that the provision of generous employment benefits may be viewed unfavorably by shareholders when there is considerable uncertainty about post-merger integration across national borders. In Models (3) through (6), we consistently find that higher levels of employment quality are negatively related to CARs. Importantly, we find that this effect is not eroded by the inclusion of acquirer region-by-target region or even acquirer country-by-target country fixed effects. This suggests that the effect is not driven by, for example, time-invariant agreements or capital flows between a pair of countries or differences in labor regulations between a pair of countries.

In Panel B, we consider the full sample of deals, and interact *Employment Quality* with a cross-border deal indicator. The results in Models (1) through (6) are consistently in line with those in Panel A:

better employee relations in the acquiring firm are positively related to announcement CARs in domestic deals, but negatively in cross-border deals. These models also consistently show that cross-border deals earn higher CARs, in line with findings in the extant literature (e.g., Doukas and Travlos, 1988; Chari, Ouimet and Tesar, 2010). Importantly, we find that our results hold after controlling for acquirer and target country fixed effects (Model (2)), acquirer region by target region fixed effects (Model (4)), and even acquirer firm fixed effects (Models (5) and (6)). The former two specifications indicate that our results are unlikely to be driven by acquirer or target level labor regulations. Whereas Model (5) includes acquirer fixed effects for the full sample, Model (6) only considers acquirers that engaged in both domestic and cross-border acquisitions over the sample period. Notably, the finding that the negative effect in cross-border deals holds even in Model (6) suggests that our results are not likely to be driven by time-invariant acquirer characteristics, i.e., acquirers treating employees well and acquiring domestically may be inherently different from those that acquire internationally. In terms of economic significance, a one standard deviation increase (+ 30) in the acquirer's score on Employment Quality is associated with an increase in CARs of 0.21% (21 bps) in domestic deals, but the increase in returns around cross-border deals drops from 1.16% to 0.92% (a 24 bps decrease) in Model (4). Combining these results, we can conclude that, despite the summary statistics in Table I indicating that cross-border acquirers have higher levels of employee relations and experience on average higher announcement returns, these higher returns are unlikely to result from the acquirer's better treatment of its employees. Instead, acquiring across national borders induces concerns for shareholders regarding labor-related frictions and uncertainty, which is priced by the stock market around such deals.

It is important to note that we control in all specifications for labor regulations in the acquirer's and—in cross-border deals—also the target's country, in addition to acquirer region by target region fixed effects. In line with Dessaint et al. (2017), we find that in domestic deals a country's labor laws regarding employment regulation (which to a large extent measures the labor rigidity faced by a firm) are negatively related to announcement returns.<sup>x</sup> However, the inclusion of country-level labor regulation indices does

not erode the significance of our firm-specific employment quality score. This suggests that government-imposed labor protection regulations are not perfect substitutes for voluntary employment policies at the firm level. In addition, the signs and significance for our other control variables are comparable to those found in the literature (e.g. Lin, Officer, and Zou, 2011): acquiring a public target negatively affects the returns to shareholders, whereas most firm-level characteristics and the financial performance of acquirers do not seem to play a significant role in driving the acquirer's own returns. In our robustness tests, we additionally control for, and interact our *Employment Quality* variable with the acquirer's and target's country GDP and GDP per capita, as well as other country-level characteristics. None of these controls affects the significance of our measure of employee relations.

# 3.3 Unbundling Employee Incentives

Next, we investigate the mechanisms underlying our above-documented effects of employee relations. Our aim is to disentangle different dimensions of an acquiring firm's provision of employment benefits and how these are viewed by shareholders (i.e., which aspects of employee relations matters). As documented both theoretically (Herzberg et al., 1959) and empirically (Edmans, 2011), employees are motivated most by the provision of monetary incentives. Such incentives may augment their productivity and loyalty, and thus reduce labor adjustment costs, which may in turn be reflected in shareholder value. Therefore, our results are expected to be mainly driven by factors related to the provision of monetary incentives. To test this hypothesis, we dig deeper into the ASSET4 database and we decompose *Employment Quality* into two broad categories capturing employees' monetary incentives (including fair salaries, bonus plans, and other fringe benefits such as health insurance) on the one hand and job security incentives (including growth in the workforce, trade union relations, and the presence of a job security policy) on the other hand. The former set of incentives represent how much the firm values the specificity of human assets (Williamson, 1981) by linking compensation to firm performance, providing a fair wage, attracting talented employees, and encouraging diligence. The latter set of incentives is directly related to employee loyalty and commitment and is thus a more direct measure of the employment insurance

dimension of employee relations.<sup>xi</sup> They represent the collective governance of human assets which are not necessarily employee-specific, and may not directly translate into superior labor productivity (Williamson, 1981).

We test these decomposed employee relations measures in Table IV. In Panel A, we consider three forms of monetary incentives: (i) the provision of a bonus plan to at least middle management (Acquirer Bonus Plan Dummy), (ii) the provision of fringe benefits such as pension funds and health insurance (Acquirer Fringe Benefits Dummy), and (iii) the wage ratio of the average worker's salary and the CEO's income (Acquirer Wage Ratio Employees/CEO).xii We include the latter based on the argument that a smaller wage gap is likely to increase employees' perception of being paid a fair wage, which may increase their retention and productivity. As before, we interact these monetary incentive variables with the cross-border indicator. In line with theory and empirical evidence, we find that each of our monetary incentive variables is positively related to acquirer announcement returns. In addition, echoing our results in Table III, cross-border deals, which arguably may entail more labor-related frictions, seem to limit the extent to which these incentives can be translated into productivity and firm value. Employee compensation schemes differ significantly across countries (e.g., Card, Heining, and Kline, 2013; Mueller, Ouimet, and Simintzi, 2017) and an overly generous compensation policy for all employees with different backgrounds and cultural values may be perceived as a waste of money by acquirer shareholders. Although target employees may value such benefits, the additional uncertainty regarding post-merger integration in cross-border deals may result in the benefits being outweighed by the costs from the perspective of acquirer shareholders. Moreover, in line with Herzberg's theory that job security does not directly lead to superior performance, we find no significant effects for the provision of job security incentives on shareholder CARs in Panel B. We measure job security incentives by (i) whether or not the firm has a trade union relations policy (Acquirer Trade Union Relations Policy), (ii) employment growth (Acquirer Net Employment Creation), and (iii) whether the firm has a job security policy (Acquirer Job Security Policy). xiii This indicates that the additional risks and costs related to the transfer

and integration of employee policies in cross-border deals only affect the transformation of monetary incentives in productivity and shareholder value, whereas they do not matter much for the employment insurance dimension. This is not unsurprising, as earlier evidence has indicated that employment protection and insurance in cross-border M&As is generally affected by country-level labor regulations (Dessaint et al., 2017). The monetary incentives captured using our employee relations measures go beyond labor regulations (which only provide employees with a safety net), and reflect the firm's voluntary and stronger commitment to employee relations.

#### 3.4 Labor-Related Frictions in Cross-Border Deals: Channels

We now delve deeper into the channels of labor-related frictions in cross-border deals. In other words, what types of frictions may account for the negative interaction effects shown in Table III? Relative to domestic deals, cross-border deals are considerably more complex transactions which make the integration of firms with different employee policies and different national, cultural, and organizational contexts more difficult (Aguilera and Dencker, 2004). In this section, we attempt to identify the channels through which such difficulties arise. In particular, we focus on five variables at the firm-level, industry-level, and the country-level, and interact them with *Employment Quality* for the subsample of cross-border deals, as reported in Table V. Again, all variable descriptions are given in Appendix A. As before, we find in each specification that the main effect of employment quality is significantly negative.

The first variable captures whether or not the transaction is a repeat acquisition in the target's country. Repeatedly acquiring firms in the same country familiarizes the acquirer with the target's country's employment cultures and labor market, which reduces frictions and uncertainty regarding the integration of the workforce from the perspective of acquirer shareholders. As shown in Model (1) of Table V, while the coefficient on *Employment Quality* is negative, the interaction term "Acquirer Employment Quality 1-1 × Repeat Acquisition" is positive and statistically significant at the 5% level, supporting the above argument. In economic terms, a 30 point increase in *Employment Quality* (one

standard deviation) increases CARs by 0.18% if the acquirer has acquisition experience in the target's country, relative to a -0.33% decrease if this were not the case.

The second variable captures the uncertainty that rises from differences in labor regulations between the target's and the acquirer's countries. If the acquirer's CARs are indeed driven by investors' concerns about labor-related uncertainty when buying foreign targets, this effect should be attenuated if the labor protection laws are weaker in the target country. Weaker social security regulations in the target country make implementation and integration of acquirer's employment policies smoother and lessen acquirer shareholders' concerns about "wasting money" on target employees. Given our above findings on the importance of an acquirer's provision of monetary incentives such as fringe benefits, we specifically focus on the social security aspect of labor regulations (which includes state-imposed provision of health benefits and other pecuniary incentives). We do this by using the social security law index from Botero et al. (2004). We regress acquirer CAR on the interaction of the acquirer's employee relations with an indicator for whether the target's country has a lower social security laws index than the acquirer's country, and indeed find a positive coefficient of the interaction term, indicating that weaker labor protection with regards to social security can resolve acquirer shareholders' concerns about post-merger integration uncertainties.<sup>siv</sup>

The third variable captures the absence of economic nationalism in the target country's government as, in the inverse case foreign acquirers face more resistance from target countries' governments who may fear that foreign acquirers will infringe national interests and that corporate restructuring result in massive lay-offs in the target firm. If such "economic nationalism" is low, foreign acquirers with better employee relations may face less political opposition and hence less labor-related uncertainty about the integration of the workforce. Such integration is likely to be more effective in target countries with weaker protectionist attitudes relative to countries with stronger protectionist attitudes. We follow Dinc and Erel (2013) and use the ruling of a liberal government (a dummy variable indicating whether the ruling government is right-wing; data obtained from the Database of Political Institutions) in the target's country

to proxy for the absence of economic nationalism, as (rightwing-)liberal parties usually and traditionally favor more free trade (Dinc and Erel, 2013). This argument is supported by the positive coefficient on the interaction term "Acquirer Employment Quality t-1 × (Absence of Economic Nationalism in Target Country)" in Model (4), which indicates that the absence of strong economic nationalism reduces the effect of labor-related uncertainty on shareholder returns.

The fourth variable is the perceived strength of labor unions in the acquirer and target's country. The rationale is that strong labor unions increase contract rigidity and difficulty in negotiating with employees. Therefore, low union strength in the target's country (as perceived by the acquirer) indicates the relative ease with which acquirers can integrate post-merger employment policies. Of course, if in the acquirer country there are strong labor unions, the employees of the acquiring firm may attempt to resist the implementation of favorable employment policies in the target firm as this may shift resources from the acquirer's to the target's employees. We therefore specifically consider the case in which both the acquirer and target countries' have low perceived union strength ("low" is defined as being in the bottom tercile of the distribution), where perceived union strength is measured by "Confidence in Unions", also from the World Value Survey. As shown in Model (5), the interaction term "Acquirer Employment Quality × (Acquirer and Target Country Low Union Strength)" has a positive loading, suggesting that the negative effect of employee relations in cross-border deals becomes less negative when both acquirer and target country have low perceived union strength.

In Model (5), we test whether labor-related uncertainty is smaller in low-tech deals (in which target and acquirer are both in low-tech industries), relative to deals in which at least one of the parties is in a high-tech industry. Firms in high-tech industries are more vulnerable to labor-related shocks as the retention and incentivization of high-skilled workers are more crucial to their operations (Ghaly, Dang, and Stathopoulos, 2017). We thus expect that there are higher labor adjustment costs when acquiring a high-tech target. In low-tech deals on the other hand, these costs should be lower, as integrating workforce and employee policies for low-skilled employees is less difficult and costly. As shown in

Model (6), "Acquirer Employment Quality × Low-Tech deal" is significantly positive, indicating that acquirer shareholders react more positively to cross-border deals undertaken by high-employment quality acquirers that engage in low-tech deals. For firms in low-tech industries, uncertainty regarding post-merger integration is likely to be lower, such that the benefits of providing generous employment benefits are more likely to outweigh the costs.

Overall, the results in Table V identify specific contexts in which the uncertainties and costs associated with integrating employment policies are lower, such that the inverse effect of employee relations on shareholder returns in cross-border M&As becomes weaker, and can even be completely offset. Combining this with the fact that cross-border deals usually achieve higher abnormal returns, our results indicate that the negative interaction between employment quality and cross-border deals as found in Table III is not due to a deal being cross-border per se. Instead, there appears to be a unique aspect of cross-border deals that induces new risks and costs associated with the post-merger integration of workforce and employment policies, which are priced by the acquiring firm's investors.

# 3.5 Employee Relations and Post-Merger Performance

Measuring short-run CARs around merger announcements of course does not paint a complete picture regarding a deal's performance. Therefore, in this section we investigate the effect of employment quality on the acquirer's long-run post-merger performance. That is, we investigate whether labor-related frictions in cross-border deals increase difficulties in post-merger workforce integration in the long run. We measure long-run performance using the acquirer's industry-adjusted returns on assets (ROA), return on sales (ROS), and employee productivity (Sales/Employees) two years after the completion of the takeover. We follow the approach in Harford, Humphery-Jenner, and Powell (2012), and include the acquirer's industry-adjusted pre-merger performance in the model as a control. Model (1) in Table VI indicates that having a higher *Employment Quality* score increases the average post-merger industry-adjusted ROA in domestic deals, whereas it decreases the post-merger profitability in cross-border deals. These effects translate into an increase in post-merger ROA of 0.41% for a one standard-deviation

increase in *Employment Quality* in domestic deals. Although cross-border deals on average show an increase in post-merger ROA, having a one standard-deviation higher level of *Employment Quality* in such deals decreases the post-merger profitability by 0.30%. We find similar but weaker results for the post-merger industry-adjusted ROS in Model (2), and Model (3) shows that an increase in *Employment Quality* results in a decrease in post-merger labor productivity in cross-border deals but not in domestic deals. This suggests that markets correctly anticipate the deal's performance at the merger announcement, and reinforces our arguments that there exist labor-related frictions that are specific to cross-border acquisitions.

## 3.6 The Role of the Target Firm's Employee Relations and Announcement Returns

One could wonder whether our above results are driven by the target's employee relations, rather than the acquirer's. Empirically this is a difficult question because we have relatively few data on the targets' employment quality scores in the ASSET4 database. ASSET4 mainly covers large firms included in the major global equity indices, so most (small) targets do not receive a rating from ASSET4.

Nevertheless, we conduct tests on a subsample of deals with employment quality data available for both the target and the acquiring firm (362 deals in total).

In Panel A of Table VII, we classify both the acquirer's and the target's *Employment Quality* scores into high- and low-groups ("high" or "low" refers to the employment quality score being above or below the sample median). We then interact the cross-border dummy with different combinations of the acquirer's and target's employment quality scores such that we concentrate on four subsamples based on a two-by-two matrix capturing high/low scores by acquirers/targets, as shown in Table VII. We first investigate each dimension separately in Models (1) – (3), and combine them in Model (4) (the "Acquirer Low, Target Low" combination is omitted as it is the benchmark case). We find that our results are almost exclusively valid for those cases with an above-median level of employment quality in the acquirer, regardless of the target's employment quality score. In other words, the target's employee

relations do not seem to affect the impact of the enhanced employee incentives of the acquirer and the labor-related frictions that we identify.

Given the insignificant effect of the target's employee relations, we again focus on the acquirer's employee relations, and test its effect on the announcement returns of the target and of the combined firm. The results are shown in Panel B of Table VII. Column (1) has the target's CARs as the dependent variable, and shows that the coefficient on the acquirer's *Employee Quality* is insignificant. This is intuitive as target shareholders care less about post-merger integration frictions and uncertainties. Given that they sell their shares to the acquirer, they are much more likely to react to, for example, a higher deal premium or the likelihood of deal completion. Column (2) has the combined firm CARs as the dependent variable, and shows significant effects consistent with our earlier findings (Column (2)). This significance seems completely driven by the acquirer's CARs, as the signs and magnitudes of the coefficients are in line with those in our baseline results using the acquirer's CARs (Table III). Of course, these results should be interpreted with caution as they come from a relatively small subsample, but they are consistent with our arguments and earlier results.

In the next section, we investigate the robustness of our results by performing a placebo test and an instrumental variable test, and we rule out a large set of alternative stories.

#### 4. ROBUSTNESS AND ALTERNATIVE EXPLANATIONS

# 4.1 Placebo Test on Employee Relations and Propensity Score Matching

Are our results unique to the employment quality measure, or are the relations hardwired in the rating metrics of the ASSET4 database? In Panel A of Table VIII, we show results for a placebo test in which we investigate alternative dimensions of employee relations that are not related to the provision of monetary incentives and which should not be affected by frictions regarding firms' abilities to incentivize employees. Model (1) repeats our analysis in Model (4) of Panel B in Table III, which we show here as a benchmark. Models (2)-(4) show the results for 3 alternative dimensions of employee relations, namely

Workforce Health & Safety, Workforce Diversity, and Training & Development. We combine them with Employment Quality in Model (5). We find that only Employment Quality is significantly related to CARs, which supports our argument that we capture labor-related frictions that affect monetary incentives but no other dimensions of employee relations. Therefore, it is plausible to argue that employees are more incentivized by benefits in terms of monetary compensation, than by the improvement of their working environment or workforce diversity (Herzberg et al., 1959).\*\*

Next, we perform a propensity score matching analysis as an alternative way to control for differences in deal, firm, country, and industry-level characteristics. We match deals involving acquirers with above-median *Employment Quality* with deals by acquirers with below-median *Employment Quality*, and we use as matching variables the control variables in our baseline specification (acquirer and target country-level labor indices, serial acquirers, acquirer ROA, acquirer leverage, acquirer size, toeholds, multiple bidders, all-cash financing, hostile deals, diversifying deals, and public targets) as well as industries and years. As we estimate propensity scores, we bootstrap the reported standard errors. The results in Panel B confirm that acquirers with high *Employment Quality* earn 55 basis points higher returns in domestic deals relative to matched firms with low *Employment Quality*, but this effect reverses for cross-border deals. Again, this suggests that, although investing in employee relations can be beneficial to firm value in domestic deals, there are additional labor-related costs when acquiring a foreign target.

#### 4.2 Alternative Explanations

In Table IX, we further conduct several more tests to rule out other alternative explanations for our results that may be unrelated to labor-related frictions in cross-border M&As. First, the attenuating effect of cross-border deals that we identify may simply capture the geographical distance between the acquirer's and target's country. Although such an argument does not explain why only monetary incentives are affected, we nevertheless interact *Employment Quality* with an indicator for whether the geographical distance between the acquirer's and target's countries is above the sample median (Model

(1)). Similarly, many have documented that the acquirer and target countries sharing a common language or a common border may explain the propensity and returns of cross-border deals. We therefore interact Employment Quality with indicator variables capturing whether the acquirer's and target's countries have a language in common (Model (2)), or a share a common border (Model (3)). Third, our results may also be driven by a difference in GDP per capita between the acquirer's and the target's countries. That is, if acquirers providing generous employee welfare (i.e., high employment quality) are firms from high GDP per capita countries that acquire targets in low GDP per capita countries, it could be that it is such difference in economic development that drives the negative CARs around cross-border deals. We therefore interact Employment Quality with the difference between the two countries' GDP per capita (in logarithm) (Model (4)). Fourth, the level of employee relations may be driven by the difference between the cultures of the target's and the acquirer's countries that are unrelated to labor issues (Ahern, Daminelli, and Fracassi, 2015). Hence, in Models (5) and (6), we interact the Employment Quality score with two World Value Survey variables capturing the difference between the acquirer's and target's countries in terms of people's attitudes towards work. We consider the percentage of people considering "Responsibility Is Important" and "Job Security Is Important." The latter dimension is an important test, as we found that our results are almost exclusively driven by monetary incentives. Therefore, we should not expect to find that the relative importance of job security incentives induces labor-related frictions when acquiring a foreign target. As expected, we find that none of the above mentioned interactions have significant coefficients.

What remains unclear is whether the negative effect when acquiring a foreign target is the result of labor-related frictions specific to cross-border deals, or whether it results from simply over-engaging in providing employee welfare which could be too costly and thus reduces firm value. The descriptive statistics in Panel A of Table II indicate that these two effects may coincide, and we need to disentangle them to further pin down the exact mechanism. Therefore, we consider an indicator for whether the acquirer's *Employment Quality* score is above the score of 50 (larger than the industry average, which we

consider as "over-investment" in employee relations), but we investigate its effect on the subsample of domestic deals only. If the over-investment story holds, we expect a significant and negative coefficient of the "High Employment Quality" dummy in this subsample of domestic deals. The positive coefficient in Model (7) refutes this, and suggests that the negative effect of employment quality in cross-border deals does not arise from the acquirer over-investment in employee relations in general.

## 4.3 Instrumental Variable Approach

In earlier specifications, we have shown that our results are not likely to be driven by time-invariant underlying characteristics of firms that acquire domestically or internationally (see Model (6) in Panel B of Table III). In addition, it seems unlikely that acquirers adjust their level of employment quality because they may do a takeover bid in the next year. To reduce a potential omitted variable bias, we included industry, year, region by region, country by country, and acquirer firm fixed effects, along with a large number of control variables in our specifications. However, to further account for potential endogeneity issues from unobservable omitted variables, we perform a two-stage instrumental variable (IV) regression as a robustness test. Specifically, we use the acquirer's industry peers' average employee wages and benefits as an IV for Employment Quality. Whereas a firm's expenses in terms of wages and benefits are influenced by the wage expenses by its industry peers (satisfying the relevance requirement of instrumental variables), it is unlikely that these expenses by industry peers affect the firm's announcement returns directly or through channels other than the focal firm's employment policies, thus satisfying the exclusion condition.xvi Similar arguments on peer effects are made for other corporate policies such as capital structure (Leary and Roberts, 2014), corporate financial policies (Ferrell, Liang, and Renneboog, 2016), corporate social responsibility (Cao, Liang, and Zhan, 2017; Liang and Renneboog, 2017), and corporate culture (Fiordelisi, Li, Stentella-Lopes, and Ricci, 2016). We take the within-sample mean of the lagged employee salaries and benefits expenses (as obtained from Worldscope) for the focal company's peer firms by industry and by year (industry-year average) as the IV. The results for the firstand second-stage regressions are presented in Appendix E. We find that the industry peers' average wage

expenses are strongly positively related to *Employment Quality* and that using an IV approach does not affect our conclusions from Table 3: higher levels of employment quality (as predicted in the first stage) is positively related to CARs in domestic deals, and the effect again reverses in cross-border deals. This increases our confidence that the effects on shareholder value we have identified are indeed driven by the acquirer's level of employee relations.

#### 4.4 Other Robustness Tests

We further conduct a few other sample-specific robustness tests. First, based on our sample distributions, one could argue that our results may be driven by US acquirers, as they make up 27% of our sample (Appendix C). In Appendix F, we repeat our results for a sample excluding US acquirers. We find that our results remain qualitatively unchanged, suggesting that we are identifying a global phenomenon. Similarly, our results may be driven a small subsample of serial acquiring firms that have radically different strategies for acquiring domestic versus foreign targets. Excluding serial acquiring firms also does not affect our results, however. Next, we investigate whether our results may be driven by a demand-side story in which employees demand for stronger monetary compensation with the threat that they may otherwise leave the firm. Although such an explanation is hard to reconcile with our earlier evidence, we test this by comparing subsamples of deals involving targets from OECD targets versus those from non-OECD targets. The costs of rewarding employees from targets in developing countries with strong monetary incentives may outweigh the benefits, as these employees are unlikely to have many outside options. They are thus unlikely to threaten to leave the firm if their demands are not met, such that the costs of providing strong incentives do not outweigh the benefits of retaining employees. We find that such an effect does not drive our results, as all our results appear in the sample consisting of OECD targets and not in the sample consisting of non-OECD targets. Last, we investigate a different dimension of the demand-side story, by interacting employment quality with a proxy for the firm's reputation. We construct an indicator for whether the firm won an employee award as such firms likely have better reputations. In these firms, employees may not threaten to leave if their demands are not met as firm

reputation acts as an incentive by itself. However, we find no significant effects, indicating that our results are more likely to be driven by a supply-side argument rather than a demand-side argument.

We also examine whether a firm's level of employee relations drives the returns around domestic and cross-border M&A deals through its effect on increasing/reducing the likelihood of engaging in a domestic versus a cross-border M&A. We use a Heckman selection model to estimate the relation between the firm's employment quality and the likelihood of the firm embarking on a domestic versus a cross-border takeover transaction, conditional on the firm having decided on performing an M&A transaction. Gao and Ma (2016) and Ouimet and Zarutskie (2016) find that labor regulation is strongly related to takeover propensity. Our results, based on *firm-level* data (which go beyond the country-level regulations), show that a firm's employment quality is positively related to engaging in M&A deals (in the first stage), but that the magnitudes are economically very small. In addition, the firm's employment quality is not significantly related to the choice between domestic and cross-border deals (2<sup>nd</sup> stage regressions; tables available upon request). This implies that a firm's treatment of its employees (over and beyond a country's labor regulations) is not likely to be a significant driver of management's decision to engage in domestic or cross-border M&A deals, but it does affect the value creation in these deals.

#### 5. CONCLUSIONS

Despite the plethora of studies on how cross-border takeovers differ from domestic ones, the roles of human capital and employee relations remain under-explored. In this paper, we have provided novel evidence on how human capital at the firm-level matters in M&As by investigating the effects of an acquiring firm's treatment of employees in terms of monetary and job security incentives on the returns to shareholders around M&A announcements for a sample of large public corporations around the world. We find acquirers with stronger employee relations (especially in terms of monetary compensation) earn substantially higher returns around domestic M&A announcements, but this effect is reversed in cross-border acquisitions. We attribute this reversal effect to shareholders' negative perception of uncertainties regarding the post-merger integration of the workforce. The underlying idea is that treating employees

well can reduce labor adjustment costs during the post-merger reorganization process, but the increased uncertainties in cross-border deals may result in acquirer shareholders' perception of the costs outweighing the benefits on providing generous employment policies. We do not find consistent evidence that (differences in) economic development, culture, geographical distance, or language drive our results. Furthermore, our main findings stem from the acquirer's treatment of employees rather than the target's, and they are mainly driven by the provision of monetary incentives rather than by job security incentives. Our results are also robust to acquirer fixed effects, to propensity score matching, to using instrumental variables, and to the construction of different samples, and we also find that the short-run results are echoed by the acquirer's long-run performance.

Our study adds to the literature on the determinants of value creation in cross-border acquisitions. By acquiring a foreign target, firms can take advantage of cross-country differences in legal environments and investor protection (Rossi and Volpin, 2004; Bris and Cabolis, 2008), product markets (DeGiovanni, 2005), financial development (Alquist et al., 2014), and tax rules (Huizinga and Voget, 2009). However, such differences also induce additional complexity and uncertainties (Aguilera and Dencker, 2004) arising from cultural and organizational differences that affect post-merger coordination and the realization of merger synergies (Siegel, Licht, and Schwartz, 2012; Ahern et al., 2015). This paper provides evidence for a new source of frictions arising in cross-border acquisitions, namely those related to the transfer and integration of workforce and corporate employment policies across national borders.

Our study is also related to the growing literature on human capital in M&As. While some recent studies look at labor relations in the context of corporate restructuring and takeovers (Atanassov and Kim, 2009; Masulis et al., 2016; John, Knyazeva, and Knyazava, 2015; Dessaint et al., 2016; Levine et al., 2015; Kim et al., 2015; Lin, Schmid, and Xuan, 2017; Ahmad and Lambert, 2016), these studies consider the country-level rather than the firm-level. In addition, a large fraction of studies investigates these issues in a single-country setting, generally based on the US framework (Pagano and Volpin, 2005; Cronqvist et al., 2009; Edmans, 2011; 2012; Edmans, Li, and Zhang, 2015); Masulis et al., 2016). Instead, this paper is among the first to provide global evidence on firm-level investment in employee relations and how labor-

related frictions in cross-border M&A deals affect the link between a company's employee relations and deal performance.

Taken together, our findings suggest an explanation for the marked differences in deal performance between domestic and cross-border takeovers, as well as for the conflicting findings in the existing literature on the role of labor orientation in driving firm and shareholder value. Perhaps the most intuitive implication of our results is that firms and shareholders should not consider generous employee benefits as being absolutely good or bad for firm value in the context of firm reorganization. A trade-off exists between value-enhancing incentive effects and the labor-related frictions brought about by cross-border deals. Overall, our findings reinforce the notion that employees play a fundamental yet nuanced role in a corporation, and highlight the importance of taking into account such nuances when studying M&As and the interplay between finance and labor, which remain a fruitful area for future research.

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Table I. Descriptive Statistics - Acquirer

This table shows summary statistics for the variables used in our study for domestic and cross-border deals. Panel A shows descriptive statistics for the acquiring firms' labor orientation measure. Panel B shows a set of deal-level variables, including the acquirer's announcement returns. Panel C shows firm-level variables and Panels D and E show country-level labor regulation indices for the acquirer's and target's country, respectively. Continuous variables are winsorized at the 1st and 99th percentiles.

country-level labor regulation indic	es for the	acquirer's			respectivel	y. Continuous	variables	are wins				iles.	
Variables	N	Mean	Median	St. Dev.	Min.	Max.	N	Mean	Median	St. Dev.	Min.	Max.	Difference
		omestic D	eals						Cross-Bo	rder Deals	8		
Panel A: Labor Orientation Variab	les (Acqu	irer)											
Workforce Diversity Score	2,550	49.81	45.61	31.40	4.830	98.67	2,015	56.66	57.80	30.94	6.11	98.79	-6.84***
Employment Quality Score	2,550	49.31	47.92	29.91	2.950	98.45	2,015	58.64	64.75	30.40	2.88	98.57	-9.34***
Health and Safety Score	2,550	45.50	38.62	29.60	2.800	99.44	2,015	58.09	58.22	30.27	3	99.49	-12.59***
Training and Development	2,550	47.97	45.29	31.25	5.160	97.40	2,015	61.66	72.34	29.49	5.16	97.39	-13.69***
Score													
Bonus Plan (Dummy)	2,550	0.386	0	0.486	0	1	2,015	0.478	0	0.499	0	1	-0.09***
Fringe Benefits (Dummy)	2,550	0.436	0	0.495	0	1	2,015	0.442	0	0.496	0	1	-0.006
Wage Ratio Empl./CEO	2,550	0.337	0.315	1.552	0.001	11.25	2,015	0.369	0.001	1.631	0.001	10.96	-0.03
Net Employment Creation	2,550	0.035	0	0.339	-0.79	8.06	2,015	0.023	0	0.599	-0.65	25.61	0.01
Trade Union Relations Policy	2,550	0.176	0	0.381	0	1	2,015	0.316	0	0.465	0	1	-0.14***
Job Security Policy	2,550	0.060	0	0.238	0	1	2,015	0.110	0	0.313	0	1	-0.05***
Panel B: Deal-level Variables													
Acquirer CARs	2,550	-0.246	-0.219	4.275	-12.13	13.42	2,015	0.159	0.028	4.027	-12.13	13.42	-0.41***
Public Target	2,550	0.193	0	0.395	0	1	2,015	0.147	0	0.354	0	1	0.07***
Diversifying Deal	2,550	0.485	0	0.500	0	1	2,015	0.398	0	0.490	0	1	0.09
Hostile Deal	2,550	0.009	0	0.0946	0	1	2,015	0.012	0	0.111	0	1	-0.003
All-Cash Financing Deal	2,550	0.411	0	0.492	0	1	2,015	0.369	0	0.483	0	1	0.04***
Multiple Bidders	2,550	0.033	0	0.177	0	1	2,015	0.041	0	0.199	0	1	-0.01
Toehold Stake	2,550	0.154	0	0.361	0	1	2,015	0.106	0	0.308	0	1	0.05***
Relative Deal Size	2,550	0.169	0.032	0.007	0	3.28	2,015	0.159	0.021	0.604	0	20.07	0.01
Panel C: Firm-level Variables													
Acquirer Leverage	2,550	0.443	0.406	0.257	-0.005	1.000	2,015	0.429	0.388	0.253	0.001	1.000	0.01*
Acquirer ROA	2,550	0.110	0.0986	0.105	-0.972	2.209	2,015	0.127	0.118	0.093	-0.60	0.645	-0.02***
Serial Acquirer	2,550	0.217	0	0.412	0	1	2,015	0.300	0	0.458	0	1	-0.08***
Acquirer Size (USD Mil)	2,550	38,906	6,925	123,507	249.9	1,107,776	2,015	65,855	8,733	186,560	249.9	1,107,776	-35,010***
Panel D: Country-level Variables (		)											
Employment Laws Index	2,550	0.318	0.218	0.180	0.161	0.828	2,015	0.411	0.282	0.216		0.828	-0.09***
Collective Relations Laws Index	2,550	0.382	0.259	0.174	0.188	0.711	2,015	0.410	0.384	0.178			-0.03***
Social Security Laws Index	2,550	0.678	0.646	0.0868	0.177	0.873	2,015	0.702	0.692	0.092	0.177	0.873	-0.02***
Civil Rights Index	2,550	0.685	0.733	0.0997	0.233	0.850	2,015	0.660	0.733	0.119	0.233	0.850	0.02***
Panel E: Country-level Variables (	Target) –	Cross-Bor	der Only										
Employment Laws Index							2,015	0.437	0.403	0.201		0.828	
Collective Relations Laws Index							2,015	0.400	0.378	0.155	0.188		
Social Security Laws Index							2,015	0.679	0.692	0.135	0.105		
Civil Rights Index							2,015	0.667	0.733	0.125	0.233	0.933	

**Table II. Descriptive Statistics – Target** 

This table shows summary statistics for the variables used in our study for domestic and cross-border deals. Panel A shows descriptive statistics for the target firms' labor orientation measure. Panel B shows a set of deal-level variables, including the target's announcement returns. Panel C shows firm-level variables and Panel D shows country-level labor regulation indices target's country. Continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles.

Variables	N	Mean	Median	St. Dev.	Min.	Max.	N	Mean	Median	St. Dev.	Min.	Max.	Difference
Domestic Deals									Cross-Bo	rder Deal	s		_
Panel A: Labor Orientation Variable	s (Acqu	uirer)											_
Workforce Diversity Score	202	52.98	50.00	30.17	8.260	97.35	160	58.63	58.43	28.12	10.21	97.94	-5.65*
Employment Quality Score	202	54.42	59.34	29.83	3.520	97.78	160	62.36	70.76	28.79	3.330	97.81	-7.94**
Health and Safety Score	202	48.89	44.13	28.87	10.23	98.99	160	59.65	59.77	28.60	10.57	98.84	-10.75***
Training and Development	202	55.01	63.28	30.98	5.200	96.58	160	60.28	73.57	30.45	5.190	96.45	-5.27
Score													
Panel B: Deal-level Variables													_
Target CARs	202	6.307	3.185	12.02	-41.00	53.12	160	7.386	2.491	12.54	-12.48	55.21	-1.08
Weighted CARs	202	1.321	0.524	4.014	-5.140	12.15	160	1.166	0.541	3.729	-5.140	12.15	0.15
Panel C: Firm-level Variables													
Target ROA	202	0.301	0.0998	1.533	-6.680	10.63	160	0.299	0.110	1.426	-2.540	12.23	0.002
Relative Deal Size	202	0.699	0.553	0.604	0.00237	3.278	160	0.461	0.301	0.604	0.001	4.930	0.24***
Target Size (USD Mil)	202	29,567	6,985	60,273	48.10	289,603	160	25,006	5,661	57,277	89.30	289,603	4,561
Panel D: Country-level Variables (Ta	arget)												
Employment Laws Index	202	0.324	0.218	0.182	0.164	0.809	160	0.394	0.282	0.200	0.164	0.828	-0.07***
Collective Relations Laws Index	202	0.343	0.259	0.161	0.188	0.667	160	0.349	0.259	0.159	0.188	0.667	-0.006
Social Security Laws Index	202	0.678	0.646	0.0677	0.400	0.873	160	0.704	0.692	0.0741	0.400	0.873	-0.03***
Civil Rights Index	202	0.685	0.733	0.0918	0.461	0.807	160	0.654	0.692	0.109	0.500	0.850	0.03***

# Table III. Employment Quality and Announcement CARs

This table shows regression results where the dependent variable is the acquirer's three-day CAR around an M&A announcement for subsamples of domestic and cross-border deals (Panel A), or for the combined sample (Panel B). The main independent variable is the acquirer's pre-merger employment quality score in terms of job security and monetary benefits (0-100), interacted with a cross-border deal dummy in Panel B. All specifications include a set of deal- (dummies for serial acquirers, toeholds, multiple bidders, all-cash financed deals, hostile deals, diversifying deals, and public targets, and the relative deal size), firm- (acquirer ROA, size, and leverage), and acquirer and target country-level (labor protection indices as in Botero et al., 2004) control variables or acquirer and target country fixed effects. In addition, each specification includes year, acquirer industry, target industry fixed effects, along with acquirer country by target country fixed effects (Panel A, Model 5), acquirer region by target region fixed effects (Panel A, Model 6, and Panel B, Model 4), or acquirer firm fixed effects (Panel B, Models 5 and 6). Model 5 in Panel B includes the full sample of acquirers; Model 6 in Panel B only includes acquirers that engage in both domestic and cross-border deals. Robust standard errors are reported in parentheses. \*, \*\* and \*\*\* stand for statistical significance at the 10%, 5%, and 1%, respectively.

Panel A: Subsamples	Don	nestic	Cross-Border					
Dep.Var.: Acquirer CAR [-1,+1]	(1)	(2)	(3)	(4)	(5)	(6)		
Acquirer Employment Quality <sub>t-1</sub>	0.008**	0.007**	-0.009**	-0.010***	-0.009*	-0.008**		
	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.005)		
Observations	2,550	2,550	2,015	2,015	2,015	2,015		
Adj. R-squared	0.075	0.086	0.058	0.110	0.103	0.314		
Firm and Deal Level Controls	Yes	Yes	Yes	Yes	Yes	Yes		
Acquirer and Target Country Level Controls	Yes	No	Yes	No	No	No		
Year FE	Yes	Yes	Yes	Yes	Yes	Yes		
Acquirer and Target Industry FE	Yes	Yes	Yes	Yes	Yes	Yes		
Acquirer and Target Country FE	No	Yes	No	Yes	No	No		
Acquirer Region x Target Region FE	No	No	No	No	Yes	No		
Acquirer Country x Target Country FE	No	No	No	No	No	Yes		
Panel B: Full Sample								
Dep.Var.: Acquirer CAR [-1,+1]	(1)	(2)	(3)	(4)	(5)	(6)		
Acquirer Employment Quality <sub>t-1</sub>	0.007**	0.005*	0.007**	0.007**	0.012**	0.001		
	(0.003)	(0.003)	(0.003)	(0.003)	(0.005)	(0.006)		
Acquirer Employment Quality <sub>t-1</sub> $\times$ Cross-	-0.013***	-0.013***	-0.014***	-0.015***	-0.014**	-0.014**		
Border	(0.004)	(0.004)	(0.004)	(0.004)	(0.006)	(0.007)		
Cross-Border	1.178***	1.231***	1.184***	1.158***	1.129**	1.083**		
	(0.294)	(0.312)	(0.303)	(0.278)	(0.446)	(0.472)		
Observations	4,565	4,565	4,565	4,565	4,565	2,363		
Adj. R-squared	0.037	0.042	0.027	0.050	0.054	0.078		
Firm and Deal Level Controls	Yes	Yes	Yes	Yes	Yes	Yes		
Acquirer and Target Country Level Controls	Yes	No	No	No	No	No		
Year FE	Yes	Yes	Yes	Yes	Yes	Yes		
Acquirer and Target Industry FE	Yes	Yes	Yes	Yes	No	No		
Acquirer Country FE	No	Yes	Yes	Yes	No	No		
Target Country FE	No	Yes	Yes	Yes	Yes	Yes		
Acquirer and Target Region FE	No	No	Yes	No	No	No		
Acquirer Region x Target Region FE	No	No	No	Yes	No	No		
Acquirer Firm FE	No	No	No	No	Yes	Yes		

# **Table IV. Unbundling Employee Incentives**

This table shows regression results where the dependent variable is the acquirer's three-day CAR around domestic and cross-border deal announcements. The main independent variables are the acquirer's pre-merger employment quality scores in terms of monetary incentives (Panel A), and job security factors (Panel B), interacted with a cross-border deal dummy. Monetary incentives consist of a bonus plan (Model 1a), fringe benefits (Model 2a), and the wage ratio of an average worker and the CEO (Model 3a). Job security factors consist of an indicator for having a trade union relations policy in place (Model 1b), net employment creation, measured as employment growth in the previous year (Model 2b), and a dummy for whether the firm has a job security policy (Model 3b). Each specification includes a set of deal- (relative deal size, and dummies for serial acquirers, toeholds, multiple bidders, all-cash financed deals, hostile deals, diversifying deals, and public targets), firm- (acquirer ROA, size, and leverage), and country-level (acquirer country labor protection indices as in Botero et al., 2004) control variables. Each specification includes year, acquirer industry, target industry, and acquirer by target region fixed effects fixed effects. Robust standard errors are reported in parentheses. \*, \*\* and \*\*\* stand for statistical significance at the 10%, 5%, and 1%, respectively.

Down Lord Venichles Associacy CAR [ 1 + 1]	Panel A: Monetary Incentives						
Dependent Variable: Acquirer CAR [-1,+1]	(1a)	(2a)	(3a)				
Cross-Border	0.628***	0.662***	0.315*				
	(0.255)	(0.235)	(0.193)				
Acquirer Bonus Plan Dummy t-1	0.389***						
	(0.148)						
Acquirer Bonus Plan Dummy t-1 × Cross-Border	-0.591***						
	(0.227)						
Acquirer Fringe Benefits Dummy t-1		0.470***					
		(0.163)					
Acquirer Fringe Benefits Dummy t-1 × Cross-Border		-0.673***					
		(0.232)					
Acquirer Wage Ratio Employees/CEO t-1			0.130***				
			(0.032)				
Acquirer Wage Ratio Employees/CEO t-1 × Cross-Border			-0.109***				
			(0.041)				
Observations	4,565	4,565	4,565				
Adj. R-squared	0.068	0.068	0.057				
Deal-, Firm-, and Country-Level Controls	Yes	Yes	Yes				
Year FE	Yes	Yes	Yes				
Acquirer and Target Industry FE	Yes	Yes	Yes				
Acquirer Region x Target Region FE	Yes	Yes	Yes				
	Panel	B: Job Security 1	Factors				
Dependent Variable: Acquirer CAR [-1,+1]	(1b)	(2b)	(3b)				
Cross-Border	0.303	0.341*	0.388*				
	(0.201)	(0.201)	(0.210)				
Acquirer Trade Union Relations Policy t-1	-0.292						
•	(0.221)						
Acquirer Trade Union Relations Policy t-1 × Cross-Border	0.194						
ı	(0.273)						
Acquirer Net Employment Creation t-1	` ,	0.027					
		(0.102)					
Acquirer Net Employment Creation t-1 × Cross-Border		0.051					
1 7		(0.154)					
Acquirer Job Security Policy t-1		(2. 2 )	-0.128				
			(0.335)				
Acquirer Job Security Policy t-1 × Cross-Border			-0.385				
1			(0.432)				
Observations	4,565	4,565	4,565				
Adj. R-squared	0.067	0.067	0.067				
Deal-, Firm-, and Country-Level Controls	Yes	Yes	Yes				
Year FE	Yes	Yes	Yes				
Acquirer and Target Industry FE	Yes	Yes	Yes				
Acquirer Region x Target Region FE	Yes	Yes	Yes				

# **Table V. Acquirer Employment Quality: Channels (Cross-Border Deals)**

This table shows regression results where the dependent variable is the acquirer's three-day CAR around cross-border deal announcements. The main independent variables are a dummy for whether the acquirer does a repeat acquisition in a particular country (Model 1), a dummy indicating whether the social security laws in the target's country are weaker than those in the acquirer's country (Model 2), a dummy indicating whether the target country has a main executive party that is not considered "nationalist" (Model 3), a dummy indicating whether the target's and the acquirer's country's population have low confidence in unions (union strength) (Model 4), or a dummy indicating low-tech deals (both the acquirer and target are in low-tech industries) (Model 5), all interacted with acquirer's pre-merger employment quality. Each specification includes a set of deal-(dummies for serial acquirers, toeholds, multiple bidders, all-cash financed deals, hostile deals, and public targets), firm-(acquirer ROA, size, and leverage), and country-level (acquirer and target country labor protection indices as in Botero et al., 2004) control variables. Each specification includes year, acquirer industry, target industry, and acquirer by target region fixed effects fixed effects. Robust standard errors are reported in parentheses. \*, \*\* and \*\*\* stand for statistical significance at the 10%, 5%, and 1%, respectively.

	(1)	(2)	(3)	(4)	(5)
Dependent Variable: Acquirer CAR [-1,+1]	Repeat Acquirer	Social Security Law	Economic Nationalism	Confidence in Unions	Low-Tech Deal
Acquirer Employment Quality t-1	-0.011*** (0.003)	-0.009*** (0.003)	-0.039** (0.017)	-0.010*** (0.003)	-0.016*** (0.005)
Acquirer Employment Quality $t-1 \times Repeat$ Acquisition	0.017** (0.006)				
Acquirer Employment Quality × (Social Security Laws in Target Country < Acquirer Country)		0.009** (0.004)			
Acquirer Employment Quality $t-1 \times (Absence \ of Economic \ Nationalism \ in Target \ Country)$			0.031* (0.017)		
Acquirer Employment Quality $t-1 \times (Acquirer \text{ and } Target Country Low Union Strength)$				0.016** (0.008)	
Acquirer Employment Quality $t-1 \times Low$ -Tech Deal					0.012** (0.006)
Repeat Acquisition	-0.678 (0.552)				
Social Security Laws in Target Country < Acquirer Country		-0.766*** (0.262)			
Absence of Economic Nationalism in Target Country			-0.837 (0.766)		
Acquirer and Target Country Low Union Strength				-1.277** (0.608)	
Low-Tech Deal					-0.683* (0.349)
Observations	2,015	2,015	2,015	2,015	2,015
Adj. R-squared	0.104	0.100	0.102	0.106	0.102
Deal-, Firm-, and Country-Level Controls	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Acquirer and Target Industry FE	Yes	Yes	Yes	Yes	Yes
Acquirer Region by Target Region FE	Yes	Yes	Yes	Yes	Yes

# **Table VI. Long-Run Operating Performance**

This table shows regression results where the dependent variables are the acquirer's average 2-year post-merger industry-adjusted ROA (defined as net income/assets) (Model 1), the acquirer's 2-year post-merger industry-adjusted ROS (return on sales) (Model 2), or the acquirer's Sales-to-Employees ratio (Model 3) following domestic and cross-border deal announcements. The independent variables are the acquirer's pre-merger employment quality score and the acquirer's pre-merger industry-adjusted ROA (Model 1), ROS (Model 2), or the combined industry-adjusted Sales-to-Employees ratio (Model 3). Each specification includes a set of deal- (relative deal size, dummies for serial acquirers, toeholds, multiple bidders, all-cash financed deals, hostile deals, diversifying deals, and public targets), firm- (acquirer ROA and leverage), and country-level (index for acquirer and target country labor regulations as in Botero et al., 2004) control variables. Robust standard errors are reported in parentheses. \*, \*\* and \*\*\* stand for statistical significance at the 10%, 5%, and 1%, respectively.

	(1)	(2)	(3)
Dependent variable:	2-Year Post-Merger	2-Year Post-Merger	2-Year Post-Merger
	Acquirer ROA	Acquirer ROS	Acquirer Sales/Employee
Acquirer Employment Quality	0.014*	0.002	0.012
Acquirer Employment Quality	(0.008)	(0.001)	(0.010)
Cross-Border	1.736**	0.385	1.150*
Closs-Bolder	(0.796)	(0.270)	(0.666)
Acquirer Employment Quality x Cross-Border	-0.024**	-0.004*	-0.020**
Acquirer Employment Quarity x Cross-Border	(0.012)	(0.002)	(0.009)
Down Manage A annione DOA (in decorate a direct of)	0.069***		
Pre-Merger Acquirer ROA (industry-adjusted)	(0.025)		
Pre-Merger Acquirer ROS (industry-adjusted)		0.526**	
rie-Meiger Acquirer ROS (maustry-adjusted)		(0.259)	
Pre-Merger Combined Sales/Employees Ratio			1.224***
(industry-adjusted)			(0.200)
Deal-, Firm-, and Country-Level Controls	Yes	Yes	Yes
Observations	1,113	2,478	85
Adj. R-squared	0.094	0.010	0.809

# Table VII. Aligning the Target's with the Acquirer's Employee Relations

This table shows regression results where the dependent variable is the three-day CAR around an M&A announcement of the acquirer (Panel A), or the target or the combined firm after the merger (Panel B). In Panel A, the dependent variable is the acquirer CAR, and the independent variables are dummies for combinations of above- and below-median target and acquirer employee relations in terms of employment quality. In Panel B, the dependent variable is the target CAR in column (1) and the acquirer-target combined CAR weighted by market value (MV) (calculated as (Acquirer MV \* Acquirer CAR + Target MV \* Target CAR) / (Acquirer MV + Target MV)) in column (2). All specifications include a set of deal- (dummies for serial acquirers, toeholds, multiple bidders, all-cash financed deals, hostile deals, diversifying deals, and relative deal size), firm- (acquirer ROA, size, and leverage, and target ROA), and acquirer and target country-level (labor protection indices as in Botero et al., 2004) control variables. Each specification includes year, acquirer industry, and target industry fixed effects.

Panel A. Dependent Var	iable: Acquirer CA	AR [-1,+1]		
•	(1)	(2)	(3)	(4)
Cross-Border	-1.369*	-0.544	-0.126	1.041
	(0.793)	(0.495)	(0.615)	(1.006)
Low Acq. Employment Quality, High Target	-1.377			-0.474
Employment Quality	(0.846)			(0.788)
Low Acq. Employment Quality, High Target	1.876			-0.472
Employment Quality × Cross-Border	(1.437)			(1.584)
High Acq. Employment Quality, Low Target		0.198		0.667
Employment Quality		(0.703)		(0.744)
High Acq. Employment Quality, Low Target		-1.651*		-3.205***
Employment Quality × Cross-Border		(0.925)		(1.043)
High Acq. Employment Quality, High Target			2.318**	2.286*
Employment Quality			(1.062)	(1.203)
High Acq. Employment Quality, High Target			-2.691**	-3.982***
Employment Quality × Cross-Border			(1.065)	(1.278)
Observations	362	362	362	362
Adj. R-squared	0.161	0.159	0.171	0.186
Deal, Firm, and Country Controls	Yes	Yes	Yes	Yes
Acquirer Industry, Target Industry, and Year FE	Yes	Yes	Yes	Yes
Panel B. Dependent Variable is	Target CARs or Co	ombined Firm C	ARs	
		(1)		(2)
		et CAR [-1,+1]	DV = Co	mbined Firm
	· ·		CAR [-1,	+1] (Market

	(1)	(2)
	$DV = Target \ CAR \ [-1,+1]$	DV = Combined Firm
		<i>CAR</i> [-1,+1] ( <i>Market</i>
		Value Weighted)
Acquirer Employment Quality <sub>t-1</sub>	0.102	0.016**
	(0.113)	(0.008)
Cross-Border	-9.354	1.557*
	(6.493)	(0.843)
Acquirer Employment Quality <sub>t-1</sub> × Cross-Border	0.059	-0.022*
	(0.110)	(0.012)
Observations	917	789
Ad. R-squared	0.135	0.253
Firm and Deal Level Controls	Yes	Yes
Acquirer and Target Country Level Controls	Yes	Yes
Year FE	Yes	Yes
Acquirer Industry FE	Yes	Yes
Target Industry FE	Yes	Yes

### Table VIII. Placebo Tests and Propensity Score Matching

Panel A shows regression results where the dependent variable is the acquirer's three-day CAR around an M&A announcement. The independent variables are the acquirer's pre-merger employment quality scores in terms of (a combination of (Model (5)) employment quality (Model (1)), health and safety (Model (2)), workforce diversity (Model (3)), and training and development (Model (4)). All specifications include a set of deal- (dummies for serial acquirers, toeholds, multiple bidders, all-cash financed deals, hostile deals, diversifying deals, and public targets, and the relative deal size), firm-(acquirer ROA, size, and leverage), and acquirer and target country-level (labor protection indices as in Botero et al., 2004) control variables. Each specification includes year, acquirer industry, target industry, and acquirer by target region fixed effects fixed effects. Robust standard errors are reported in parentheses. Panel B reports the results of a propensity score matching procedure (nearest-neighbor matching) used to test the differences in CARs between deals involving acquirers with above-median Employment Quality, matched with deals involving acquirers with below-median Employment Quality, for domestic and cross-border deals. Matching is based on all control variables used in our baseline specification, as well as on industry and year. Standard errors are bootstrapped. \*, \*\* and \*\*\* stand for statistical significance at the 10%, 5%, and 1%, respectively.

Panel A: Placebo Tests					
Dependent Variable: Acquirer CAR [-1,+1]	(1)	(2)	(3)	(4)	(5)
Cross-Border	1.158***	0.587*	0.658*	0.537	1.086***
	(0.278)	(0.321)	(0.360)	(0.388)	(0.401)
Acquirer Employment Quality <sub>t-1</sub>	0.007**				0.008*
	(0.003)				(0.004)
Acquirer Employment Quality <sub>t-1</sub> × Cross-Border	-0.015***				-0.017***
	(0.004)				(0.006)
Acquirer Health & Safety <sub>t-1</sub>		0.001			-0.002
		(0.002)			(0.003)
Acquirer Health & Safety <sub>t-1</sub> × Cross-Border		-0.001			-0.001
		(0.004)			(0.004)
Acquirer Workforce Diversity <sub>-1</sub>			0.004		0.004
			(0.003)		(0.004)
Acquirer Workforce Diversity <sub>-1</sub> × Cross-Border			-0.006		-0.003
			(0.005)		(0.005)
Acquirer Training & Development <sub>t-1</sub>				0.0004	-0.005
				(0.003)	(0.004)
Acquirer Training & Development <sub>t-1</sub> × Cross-Border				-0.004	0.007
				(0.005)	(0.005)
Observations	4,565	4,565	4,565	4,565	4,565
Adj. R-squared	0.050	0.048	0.048	0.048	0.051
Acquirer and Target Country Level Controls	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Acquirer and Target Industry FE	Yes	Yes	Yes	Yes	Yes
Acquirer Region x Target Region FE	Yes	Yes	Yes	Yes	Yes
Panel B: Propensity Score Matching		•	•		

Dependent Variable: Acquirer CAR [-1,+1]	(1) High Employment Quality Acquirers	(2) Low Employment Quality Acquirers	(3) Difference (Bootstrapped St. Err.)
Domestic	-0.047	-0.596	0.550**
N	1,116	1,434	
Cross-Border	-0.025	0.513	-0.537**
N	1,166	849	

#### Table IX. Testing Alternative Explanations for the Attenuating Effect in Cross-Border Deals

This table shows regression results where the dependent variable is the acquirer's three-day CAR around cross-border (Models 1-6) or cross-border and domestic (Model 7) deal announcements. The main independent variables are a dummy for whether the distance between the target's and acquirer's country is higher than the sample median (Model 1), whether the target's and acquirer's countries have a common language (Model 2) or a border (Model 3), the difference in log(GDP/Capita) between the target's and acquirer's country (Model 4), the difference in the percentage of the target's and acquirer's country's population that considers "responsibility" important (Model 5), a dummy indicating whether the target's country's population considers "job security" more important in a job than the acquirer's country's population (Model 6), all interacted with employment quality. Model 7 reports the result of regressing acquirer CAR on a dummy variable indicating that the acquirer has high employment quality (defined as the Employment Quality score above 50) and without any interaction on the subsample of domestic deals only. Each specification includes a set of deal- (dummies for serial acquirers, toeholds, multiple bidders, all-cash financed deals, hostile deals, relative deal size, and public targets), firm- (acquirer ROA, size, and leverage), and country-level (acquirer and target country labor protection indices as in Botero et al., 2004) control variables. Each specification includes year, acquirer industry, target industry, and acquirer by target region fixed effects fixed effects. Robust standard errors are reported in parentheses. \*, \*\* and \*\*\* stand for statistical significance at the 10%, 5%, and 1%, respectively.

Troots standard errors are reported in parentineses.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent Variable: Acquirer CAR [-1,+1]	Cross-	Cross-	Cross-	Cross-	Cross-	Cross-	Domestic
	Border	Border	Border	Border	Border	Border	Domestic
	-0.008	-0.011***	-0.009***	-0.010***	-0.012**	-0.009***	
Acquirer Employment Quality t-1	(0.005)	(0.004)	(0.003)	(0.003)	(0.006)	(0.003)	
	-0.482	(0.001)	(0.003)	(0.003)	(0.000)	(0.003)	
Distance > Median	(0.611)						
Acquirer Employment Quality t-1	-0.001						
× (Distance > Median)	(0.007)						
Target and Acquirer Country Share Common	(0.007)	-0.232					
Language		(0.633)					
Acquirer Employment Quality $t-1 \times (Target and $		0.007					
Acquirer Country Share Common Language)		(0.008)					
•		(01000)	0.767				
Target and Acquirer Country Share Border			(0.782)				
Acquirer Employment Quality t-1			0.004				
× (Target and Acquirer Country Share Border)			(0.009)				
				0.232			
Difference in log(GDP/Capita)				(0.258)			
Acquirer Employment Quality t-1				-0.002			
$\times$ (Difference in log(GDP/Capita))				(0.003)			
Target > Acquirer Country "Responsibility is					-0.034*		
Important"					(0.019)		
Acquirer Employment Quality t-1 × (Target >					0.001		
Acquirer Country "Responsibility is Important")					(0.002)		
Target > Acquirer Country "Job Security is						-0.806	
Important"						(1.029)	
Acquirer Employment Quality t-1 × (Target >						0.009	
Acquirer Country "Job Security is Important")						(0.013)	
Aggrigan High Employment Ovelity (Dymmy)							0.368**
Acquirer High Employment Quality (Dummy)							(0.187)
Observations	2,015	2,015	2,015	1,735	1,432	2,015	2,550
Adj. R-squared	0.100	0.105	0.108	0.110	0.131	0.105	0.042
Deal-, Firm-, and Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Acquirer and Target Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Acquirer Region x Target Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

#### **Endnotes**

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- iii A notable example, albeit not in the context of M&As, is the recent frustration of the greenfield investment in the US by the Chinese company Fuyao Glass Industry Group, Motivated by lower manufacturing costs, Fuyao entered into the US and invested in General Motors' abandoned plants in Ohio State. But the Chinese company soon faced a strong culture clash with its workforce as many workers questioned the company's commitment to operating under American supervision and American norms. The Chinese company faced an acrimonious union campaign by the United Automobile Workers, endless complaints by US employees regarding unfair treatment in paid time-off, and a lawsuit by a former US manager, in spite of a favorable stock market reaction when Fuyao announced its US investment plan in 2014. For detailed description, see: "Culture Clash at a Chinese-Owned Plant in Ohio." New York Times, June 10, 2017. https://www.nytimes.com/2017/06/10/business/economy/ohio-factory-jobs-china.html. iv For example, a sale of a firm triggers the "transfer of undertakings protection of employment" (TUPE) regulations of 1981, which stems from the European Acquired Rights directive. This regulation states that "all the [seller's] rights, powers, duties and liabilities under or in connection with [an employee's contract of employment], shall be transferred to the [buyer]." Furthermore, the buyer assumes the liability for "anything done before the transfer is completed by or in relation to the [seller] in respect of that contract or a person employed in that undertaking or part" (Calcagno and Renneboog, 2007). TUPE states that such an act "shall be deemed to have been done by or in relation to the [buyer]."
- <sup>v</sup> These effects are economically significant as three-day acquirer CARs range between -50 and +50 basis points, on average.
- vi It is not meaningful to include the deals announced before 2002 as the ASSET4 coverage starts in 2002.
- vii To keep a sufficiently large number of observations, we do not exclude the financials and utilities industries. However, our conclusions remain unaffected after excluding these from the sample (results are available on request). viii We however perform an additional test for the subsample for which we have ASSET4 information for both target and acquirer in Table VII.
- <sup>ix</sup> A serial acquiring firm is defined as a firm engaging in more than 10 takeover deals across our sample period. Alternatively, when we define serial acquirers as firms engaging in more than two takeover deals per year, our conclusions are not affected. A relatively large number of deals—they make up 25% of our sample—involve serial acquiring firms.
- <sup>x</sup> To save space, these control variables are not reported in Table III, but they are available upon request.
- xi This classification conceptually matches the dichotomy by Herzberg et al. (1959) who distinguish between "motivational" factors (such as monetary incentives) and "maintenance" factors (such as job retention policies and improving working conditions).
- xii The effect of the firm's industry is controlled for by including industry fixed effects in all models.
- xiii In addition, we test a set of alternative variables related to job security (not reported): the percentage of trade unionization in the acquirer firm, the rate of turnover in the workforce, and the number of labor-related controversies reported in the media (e.g. strikes). As before, none of these are significantly related to CARs.
- xiv These results only hold for the social security laws index. The other three dimensions of labor regulations employment laws (firing workers, increasing working hours, dismissal procedures), collective relations laws, and civil rights laws are less directly related to incentives such as health insurance benefits. These results also suggest that our previous results on firm-level *Employment Quality* are not entirely explained by country-level labor regulations. Although others have documented that labor market regulations and ownership structure are substitutive governance mechanisms (e.g., Bennedsen, Huang, Wagner, and Zeume, 2015), we show that this may not be the case for firm-level employment policies; firm- and country-level measures of employee policies capture different aspects and cannot be used as substitutes.
- xv We perform a second set of placebo tests on the smaller sample of deals for which we have employment quality information for both the target and the acquirer in Appendix G. Our conclusions remain unchanged. In addition,

<sup>&</sup>lt;sup>i</sup> For example, the 2016 deal between the German drug company Bayer and US-based Monsanto was valued at \$66 billion, which Bayer clinched with improved \$66 billion bid, exceeding the 2015 GDP of Luxembourg (\$57.8 billion), Source: Reuters, Sep. 15<sup>th</sup> 2016. <a href="http://www.reuters.com/article/us-monsanto-m-a-bayer-deal-idUSKCN11K128">http://www.reuters.com/article/us-monsanto-m-a-bayer-deal-idUSKCN11K128</a>.

ii The notion of labor adjustment costs was raised by Dixit (1997), who argues that a firm cannot adjust its labor demand costlessly. That is, when a firm adjusts its labor demand, it incurs the costs of firing, search, selection, hiring, and training, as well as costs associated with productivity losses. This labor market friction leads the firm to have the incentive to minimize its labor turnover.

when we run similar tests on other ASSET4 Social Pillar scores and Environmental Pillar scores (the subcategorical scores that are not necessarily employment-related), we do not find any statistical significance.

xvi One potential concern is that the firm's employment quality and its peer firms' wages and benefits expenses are affected by transitory political or economic situations (e.g. "Brexit"). However, as our employment quality score is adjusted for the firm's global industry peers rather than its national peers, such local events should not affect our identification in a substantial way.