Corporate Social Responsibility and Post-merger Labour Restructuring*

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Abstract

Using a unique panel of target firms in European countries, this paper examines how corporate social responsibility (CSR) affects employment policies after acquisitions. Surprisingly, I find that acquirers with greater CSR performance are *more* likely to lay off employees in target firms. My findings are primarily driven by the *Social* component of the CSR rating. I further document a positive impact of acquirers' social performance on target firms' labour productivity, technical efficiency, and staff costs. In addition, I show that socially responsible firms enjoy higher announcement returns, especially when they do more layoffs. These results are consistent with the cost-saving channel that higher labour costs induced by the implementation of CSR policies decrease the optimal level of employment in acquired targets. Overall, my paper contradicts the argument that socially responsible firms are inconsistent with value maximisation and shows that they are managed to maximise shareholder interests by *engaging in more* post-merger labour restructuring.

Keywords: *Corporate Social Responsibility (CSR), Mergers and Acquisitions (M&As), Employment.*

JEL Classification: G34, M14, J21

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1 Introduction

Corporate social responsibility (CSR) has received increasing attention from investors, corporate executives, researchers, and policymakers during the last two decades. According to a recent survey by KPMG (2020), 96% of the world's largest 250 companies now report CSR activities, which is up from 35% in 1999. Prior literature considers CSR engagement as a stakeholder-oriented behaviour, which reflects a commitment to behave ethically and to invest in activities that benefit various stakeholders (McWilliams and Siegel, 2001; Edmans, 2011; Deng et al., 2013; Guiso et al., 2015; Flammer, 2015). However, the debate over CSR revolves around whether such activities are value-enhancing or whether they are the value-destroying manifestation of agency conflicts.[1] For a more in-depth insight into CSR, a natural question arises: How does CSR affect firms' behaviour? In this paper, I shed light on this question by studying the post-merger labour restructuring decisions of acquirers with varying degrees of CSR engagement. As one of the most important corporate investment decisions, mergers and acquisitions (M&A) offers an excellent platform to better understand the nature of CSR activities.[2] While there is considerable research on the links between CSR and M&A, most of it examines the impact of CSR on M&A performance (e.g., Deng et al., 2013; Gomes and Marsat, 2018; Arouri et al., 2019), paying little attention to the issue of how social performance influences post-merger strategies in target firms.[3]

In this paper, I construct a unique panel of target firms and investigate whether socially responsible acquirers manage targets differently after acquisitions. By focusing on post-acquisition restructuring strategies, I can avoid some endogeneity concerns that are common

[1] A large number of studies provide evidence that CSR can enhance firm value, such as firms with higher employee satisfaction realise superior long-term stock returns (Edmans, 2011), the adoption of CSR proposals improves firms' labour productivity and sales growth (Flammer, 2015), high CSR firms enjoy a lower cost of capital (El Ghoul et al., 2011; Chava, 2014; Gao et al., 2021), and perform better during financial crises (Lins et al., 2017). In contrast, others such as Cheng et al. (2013), Krüger (2015), Masulis and Reza (2015), and Cai et al. (2021) view CSR activities as the result of agency problems within the firm.

[2] M&As are largely unanticipated events, which can potentially mitigate the reverse causality problems in the relation between CSR activities and firm value (Deng et al., 2013).

[3] One potential reason this question has not been investigated is deficient data. On the one hand, most

to the literature (e.g., Deng et al., 2013; Flammer, 2015; Lins et al., 2017).[4] Given the centrality of human capital, the restructuring process after acquisitions inevitably involves decisions associated with the workforce of target firms. However, previous studies suggest that corporate mergers could "hurt" workers, documenting a significant decline in employment after acquisitions (Li, 2013; Dessaint et al., 2017; Lagaras, 2020; Gehrke et al., 2021).[5] Thus, I focus on employees – one set of internal stakeholders and arguably the firms' most valuable asset – and conjecture that the way a company treats its stakeholders (e.g., CSR) should play a role in post-merger labour restructuring. My question is if acquirers are stakeholder-oriented and operate in a socially responsible manner, are they more likely to protect employees from restructuring after acquisitions?

According to the different views of CSR, the relationship between CSR and post-merger restructuring is ambiguous. Socially responsible acquirers may engage in less post-merger labour restructuring due to two very different reasons. Under the agency view, CSR can be a manifestation of agency problems (Bénabou and Tirole, 2010; Cheng et al., 2013; Masulis and Reza, 2015). Investments in CSR are made to satisfy management's personal preferences at the expense of shareholders. Thus, managers in high CSR acquirers are more likely to overinvest to "build empires", and more employment growth after acquisitions should be expected. Furthermore, inefficient managers can strategically engage in socially responsible activities and protect employees from restructuring as an entrenchment strategy (Cespa and Cestone, 2007). Alternatively, CSR engagement can be viewed as a not-for-profit (i.e., purely altruistic) behaviour (Bénabou and Tirole, 2010; Borghesi et al., 2014; Liang and Renneboog, 2020). Managers (and their companies) may personally believe that they have a moral obligation

target firms are private firms. On the other hand, in the United States, acquirers often integrate targets with their existing assets, and thus it is hard to observe financial statements of targets both before and after acquisitions. To overcome these obstacles, I study a unique sample of private firms in Europe and use the Amadeus database in this paper.

[4]This is a question that is different from *"Does CSR affect corporate performance?"*, which presumably suffers more from endogeneity problems. For example, it is possible that only well-performing firms that can afford to engage in CSR activities, which is commonly referred as "doing good by doing well".

[5]This is becasue because eliminating occupational overlap is often the key channel to obtaining synergy gains.

to engage in CSR activities. When a firm commits to social good, it fosters a corporate culture of trust and cooperation that takes into account the social, environmental and other externalised impacts of its decisions (Hoi et al., 2013; Gao et al., 2014). Such altruism motive is likely to encourage firms to care more about their stakeholders (e.g., employees) and limit downsizing decisions.[6]

By contrast, the cost-saving view predicts that CSR engagement may promote labour restructuring and induce more layoffs after takeovers. CSR activities entail substantial investments (Accenture and UNGC, 2010), many of which are employee-related. Investments aimed to improve the work-life balance (e.g., childcare, flexitime), health and safety, and employee involvement, add up to the wage bill, increasing the labour costs per employee. Hence, costs per worker in target firms are likely to increase once they are acquired and managed by socially responsible acquirers, which in turn decreases the optimal level of employment in targets (See Figure 1 for an illustration). In line with this view, Liang et al. (2020) argue that when acquirers' employment policies are more generous, cost savings from eliminating overlapping or redundant worker are greater, leading to higher announcement returns.[7] If this is the case, high CSR acquirers will operate larger employee layoffs in target firms, especially for the redundant or overlapping workforce.

Whether socially responsible acquirers are more or less likely to restructure the target's labour force is ultimately an empirical question. To test this question, I use data from European countries for the 2000-2018 period. My data are from the combination of two datasets, *Zephyr* and *Amadeus*, which provide detailed M&A information and give access to financial data on European private firms. The feature of these databases is unique since I can observe acquired firms after the deal. Moreover, I obtain data on CSR ratings from the

[6]Matsa and Miller (2013, 2014) show that women-owned companies undertake fewer workforce reductions, increasing relative labour costs, and they argue that female leaders may be more stakeholder-oriented and altruistic.

[7]Liang et al. (2020) find that acquirers with more generous employment policies can enjoy greater cost savings from eliminating redundant workers (as those laid-off employees would otherwise receive a larger additional payment) and lower labour adjustment costs from integrating the workforce, thus realising higher announcement returns. However, this effect reverses in cross-border deals due to lack of workforce overlap, higher labour adjustment costs, and higher uncertainty about workforce integration success.

Refinitiv ESG database, which covers more than 10,000 publicly listed companies worldwide. For my tests, I rely on panel regression techniques that control for target, year, and event-time fixed effects, which alleviate concerns about many unobservables. I compare the target firms' employment before and after the acquisition, and investigate how this interplay is related to acquirers' CSR performance.

Using a sample of 921 target firms from 14 European countries, I find that acquirers with superior CSR performance are more likely to lay off employees in target firms after the acquisition. The results are economically significant: a one-point increase in the CSR rating (with a standard deviation of 0.71) is associated with a decrease in the target's post-merger employment of 10%. This finding holds after controlling for various target, acquirer, and deal-level characteristics. In addition, recent evidence indicates that CSR activities are often adopted by firms with good governance or with greater institutional ownership (Ferrell et al., 2016; Dyck et al., 2019; Chen et al., 2020). Therefore, I also provide evidence that my findings persist after controlling for factors related to corporate governance and institutional ownership.

To further help address the concern of omitted correlated variables, I estimate triple-difference regression models by testing whether the main results are more pronounced for targets that operate in countries with weak union power or strong investor protection. If the target country has weak labour unions, employees in target firms have less power to resist layoffs, and thus, layoffs are more likely. Similarly, when investors have greater influence, higher priority should be given to value-enhancing practices (e.g., post-merger labour restructuring). Consistent with my predictions, the negative relation between acquirers' CSR and post-merger employment (in targets) becomes stronger for target firms in countries with weak labour unions or countries with strong shareholder rights. As an additional test, I also use the country's legal origin as a proxy for the acquirer's CSR level. I find that acquirers from Scandinavian countries operate larger employee layoffs in target firms, when compared with

other acquirers.[8] This confirms my main finding that socially responsible firms are more prone to engage in post-acquisition labour restructuring in target firms.

Next, I explore the mechanisms underlying my documented effects of CSR. I show that my results are mainly driven by the *Social* score, and less so by the *Environmental* score. More importantly, I find that the acquiring firm's CSR policies providing monetary benefits to employees have a negative effect on the post-merger employment of target firms. These findings are consistent with my main hypothesis that the relationship between acquirers' CSR and employment (in targets) arises from the cost-saving channel. To provide further evidence, I focus on the *Social* score and apply a triple difference-in-differences approach. I first investigate whether the relation is more pronounced for firms acquiring targets in highly-skilled industries, where employees in these industries should be more "expensive". In this case, employee-related CSR programs would be more "expensive" as well, thus inducing higher labour costs in target firms after takeovers, and synergy gains from eliminating redundancy are also greater. Building on this conjecture, I indeed find that the effect of *Social* on employment mainly comes from human-capital intensive industries. In addition, I examine the targets that are more financially constrained, for which the cost-saving motive is more relevant. As expected, my results are stronger for targets in financially dependent industries and targets with more cash holdings. Further, I examine whether my findings are affected by deal types. If high CSR acquirers are more likely to lay off employees (especially the redundant or overlapping workforce), more pronounced results should be expected for same-industry or domestic deals, which have more opportunities for eliminating redundancy. The reason is that when acquiring a target from different industries or across country borders, opportunities to eliminate overlap could be limited due to skill gaps and geographical distance. Consistent with this point of view, I indeed find that the relation between the *Social* score and employment is more pronounced for the same-industry and domestic deals. Finally, I show that my results

[8]Liang and Renneboog (2017) find that a firm's CSR contribution and its country's legal origin are strongly correlated and firms from the Scandinavian legal regime obtain the highest scores on most of the CSR ratings.

are also stronger for targets with more inefficient employees, as redundant workers are more likely in firms with lower labour productivity (these target firms can offer more opportunities for eliminating redundant resources in the workforce). In sum, I conclude that these results provide further support for the cost-saving view.

I further investigate how acquirers' social performance affects other target firms' outcome variables. I find that targets acquired by acquirers with greater social performance experience higher labour productivity, technical efficiency, and staff costs after M&As. These results give further support to the cost-saving view that due to the higher labour costs after acquisitions by socially responsible acquirers, targets are more likely to lay off employees, especially the redundant or overlapping workforce. Hence, these target firms have more productive workers after acquisitions, providing better services and making better products. However, since firm resources are devoted to more CSR activities after acquisitions, I find that these social accomplishments could be achieved at the expense of the targets' capital expenditures.

In addition, I conduct an event study to investigate market reactions toward acquisitions by socially responsible firms. If socially responsible acquirers can enjoy greater cost-saving benefits by firing more employees in target firms, their shareholders should react more positively to deal announcements. As expected, I find that the acquirer's social performance is positively related to shareholder returns around deal announcements. In particular, I observe that socially responsible firms also enjoy higher announcement returns when they do more layoffs in target firms. Overall, these results are consistent with my main argument that acquirers with better social performance can realise greater cost-saving benefits from labour restructuring after the acquisition.

I also examine the role of moral capital and managerial entrenchment in explaining the heterogeneity of post-merger labour restructuring in target firms. Previous literature asserts that CSR performance enhances corporate reputation and social capital, gaining trust from investors and other stakeholders (Godfrey et al., 2009; Goss and Roberts, 2011; Elfenbein et al., 2012; Lins et al., 2017; Hong et al., 2019; Barrage et al., 2020). This positive moral capital, in

turn, can provide a form of insurance by moderating the negative assessment of stakeholders when firms suffer a negative event. Given the negative externalities of layoffs on various internal and external stakeholders, large-scale workforce reductions after the acquisition may incur reputational penalties. As such, CSR engagement serves to protect firms from adverse reputational consequences of corporate downsizing. In this respect, acquirers with a better CSR image may be able to engage in more post-merger layoffs. Moreover, the managerial entrenchment channel argues that it is possible that engagements in CSR and protecting employees from restructuring are substitute ways of forming an alliance with stakeholders. If high CSR firms have built solid support from other stakeholders, they have less to lose from engaging in layoffs after acquisitions. However, I do not find strong evidence pointing to these two channels as major explanations for my main findings.

To further pin down my results, I perform a battery of additional tests. First, I incorporate subsidiary-level data into my analysis and find that when targets are acquired by a high CSR acquirer, the subsidiaries of these target firms also engage in more labour restructuring after acquisitions. Second, I address the concern that targets differ along many dimensions by showing that my results are robust to using a matched sample. I match targets acquired by high CSR acquirers with those by low CSR acquirers on industry, country, and other control variables. My analyses of the matched sample again show that targets in the high CSR group engage in more labour restructuring after acquisitions. Third, I follow previous studies (Goss and Roberts, 2011; Cai et al., 2016; Bae et al., 2019; Cheung et al., 2020) and address the endogeneity concern by using two sets of instrumental variables: 1) a country's egalitarian culture; 2) 5-year lagged CSR. The results from the two-stage least squares (2SLS) estimation confirm my main results. Finally, I find that my results are robust to (i) an alternative ESG database (e.g., Sustainalytics), (ii) the use of different dependent variables (e.g., employee layoffs), (iii) controlling for the acquirer's management practices, (iv) the exclusion of US acquirers or targets in financial industries, and (v) other potential concerns.

This study contributes to two strands of the existing literature. First, it is related

to the work on corporate social responsibility (e.g., Edmans, 2011; Flammer, 2015; Ferrell et al., 2016; Lins et al., 2017). By examining the post-merger labour restructuring decisions of socially responsible acquirers, I provide insights into how CSR affects firms' behaviour. In the M&A context, existing evidence shows that CSR creates value for acquiring firms' shareholders (Deng et al., 2013), impacts bid premiums (Gomes and Marsat, 2018), and affects M&A completion uncertainty (Arouri et al., 2019). While previous studies show that CSR is associated with M&A performance, the impact of CSR on post-acquisition strategies has been relatively unexplored. My paper adds to this work by providing evidence that socially responsible acquirers manage target firms differently after acquisitions. In particular, I examine the employment policies of socially responsible acquirers.

In the context of M&As, I also answer the following questions: How do managers in socially responsible firms balance the interests of stakeholders and shareholders when making post-merger layoff decisions? Whose interests to serve first? While prior studies consider CSR as a voluntary behaviour that is responsible for a broader group of stakeholders and even beyond the interests of firms (McWilliams and Siegel, 2001; Vogel, 2005; Calveras et al., 2007), I find no evidence that high CSR firms are willing to sacrifice profits to protect workers from post-merger restructuring. By contrast, high CSR acquirers seem more prone to realise cost savings by engaging in labour restructuring after acquisitions. My findings contradict the argument that firms with great CSR performance are inconsistent with value maximisation (Friedman, 1970; Cheng et al., 2013; Borghesi et al., 2014; Masulis and Reza, 2015; Cai et al., 2021) and suggest that socially responsible firms also act in the best interests of their shareholders.

Second, this paper contributes to the research that examines the employment effects of mergers. Prior studies have shown that takeovers are associated with a significant decline in target firms' employment, and this employment decline reflects efficiency-seeking restructuring (Li, 2013; Dessaint et al., 2017; Lagaras, 2020; Gehrke et al., 2021). However, Geurts and Van Biesebroeck (2019) provide evidence of substantial heterogeneity and show that mergers

motivated by market power experience a strong workforce reduction, but mergers motivated by efficiency gains lead to employment expansions. In this paper, I build upon the existing studies and examine one firm-specific characteristic, CSR engagement, as a determinant of labour restructuring after M&As. My study provides novel insights into how this corporate policy plays a significant role in exacerbating or mitigating workforce reductions after the M&A. To the best of my knowledge, this study is the first to investigate the interaction between acquirers' CSR performance and post-merger restructuring with a focus on employment outcomes.

The rest of the paper proceeds as follows. Section 2 presents the data and the sample construction. Empirical methodology and results are presented in Sections 3 - 5. Section 6 concludes.

2 Data and Summary Statistics

2.1 Sample construction

My sample consists of European mergers between 2003 and 2016. The initial sample of mergers comes from *Zephyr*, which contains information on public and private deals like IPOs, M&As, acquisitions of minority stakes, and others. Accounting and employment data are accessible through the Amadeus database for public and, crucially, private firms in Europe because most European countries require all firms (private and public) to report their unconsolidated financial accounts publicly (Erel et al., 2015). I then match target firms from *Zephyr* to *Amadeus* using the common firm identifier in BvD. The match is necessary to have information on financial variables before and, particularly, after the deal. I can therefore observe target firms after the deal if they remain as independent legal entities and are not fully absorbed by acquirers.

To be included in my sample, the transactions should meet the following four selection

criteria: (1) the deal was announced after 2002, and the Zephyr database contains detailed information on this transaction; (2) the acquiring firm has less than 50% of the target's shares before the deal and more than 50% after the deal; (3) the acquiring firm has data available in Refinitiv for the fiscal year before the deal; (4) the target firm has non-missing financial and employment data for at least one year before and two years after the deal (e.g., for a deal in 2010 I require employment data up to 2012).[9] These restrictions result in a final sample of 921 deals made by 586 acquiring firms. In Table B.1, I describe in more detail the number of deals I lose in each step of my sample construction procedure. In addition, I get year-end financial information from three years before the deal to three years after the deal. This gives me a 7-year event window from T - 3 to T + 3, where the year T is the year of the transaction for each firm.[10]

2.2 CSR measure

I obtain CSR data from the Refinitiv ESG database (formerly ASSET4) that has been employed in previous CSR studies (Ferrell et al., 2016; Liang and Renneboog, 2017; Dyck et al., 2021; Tsang et al., 2021). The sample includes more than 10,000 companies around the world and provides history up to the fiscal year 2002 for approximately 1,000 companies (mainly U.S. and European). All Refinitiv ESG data is refreshed on products every week, including the recalculation of the ESG scores. The Refinitiv ESG database evaluates a firm's ESG performance, commitment and effectiveness based on publicly reported information (e.g., annual reports, stock exchange filings, non-governmental organisations' websites, and news sources). It captures and calculates over 450 company-level ESG measures, of which a subset of 186 of the most comparable and material per industry power the overall company assessment and scoring process. Each measure goes through a careful process to standardize

[9]Following Larrain et al. (2017), I also exclude all targets that participate in more than one deal during my sample periods, with different acquirers or with the same acquirer. The reason for excluding these observations is that it is difficult to pin down the effect of each deal transaction for these cases.

[10]In Table B.2, I also define the event window from T - 2 to T + 2, and find that my results remain the same.

the information and guarantee it is comparable across the entire range of companies. These underlying measures are grouped into 10 categories that form the three pillar scores: environmental, social and corporate governance. Following prior studies (e.g., Dyck et al., 2019; Cheung et al., 2020; Tsang et al., 2021), I compute a firm's overall CSR score by averaging the scores assigned to the environmental and social dimensions, which are closely connected with the traditional notion of CSR.

2.3 Summary statistics

In Panel A of Table 1, I present the distribution of my sample mergers according to the target industry and year. The number of mergers increases more or less monotonically until the year 2007. It then decreases significantly during the financial crisis and rebounds in 2011. Most of the targets are in manufacturing (36.08%), services (32.71%), and wholesale and retail trade (11.30%).[11] Panel B reports the characteristics and distribution of acquisitions across countries. Targets in the UK have more employees, with a mean of 591, more than eight times the targets in Denmark. The United Kingdom is also the country with more activities, with almost one-third of the deals (32.24%), followed by Germany (12.81%), Sweden (11.40%) and Spain (10.75%). More than two-thirds (73.37%) of deals are diversified and cross-border, and the vast majority (93.05%) of the acquisitions involve private targets.

[Insert Table 1 here.]

[Insert Table 2 here.]

Table 2 presents summary statistics for financial variables of the acquirers and targets for the year prior to the acquisition. Most acquisitions are small, with a median target asset size of around €15.83 million. Not surprisingly, acquirers are much larger than targets, with a mean asset size of about €34,364.02 million, compared to a mean target asset size of €210.49

[11]To keep a sufficiently large number of observations, I do not exclude the targets in the financial and utility industries. However, my conclusions remain unaffected after excluding these from the sample (results are shown in the section on robustness tests).

million. Acquiring firms also have more employees, with a mean of 42,412, compared to the mean of 375 for the targets. Acquirers have a lower leverage ratio (mean of 0.25) than targets (mean of 0.66). Further, I divide acquirers into high and low CSR firms according to the sample median of their CSR. Firms with high CSR scores have significantly lower Tobin's q and ROA than firms with low CSR scores, suggesting that CSR engagement might be driven by agency problems (Cheng et al., 2013; Masulis and Reza, 2015). Compared to acquirers with low CSR scores, those with high CSR scores are larger in total assets, have more employees (Liang and Renneboog, 2017), maintain higher leverage, and spend more on employee expenses (although insignificantly so).[12] As for deal characteristics, I find that compared to firms with low CSR scores, firms with high CSR scores prefer to acquire larger targets, targets with lower labour productivity, and targets whose industries are different from theirs. All variables' definitions are available in Appendix A.

3 Empirical Methodology and Results

3.1 Main results

I now investigate how CSR affects acquirers' employment policies after acquisitions, and, specifically, I examine whether socially responsible acquirers engage in more or less labour restructuring in target firms. To explore the relation between the CSR performance and the post-merger employment level, I adopt a difference-in-differences design and estimate the following panel regression model:

$$Employment_{i,t} = \alpha_i + \beta_2 Post \cdot CSR_i + \gamma Post \cdot X_i + \delta_i + \zeta_t + \lambda_r + \epsilon_{i,t} \tag{1}$$

Where *CSR* is the log of acquirer's initial CSR score (measured in the year prior to the deal

[12] A large part of SG&A consists of expenses related to labour and IT investments (e.g., white collar wages, employee training, consulting, and IT expenditures) (Eisfeldt and Papanikolaou, 2013).

announcement) and *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise.[13] My dependent variable is the target's employment at the firm level in logs, and the key estimate is the interaction term *Post* with acquirers' CSR performance. I include target (δ_i) fixed effects to control for time-invariant firm-level characteristics that may be correlated with omitted variables. All estimations also include year (ζ_i) and event-time (λ_r) fixed effects. These fixed effects absorb the *Post* dummy while allowing me to control for changing macroeconomic conditions and economic tendencies that are common to all acquisitions. In addition, targets of high and low CSR acquirers could differ along with a number of dimensions that may be correlated with the dependent variable. For example, as mentioned above, high CSR acquirers prefer larger targets or targets that are from different industries. To further mitigate the sources of confounding variation, I control for firms' initial characteristics for both acquirers and targets and deal characteristics, as well as their interaction with a *Post* dummy.[14,15] X_i is a vector of firm-level control variables measured in the year before the deal, including acquirer size, acquirer leverage, acquirer ROA, acquirer Tobin's Q, target size, and target leverage. These controls ensure that the results are not driven by pre-deal differences among acquirers with different levels of social performance. Note that X_i does not enter separately in the baseline regression because it is absorbed by firm fixed effects.

I also implement an event study DiD analysis and estimate the following dynamic specification:

$$Employment_{i,t} = \alpha_i + \sum_{k=-3,\neq -1}^{+3} \beta_k W_{ki} \cdot CSR_i + \gamma Post \cdot X_i + \delta_i + \zeta_t + \lambda_r + \epsilon_{i,t} \qquad (2)$$

Where W_{ki} is a dummy equal to one if in year t firm i is k years away from the completion

[13]Following Dyck et al. (2019), I use logs of CSR scores to obtain better distributional properties and to reduce the impact of outliers. My main results are unaffected if I use the raw scores instead of the scores in logs.

[14]I also employ a propensity score matching analysis to mitigate the concern of whether high CSR acquirers manage targets differently or they buy different targets.

[15]I do not include time-varying firm-level controls becasue they are endogenous to the deal decision.

of the deal, with $k \in [-3, +3]$. The effects on year $t-1$ are normalised to zero. In all specifications, standard errors are corrected for clustering of observations at the acquirer level.

[Insert Table 3 here.]

Table 3 presents the regression results from these analyses. In column (1), I show the baseline estimate of the effect of acquisitions on employment (*Post*), with the coefficient indicating that, on average, following acquisitions, employment at the target firm decreases by 11.6%.[16] In column (2), I interact the *Post* dummy with acquirers' CSR investment to study how CSR performance modifies the average effect of takeovers on employment. After controlling for various target and acquirer initial characteristics, I observe a negative and significant sign on the interaction term, which indicates that the decline in employment after the deal is significantly more pronounced as the acquirer's CSR engagement increases. The results regarding CSR are also economically significant. A one-point increase in CSR (with a standard deviation of 0.71 points) is associated with a 10.1% decrease in targets' post-merger employment. Given that the sample mean of employment (in logs) is 4.43, this amounts to an economic impact of 2.26% (=0.101/4.43). In column (3), I add event-time fixed effects, such that the *Post* dummy itself is absorbed and only the interaction effects are identified. I find that the magnitude of the effect is unchanged and is still significant at the 5% level. I obtain qualitatively similar results: each extra point on the CSR decreases employment by 10 percentage points, ceteris paribus. Column (4) explores the dynamics of the effect of CSR on labour restructuring in the post-merger years. No statistically significant effect exists in the years before the deals, and a persistent stronger workforce reduction for acquirers with superior CSR performance is evident in every year subsequent to the mergers (See Figure 2). These findings suggest that my results do not suffer from reverse causality. Finally, in columns

[16]My finding appears to be dissimilar to Boucly et al. (2011) and Erel et al. (2015). The possible reasons for this are related to the following: First, the size of the target firms in my sample is much larger (more than three times larger) than that of Erel et al. (2015); Second, nearly a third of the targets are concentrated in the UK, where capital and credit markets are large and well-functioning. Thus, relaxing credit constraints is less likely to be the motive for mergers and acquisitions in my sample.

(5) - (6), I additionally control for deal-specific characteristics and country-level (target firm) economic conditions. I continue to find a negative and significant coefficient on the interaction between *CSR* and *Post*.

I also ensure that my findings persist after controlling for measures of corporate governance and institutional ownership. Recent evidence shows that well-governed firms or firms with higher institutional ownership are more likely to be socially responsible (Ferrell et al., 2016; Dyck et al., 2019; Chen et al., 2020). As institutional investors act as effective monitors of corporate behaviour and can discourage firms' overinvestment (Aggarwal et al., 2011; Crane et al., 2016), managers will move quickly to undertake post-acquisition restructuring. If governance or institutional ownership is correlated with my CSR measure, then it is possible that CSR is simply proxying for governance, resulting in an omitted variable bias. To address this concern, I first measure governance by using the *Governance* score from the Refinitiv ESG database.[17]. I also construct a firm's entrenchment index (*E-index*) following Bebchuk et al. (2009) and Liang and Renneboog (2020).[18] In addition, I gather acquirers' institutional ownership data from the Factset Stock Ownership Summary database by Ferreira and Matos (2008). In Table 4, I repeat the analyses from Table 3, but I now add the governance and institutional ownership controls. All models include the full set of other control variables employed in Table 3. Consistent with my predictions, columns (2) – (5) show that the *Governance* score and the *Institutional Ownership* are negative and significant, which provides some evidence that well-governed firms do more labour restructuring after acquisitions.[19] No significant results can be found for the *E-index*. Most importantly, I again find that the effect of CSR on targets' post-merger employment persists. These results suggest that my main results documented above are not fully driven by firm governance.

[17]I have excluded corporate governance components from the measure of CSR when estimating main regressions.

[18]The *E-index* include a list of governance provisions: poison pills, golden parachutes, staggered boards/classified boards and supermajority requirements.

[19]Foreign institutional investors are in a better position than domestic institutional investors to monitor firms (Aggarwal et al., 2011). I additionally control for both domestic and foreign institutional ownership in Table B.3 and find that my results remain the same.

[Insert Table 4 here.]

Overall, I document a negative relation between acquirers' CSR performance and employment (in targets) after acquisitions. This evidence is consistent with the cost-saving view that CSR increases labour costs per employee, and thus, high CSR acquirers are more likely to fire workers, especially the redundant or overlapping workforce.

3.2 Union strength and investor protection

To further help address the concern of omitted correlated variables, I next estimate triple-difference regression models by testing whether the negative relation between CSR and employment is stronger for targets that operate in countries with weak union laws or targets in countries with strong investor protection. Low union strength in the target's country indicates the relative ease with which acquirers can undertake labour restructuring. By the same token, if the target country has strong labour unions, local employees have more bargaining power to resist lay-offs and the implementation of various employment policies. In addition, when investors have greater influence, higher priority is given to enhancing firm value (Atanassov and Kim, 2009). That is to say, if the employee layoff after acquisitions increases shareholder wealth, one would expect targets in countries with stronger shareholder protection to make more employee layoffs. Therefore, the negative relation between the acquirer's CSR and post-acquisition employment should be stronger for targets in countries with weak labour unions or strong investor protection.

[Insert Table 5 here.]

Table 5 presents the results from tests examining the effect of union strength and investor protection on the relation between CSR and post-merger employment. The data for labour regulations comes from Botero et al. (2004), which has been widely used in previous studies (Atanassov and Kim, 2009; Levine, 2017). The first index, *Union*, measures the statutory

protection and power of unions. The second index, *CRL*, assesses the legal protection of labour unions and the regulation of collective disputes. My main proxy for investor protection is the anti-self-dealing index (*ASDI)* developed by (Djankov et al., 2008), which captures a country's legal protection of shareholder rights. Moreover, I also use the Djankov et al. (2007) creditor index, *Creditor*, for legal protection of creditor rights. Overall, the results are consistent with my predictions. In columns (1) - (4) of Panel A, I find that the coefficient on the triple interaction term is positive and significant at the 5% level, suggesting that the negative relation between CSR and targets' post-merger employment becomes more (less) pronounced in countries with weak (strong) union power. As reported in Panel B, the coefficient on the triple interaction term is negative and significant, which indicates that the negative relation is more pronounced for targets in countries with stronger investor protection. This result suggests that the observed workforce reductions are more likely driven by shareholder value maximization.

3.3 Legal origin and employment

As the main purpose of this paper is to evaluate how CSR affects firms' employment policies after acquisitions, I also turn to the regulatory context of CSR at the country level. In the context of CSR, a country's legal regime determines how "public goods" should be provided by firms: through regulations and rules, firm discretion, or government involvement in business (Kitzmueller and Shimshack, 2012). As such, the explicit or implicit contracts between firms' shareholders and their stakeholders can be shaped by a country's legal regime through its effect on governance structures and the decision-making process.[20] Using CSR ratings for 23,000 firms from 114 countries, Liang and Renneboog (2017) find that a firm's CSR performance and its country's legal origin are strongly correlated, and the level of CSR is highest under the Scandinavian legal regime. I therefore use legal origin as a proxy for firm-level CSR and

[20]For example, in Germany, large firms are legally required to take into account the interests of employees through the system of *co-determination*, which requires that employees and shareholders have an equal number of seats on the supervisory board of the company (Allen et al., 2015).

explore the relation between acquirers' legal origin and targets' post-merger employment. Moreover, since all of the acquirers in my sample are in the Refinitiv ESG database, a potential concern is that my results may be subject to sample selection bias, if the decision on whether to include a firm in the database is not random. This test could mitigate such bias and give me more observations, even including many private acquirers.[21] Following Porta et al. (1998), Djankov et al. (2008), and Liang and Renneboog (2017), I classify legal traditions into five categories, as denoted by the following dummy variables: *English Common Origin, French Civil Origin, German Civil Origin, Scandinavian Civil Origin, and Socialist Origin*. As reported in Table 6, I regress employment on the legal origin dummy and show that the results are mostly consistent with my predictions. In column (1), I find a negative coefficient on the interaction between *Scandinavian* and *Post*, implying that acquirers from Scandinavian countries are more likely to fire workers after takeovers. Column (2) also shows that the *Civil* * *Post* coefficient is negative though generally statistically insignificant. These results confirm my main findings that socially responsible acquirers are more likely to do labour restructuring in target firms after acquisitions.

[Insert Table 6 here.]

4 Potential Mechanisms

4.1 Unbundling CSR

Next, I investigate the mechanisms underlying my documented effects of CSR. My aim is to disentangle the different dimensions of an acquiring firm's CSR contribution. Specifically, the Environmental (E) dimension measures a firm's impact on the natural environment. The Social (S) dimension covers a firm's relation with its employees, customers and society.

[21] Refinitiv mainly covers large firms included in the major global equity indices, so most (small) firms do not receive a rating from the Refinitiv ESG database.

Firms with higher *Social* scores are more likely to treat their employees well and provide generous employment benefits. An overly generous labour policy for employees (especially the redundant workers) in target firms may be perceived by acquirer shareholders as money not well spent. If the cost-saving view is the underlying channel, my results are expected to be mainly driven by the *Social* score. I extend the main regressions by examining the two individual components of the CSR rating in Table 7. As expected, in columns (1) – (3), I show that my findings are mainly driven by the acquirer's *Social* score, and less so by the *Environmental* score. The magnitude of the coefficient on the *Social* score is also much larger (more than ten times larger than that of the *Environmental* score). Relative to the sample mean, the coefficient estimate of -0.157 implies that a one-point increase in the *Social* score is associated with a 3.57% (=0.157/4.43) decrease in employment of target firms after acquisitions. These results also rule out an alternative explanation that green acquirers are more likely to close the polluting plants or departments in target firms, which decreases employment after acquisitions. If this was the case, I should observe a negative and significant coefficient on the interaction term of *Environmental * Post*. Finally, for robustness tests, I follow Fauver et al. (2018) and use an equally weighted employee-friendliness index, which is defined as the equal weighting of the workforce and human rights sub-scores from the Refinitiv database. The result using the measure of employee-friendliness in column (4) is also negative and significant at the 5% level.

[Insert Table 7 here.]

In addition, there are also some employee-related CSR programs that affect employee welfare, contributing to the *Social* performance (e.g., work-life balance benefits, health and safety policies, employee involvement, etc.). These programs are directly related to cost decreases or increases resulting from eliminating redundancy or overlapping work after acquisitions or the extent to which an acquirer has to pay an extra premium to workers in target firms. Thus, I dig deeper into the Refinitiv ESG database and following Liang et al.

(2020), I construct a monetary CSR dummy in which I consider several forms of monetary policies: (i) *Day Care Services:* Does the company claim provide day care services (including services such as vouchers, referrals, allowances, etc.) to employees? (ii) *Policy Employee Health & Safety:* Does the company have a policy to improve employee health & safety? (iii) *Health & Safety Training:* Does the company train its executives or key employees on health & safety? (iv) *Policy Skills Training:* Does the company have a policy to improve the skills training of its employees? As before, I interact the monetary CSR dummy with the *Post* dummy. The results are presented in column (5). The coefficient on *Monetary CSR dummy * Post* is negative and significant at the 1% level, which indicates that the acquiring firm's employment policies in terms of monetary benefits have a negative effect on the post-merger employment of target firms.

I also gather information on acquirers' staff benefits from the Refinitiv ESG database, which measures the total value of salaries and wages paid to all workers, including all benefits, as reported by the company in its CSR reporting. Specifically, it contains all monetary benefits, such as social security, pension, allowances, commissions, share-based payments, etc. I thus measure the acquirer's labour costs per employee by using the ratio of staff benefits to the total number of employees, and explore whether acquirers with greater employee welfare engage in more labour restructuring. In line with my prediction, I find in column (6) that acquirers' staff benefits per employee are negatively related to post-merger employment in target firms. Overall, these results imply that my findings are driven by the cost-saving story.

4.2 Cross-sectional variation analysis

To provide further evidence that the effects of CSR on post-merger labour restructuring are tied to the cost-saving view, I then focus on the *Social* component and implement triple difference-in-differences tests to examine the heterogeneous treatment effects.

4.2.1 Intense labour cost pressure

First, I investigate whether the effects of CSR are stronger for firms acquiring targets in highly-skilled, human capital-intensive industries, as these workforces should be more "expensive". Firms in these industries (e.g., Apple, Amazon, Google, Facebook, Microsoft, etc.) are well known for providing their employees with generous perks in addition to competitive salaries. In this case, I expect that employee-related CSR programs should be more "expensive" as well, thus inducing higher labour costs in target firms after acquisitions, and synergy gains from eliminating these employees are also greater. As such, I expect that my main results are more pronounced for targets in highly-skilled industries. Following Ghaly et al. (2015) and Cao and Rees (2020), I first define the *High Skill* indicator as taking the value of one if the industries belong to telecommunications, high-tech, and healthcare industries, and zero otherwise.[22] I next define the *High R&D* indicator as taking the value of one if the industry-level R&D expenditure is above the sample median, and zero otherwise, as firms in R&D intensive industries are more likely to depend on highly educated or skilled workers.[23] Finally, I follow Chen et al. (2021) and measure skilled occupation intensity as the proportional of skilled occupations with respect to all occupations in each industry. I obtain employment data from the Integrated Public Use Microdata Series (IPUMS) database, which provides Current Population Survey (CPS) Data on individual worker's occupational code, industry, state, etc. Based on the IPUMS occupational code book, I define skilled workers as those with an occupational code between 37 and 200, which includes occupations such as scientists, engineers, computer programmers, IT professionals, etc.[24] I then define the *High skilled employment* indicator as equal to one if the proportion of skilled workers among all workers in the firm's 2-digit SIC industry is above the sample median, and zero otherwise. The results are reported in Panel A of Table 8. Consistent with my predictions, coefficients on triple

[22] I include the following two-and three-digit SIC codes: 283, 357, 36, 384, 48, and 80.

[23] The industry-level R&D measure is the average of the firm-level R&D intensity, calculated as the ratio of R&D expenditure to total sales.

[24] Since the CPS data does not provide SIC industry information directly, I manually link the 1990 industry code to the two-digit SIC code.

interaction terms are all negative and significant, indicating that the negative relation between acquirers' social performance and post-merger employment is more pronounced for targets in human-capital-intensive industries.

Second, I examine the targets that are more financially constrained, for which the cost-saving motive is more relevant. As financially distressed firms value financial flexibility with more urgency and thus are more sensitive to increased labour costs induced by CSR programs. If the cost-saving story can explain my findings, the results should be more (less) pronounced when targets face greater (smaller) financial pressure. I thus use the industry-level financial dependence and the level of cash holdings (normalised by a firm's assets) as measures of financial constraints.[25,26] The industry-level financial dependence is arguably more exogenous than other firm-level traditional measures of financial constraints (e.g., leverage, size, age, etc.). *High financial dependence* equals one if the target operates in a 2-digit SIC industry with financial dependence above the sample median, and zero otherwise. *High cash* equals one if the target's cash holdings is above the sample median, and zero otherwise. Inspection of the results in Panel B shows that coefficients of triple interaction terms are negative and significant, which suggests that the results are indeed stronger among targets in financially dependent industries and targets with higher cash holdings.

[Insert Table 8 here.]

4.2.2 More opportunities for redundancy

I expect that the effect of CSR should be affected by the deal type. According to my arguments, cost savings from eliminating redundant or overlapping workers are greater for high *Social* acquirers. However, relative to same-industry deals, diversifying deals offer fewer opportunities

[25]Industry financial dependence is Rajan and Zingales (1998) measure of external financial dependence, computed at the 2-digit SIC code using U.S. data.

[26]Cash holdings are higher when managers believe they face greater financial constraints (Opler et al., 1999; Erel et al., 2015). Given that the target firms in my sample are mostly privately held and are very small, I can not use measures of financial constraints (e.g., KZ index, or WW index) that can be calculated for larger or public firms.

for eliminating redundant resources in the workforce due to the lack of occupation overlap (i.e., similar job duties and skills among acquirer and target workforces). Similarly, when acquiring a foreign target, opportunities for eliminating overlap are also limited due to geographical distance and regulatory concerns (Liang et al., 2020). Hence, my results should be more pronounced for same-industry or domestic deals, which have more opportunities for eliminating redundancy. I then label acquisitions as same-industry (domestic) when the acquirer and the target are from the same industry (country). I define an acquisition as "same-industry" when the target and the acquirer operate in the same three-digit SIC code.[27] The results reported in column (1) of Panel C are largely consistent with my premise. I find that the coefficient on the triple interaction term (*Same-industry * Social * Post*) is negative and significant at the 5% level. In column (2), the coefficient on the triple interaction is again negative, although not statistically significant at conventional levels. Taken together, these results are consistent with the notion that due to more opportunities for eliminating workforce overlap, the negative relationship between CSR and targets' post-merger employment becomes stronger.

Second, I test the target firms with lower labour productivity. The rationale is that redundant resources in the workforce are more likely for low-quality or inefficient workers. As such, targets with lower labour productivity provide more opportunities to eliminate workforce redundancy, and my results should be stronger for these target firms. I measure the labour productivity by using the ratio of firm sales to employment. I then define the *Low labour productivity* indicator as equal to one if the target's average labour productivity (3 years before the deal) is below the sample median, and zero otherwise. As shown in column (3), the triple interaction term (*Low labour productivity * Social * Post*) is negative and significant at the 5% level, suggesting that the negative effect of social performance on employment becomes stronger when targets have more inefficient workers.

Overall, the negative relationship between acquirers' social performance and post-merger employment (in targets) is more pronounced for targets in human-capital-intensive industries,

[27]My results remain qualitatively unchanged when I define the same-industry deal using the two-digit SIC code.

targets that are more financially constrained, and deals or targets with more opportunities for eliminating workforce redundancy. These results provide further support for the cost-saving explanation.

4.3 Effects on other target firm outcomes

Next, I examine how acquirers' *Social* performance affects target firms in other outcome variables. The cost-saving view argues that CSR can increase the expenditure on workers and, thus, target firms of high CSR acquirers will implement a larger post-merger workforce reduction, especially for the redundant or overlapping workforce (as those laid-off employees would otherwise receive a larger additional payment). If this channel exists, I should also expect higher labour efficiency and more investments of human capital in target firms acquired by acquirers with greater social performance. Further, since workers are more productive, targets can improve their earnings potential and technical efficiency by delivering better services or making better products. To examine these issues, I conduct additional tests using several measures of labour productivity and technical efficiency: 1) Sales per employee; 2) Added value per employee; 3) Material costs per employee; 4) Sales to assets.[28] I also examine the impact on proxies for investments in human capital: 1) Staff costs to assets and 2) Staff costs per employee. The staff costs not only contain wages and salaries but also include social security costs, pension costs and other employee-related costs. Figure B.1 presents the estimated coefficients together with 95% confidence bands, focusing on the specification including target, year and event-time fixed effects. The coefficients and standard errors are reported in Table 9. Consistent with my predictions, in columns (1) – (4), I find evidence that CSR has a positive impact on labour productivity and technical efficiency after acquisitions.[29] Moreover, columns (5) – (6) do indeed show that *Social * Post* coefficient

[28]The number of observations declines substantially because, in the UK, firms are not required to report sales data (Erel et al., 2015). Data on material costs is missing for firms from the UK, and I use the cost of sales to replace the missing value.

[29]It is also possible that CSR improves the firm-employee relationships, thus increasing labour productivity (Edmans, 2011, 2012; Flammer, 2015).

is positive and significant, which suggests that acquirers with greater social performance increase the expenditure on workers in target firms after acquisitions. Taken together, these evidences are largely consistent with the cost-saving story.

[Insert Table 9 here.]

Finally, I examine the capital expenditures in target firms. Engagements in CSR - that is, meeting the needs of various corporate stakeholders - may draw limited financial and physical resources from other investment opportunities, which lead to a decline in capital expenditures. I use asset growth as the proxy for capital expenditure because *CAPEX* is rarely reported in my sample. As shown in columns (7) - (8), there is a significant negative relation between the acquirer's social performance and asset growth in target firms after acquisitions and the magnitude of the coefficient on *Asset growth (fixed)* is larger. These results suggest that allocation of scarce corporate resources to CSR activities could decrease targets' capital expenditures, which provides additional insights into the drivers of my main findings.[30]

4.4 Announcement effects

In this section, I provide further evidence supporting the cost-saving view by investigating the impact of an acquirer's social performance on merger announcement returns. If acquirers with greater social performance can efficiently restructure the labour force in target firms and realise higher cost savings, I expect to observe positive shareholders' reactions to M&A announcements. To assess market reactions and thus draw inferences on shareholder value, I calculate cumulative abnormal stock returns (CARs) for the acquiring firm in the T days surrounding the deal announcement. These abnormal returns are obtained using the market

[30]I also explore innovation activities in target firms in Table B.4. Due to the data limitation, I focus only on the number of patents of target firms. I find that higher levels of social performance are negatively related to the number of patents, which indicates that socially responsible acquirers could also reduce their innovation investments in target firms after acquisitions.

model over a period starting 120 days before the announcement date until 30 days before this date. I focus only on the acquirers' CARs because most of the targets in my sample are private firms.

In Panel A of Table 10, I report the CARs for the full sample of acquirers as well as the subsamples of high and low *Social* acquirers.[31] Acquirers are divided into high and low *Social* acquirers according to the sample median of their social performance. The mean CAR (-1, 1), CAR (-2, 2), and CAR (-3, 3) for the full sample are positive and significant. The subsample results show that these positive returns are mostly driven by high *Social* acquirers. The mean CARs for high *Social* acquirers are positive and significant at the 1% level. In contrast, the respective CARs for low *Social* acquirers are much smaller and not significant. The median CARs show a similar pattern. The equality in mean and median CARs between the high and low *Social* subsamples is rejected significantly.

[Insert Table 10 here.]

In Panel B, I present estimates from multivariate regressions using the CAR (-1, 1) as the dependent variable. In addition to including acquirer controls specified in Section 3.1, I also control for acquirer industry and year fixed effects. Column (1) indicates that a higher level of social performance is positively related to shareholder returns around deal announcements. This is consistent with my main story that socially responsible acquirers can realise greater cost savings from eliminating workforce redundancy, and thus, these CSR policies are regarded favourably by shareholders. To mitigate omitted variable concerns, in columns (2) – (4), I consistently find that higher levels of social performance are positively related to acquirer CARs, and this effect is not eroded by the inclusion of target and deal-specific characteristics, and target industry, acquirer and target country fixed effects.

Next, I take a further step to investigate how the market responds to workforce reductions after the acquisition. If acquirers with greater social performance can realise more cost-saving

[31]The results for high and low CSR acquirers are reported in Table B.4.

benefits by engaging in post-merger labour restructuring, I should observe higher announcement returns for socially responsible acquirers. Panel C of Table 10 presents the results. The independent variable of interest is the interaction term *Social * Large* $\Delta log(Emp)$, where *Large* $\Delta log(Emp)$ is an indicator that equals one if the pre-to-post decrease in log-employment is above the sample median, and zero otherwise. Similarly, the specifications include various fixed effects, and firm and deal-specific characteristics. I find that the interaction coefficient is positive and significant at the 5% level.[32] These results are consistent with the notion that investors anticipate increased shareholder wealth due to workforce reductions by acquirers with greater social performance.

Overall, these results are consistent with my baseline argument and recent evidence on the impact of a firm's CSR on merger performance (Deng et al., 2013; Liang et al., 2020).

4.5 Alternative explanations

4.5.1 Moral capital

Another potential channel for the observed findings could be related to the moral capital story. Existing literature suggests that CSR activities can help build social capital and enhances stakeholder trust, and there are potential halo effects of being charitable or good (Godfrey et al., 2009; Goss and Roberts, 2011; Elfenbein et al., 2012; Lins et al., 2017; Hong et al., 2019; Barrage et al., 2020). Firms with stronger CSR credentials (i.e., larger moral capital reserves) are more likely to be seen in a positive light, and stakeholders are more likely to temper their negative judgement of the firm. This positive moral capital, in turn, can provide a form of insurance by moderating the negative assessment of stakeholders when firms suffer a negative event. In other words, CSR can help firms window-dress their image and reputation to pursue self-interest or economic egoism in the organisation. Given the negative externalities of layoff on various internal and external stakeholders, large-scale workforce reductions after

[32]As a placebo test, Table B.6 shows that "green acquirers" can not enjoy higher announcement returns when they do more labour restructuring.

the takeover may incur reputational penalties. As such, CSR engagement serves to protect firms from adverse reputational consequences of corporate downsizing, and acquirers with a better CSR image may engage in more post-merger layoffs.

To test the moral capital channel, I begin by testing large acquirers. Large firms always face greater scrutiny from media, special interests, and stakeholders because they have higher profiles than small firms. Simply put, firms with a larger market preference always incur more risk. If the moral capital story is the underlying mechanism, stronger results should be found for larger acquirers. Second, I expect the moral capital benefits to be less prevalent in industries with high labour volatility or when the economy turns downward. In these cases, labour adjustment occurs more often, and layoff decisions can be seen as a more common practice. I define the *High labour volatility indicator* as one if the target's industry-level labour volatility is above the sample median, and zero otherwise.[33] I then use change in GDP to proxy for economic conditions. *Negative GDP change* is the 1-year percentage decrease in the target's country GDP, with positive changes set to zero. Third, I obtain data on the country-level *"Responsibility is really important"* and *"Work is really important"* from the World Value Survey, and consider the case in which people in the target's country have a higher predilection for responsibility and work. Employee layoffs could have greater negative social implications in countries with higher values of these two variables ("High" is defined as being above the sample median), and thus the moral capital of high CSR firms becomes more important, and my results should also be more pronounced in these countries. The results of the analysis are reported in columns (1) – (5) of Table B.7. However, I do not find any evidence to support the moral capital channel.

If the moral capital channel plays a role in post-merger labour restructuring, it is also interesting to investigate the acquirers with a prior history of mass layoffs. Godfrey et al. (2009) argue that whether CSR activities can generate moral capital mainly depends

[33]The industry-level labour volatility is the average of the firm-level labour volatility, measured as the standard deviation of the number of employees relative to the value of plant, property, and equipment (PPE) assets over time.

on the stakeholders' evaluations of the firm's motives. The moral capital arising from socially responsible activities comes from the signal of non-self-serving intentions. However, engagement in activities with negative effects on stakeholders may signal an intention to act self-interestedly rather than considering the needs of others or society at large. As such, for firms with repeated violations, investments in CSR may be perceived as a window-dressing behaviour for their negative behaviours. If CSR engagements are viewed as an ingratiating attempt to win favour, firms are less likely to gain and may even generate a negative moral evaluation. Thus, prior mass layoff practices may deplete firms' moral capital and result in a dramatically less forgiving stakeholder set, and my results should be less pronounced for acquirers with a prior history of mass layoffs. Following Atanassov and Kim (2009), the mass layoff is measured as taking the value of one if a firm experiences more than a 15% drop in the number of employees from year $t^{\smile}1$ to year t or $t+1$. Then, I define a *Prior mass layoff* indicator as one if the acquirer had undertaken a large-scale employee layoff in the 5 years before the deal, and zero otherwise. The specification in column (6) shows a positive and significant triple interaction term (significant at the 10% level), the only instance supporting the moral capital channel. Overall, I find very limited evidence that the moral capital story is driving my main findings.

4.5.2 Managerial entrenchment

The agency view of CSR suggests that CSR activities are linked to the pursuits of managers' self-interests. Inefficient CEOs can use CSR activities strategically to build relations with stakeholders to receive favourable treatment during future turnover decisions (Cespa and Cestone, 2007). In line with that, Cai et al. (2021) provide empirical evidence that CEOs are unlikely to be replaced for poor performance when firms donate to charities affiliated with a large fraction of the board or when they donate large amounts. If protecting employees from post-merger restructuring can be used as an entrenchment strategy for managers, it is also possible that engagements in CSR activities and reluctance to layoff are substitute ways of

forming an alliance with stakeholders. When managers in high CSR firms have built solid support from other stakeholders, they have less to lose from engaging in layoffs. Therefore, high CSR acquirers are expected to take more layoffs after acquisitions.

However, I do not find evidence in support of this channel. First, when I include corporate governance proxies to capture agency concerns, the negative relationship between acquirers' CSR performance and post-merger employment in target firms continues to hold (Table 4). Second, if my results are primarily driven by the agency channel, I would expect my results to be more pronounced in countries with weak legal protection, where shareholders' and managers' incentives are less likely to be aligned, and agency problems are likely to be higher. However, the results are not consistent with my predictions. In contrast, the negative relationship between CSR and employment (in targets) is more pronounced in countries with better investor protection (Table 5), which suggests that the observed workforce reductions are more likely to be motivated by shareholder value maximization rather than influenced by manager entrenchment. Finally, if CSR is a manifestation of agency problems, one expects that the main findings should be driven by acquirers' environmental and social performance simultaneously. Again, as shown above, my results are mainly driven by the social score, and less so by the environmental score (Table 7). Overall, these results suggest that the entrenchment channel is unlikely to be the main channel through which socially responsible acquirers operate larger workforce reductions after the acquisition.

5 Additional Analyses and Robustness Tests

5.1 Subsidiary-level evidence

In this section, I utilise the subsidiary-level data and examine how acquirers' social performance affects the labour restructuring in the targets' subsidiaries. I rely on the Amadeus database to extract ownership information of target firms. The minimum ownership stake I require

to consider a target firm as a controlling shareholder is 50%. Similarly, I require that the subsidiaries have nonmissing employment data for at least one year before and two years after the merger. Then, I am able to find 427 subsidiaries meeting these criteria. Table 11 reports results from subsidiary level regressions using Equation (1), and results are mostly consistent with those at the parent level. The estimates in columns (1) - (3) show that when targets are acquired by a high CSR acquirer, the subsidiaries of these target firms also engage in more labour-restructuring after acquisitions. In line with my previous findings, the results are primarily driven by the social component of the CSR rating, rather than by the environmental component. In addition, I can observe a positive effect of the acquirer's social performance on subsidiaries' staff costs and labour productivity in columns (4) - (7), although insignificantly so. Finally, column (8) shows that targets managed by acquirers with greater social performance operate fewer subsidiaries after acquisitions. This result is consistent with my previous findings that the allocation of scarce corporate resources to CSR activities could decrease targets' capital expenditures.

[Insert Table 11 here.]

5.2 Propensity score matching

Do socially responsible acquirers manage targets differently, or rather they buy different targets? Moreover, one could wonder whether my results are driven by the target's social performance, rather than the acquirer's. However, empirically this is a difficult question because most targets in my sample are private firms and do not receive a rating from the Refinitiv ESG database. To control for observable differences in firm and industry attributes, I next perform a one-to-one propensity score matching analysis.[34] Acquirers are divided into high and low CSR subgroups according to the sample median of their *Social* score. I

[34]Anecdotal evidence suggests that a firm's corporate policies can be affected by the policies of its peer firms.

match targets in the high CSR group with those in the low CSR group on their size and employment in the year before the deal, and I ensure targets in these two groups are in the same two-digit SIC code and the same country.[35,36] By matching on industry and country, I can also remove unobserved industry and country heterogeneity that may be correlated with the employment in target firms. In Figure 3, I present the estimated coefficients together with 95% confidence bands for the matched sample. The results in Table 12 show that targets lay off more employees following the acquisition by acquirers with higher *Social* performance. I further plot employment levels before and after the event for each group, and the deal completion year is defined as time zero. Following Vig (2013) and Buchuk et al. (2014), I compute the yearly rescaled average values of employment for each subsample. For each year, rescaling is done by deducting the 3-year average before the deal (i.e. $T-3$ to $T-1$) from each annual average figure of employment. In Figure B.2, I can observe that these two subsamples have similar trends in terms of employment before the deal. However, targets in the high CSR group experience a strong reduction in employment level after the completion of takeovers at time 0. In contrast, a similar downward trend is not seen for targets in the low CSR group. To further address selection concerns, I use placebo tests to compare targets acquired by "green acquirers" with that acquired by "non-green acquirers". Acquirers are divided into two subgroups according to the sample median of their *Environmental* score. If the above results were due solely to selection, then similar employment dynamics should also be observed among targets of "green acquirers". However, no results can be found in Table B.9.

[Insert Table 12 here.]

[35] I exploit a probit model to estimate the probability of being a target in the high CSR group based on their size and employment in the year before the deal.

[36] In Table B.8, I additionally match targets from these two groups based on their deal characteristics and my results remain unaffected.

5.3 Instrumental variable test

To further alleviate potential endogeneity problems, I also estimate instrumental variable regressions. My first instrument is a measure of national culture, egalitarianism. National culture can be considered as a critical informational institution that significantly affects the behaviours of corporations and their stakeholders, which is expected to shape firms' CSR practices (Schwartz, 2004). In particular, egalitarian cultures seek to induce societal members to recognise one another as moral equals who share basic interests as human beings. The most important values in egalitarian cultures include equality, social justice, responsibility, and mutual help. People are socialised to internalise a commitment to cooperate and feel concern for everyone's welfare. A firm's CSR investment, especially efforts to promote the welfare of employees and the society, is more likely to be valued in egalitarian cultures (Schuler and Cording, 2006). Thus, in countries with a higher egalitarianism value, firms are expected to maintain high CSR performance, treat their employees well and, more generally, act for the benefit of all their stakeholders as a matter of choice (Cai et al., 2016; Cheung et al., 2020). Second, I add the lagged social score from 5 years before the deal. It is unlikely that the social score assigned to firms 5 years before the deal are going to be influential in labour restructuring of target firms.

To support my choice of instrumental variables, in the 2SLS regression I perform the following two tests: (1) a weak instruments test to confirm the relevance of the instruments (i.e., high correlations between instruments and CSR); (2) An overidentification test to examine the exogeneity of the instruments (i.e., no significant correlation between the instruments and the error terms in the regressions). Results are reported in Table B.10. In the first-stage model reported in column (1), I see that both instruments are statistically significant, which seems to validate their use. In column (2), I report results from the second-stage model and I find that the coefficient of instrumented *Social* is still negative and significant. Taken together, these results confirm my main findings that high CSR acquirers are more likely to engage in post-acquisition labour restructuring in target firms.

5.4 Other robustness tests

I also conduct a few other specific robustness tests. First, it is possible that my main finding of the relation between CSR and labour restructuring is attributed primarily to the Refinitiv ESG database used in my study.[37] The coverage of Refinitiv ESG data is fairly extensive, and the database is also widely employed in a large number of previous studies. However, it is arguable that the assignment of individual firm ratings may be biased toward the methodology Refinitiv adopts. To address this possible bias, I employ an alternative ESG ratings database, Sustainalytics database, which is also widely used in the literature.[38] I then repeat the main estimation using firm-level CSR ratings assigned by the Sustainalytics database (ranging between 0 and 100). As the Sustainalytics database in WRDS is available from 2009, there is a significant loss of data, reducing the sample size to 2600 observations. Results are reported in column (1) of Table 13 and confirm that my key findings remain materially unaffected.

[Insert Table 13 here.]

Second, I replicate my main regressions using the *Layoff* indicator as the dependent variable. I follow Atanassov and Kim (2009) and define a *Layoff* indicator as one if the firm experiences a decrease in the number of employees greater than 15% over one year or two years, and zero otherwise.[39] The results in column (2) show that the coefficient on the interaction term is positive and significant, confirming my previous conclusions.

Third, I control for the acquirer's management practices. CSR investments are set by a firm's management team. Doukas and Zhang (2021) show that acquirers with talented managers are more inclined to engage in CSR activities to shape corporate social culture. Hence,

[37] Chatterji et al. (2016) argue that one should cross-validate the results using several different ESG data sources for every CSR research.

[38] Similar to Refinitiv ESG, CSR ratings in the Sustainalytics database are also industry adjusted, that is, companies are rated on their CSR engagement (both voluntary initiatives and mandatory compliance), relative to industry peers, on a global scale. Firm coverage in the Sustainalytics database is comprised mostly of constituents of major global equity indices.

[39] For robustness I use a different cutoff level for *Layoff* (20% decline in the number of employees) and find similar results.

if CSR is simply proxying for managerial ability, acquirers with greater social performance could change the management practices in target firms, resulting in a change in the type of workforce after acquisitions. I then use the Demerjian et al. (2012) proxy of managerial practices, which estimates the proportion of firm efficiency attributable to managers. Since Demerjian et al. (2012) obtain their sample from Compustat, the additional requirement of having managerial ability data for the acquirer reduces my sample size to 1784 observations. As reported in column (3), our results remain qualitatively unchanged after controlling for the acquirer's management practices.

Fourth, based on my sample distribution, one could argue that results may be driven by US acquirers, as they make up 26% of my sample. I repeat my results for a sample excluding US acquirers in column (4). The exclusion of these target firms reduces the sample size to 4519 observations. I find that my results remain the same, suggesting that I am identifying a global phenomenon.

Fifth, recent studies (Deng et al., 2013; Erel et al., 2015) remove financial firms from their investigations as financial industries have different reporting policies and are subject to different regulations. In order to rule out this potential bias, I also remove all targets in financial industries from my sample. Results are reported in column (5). Again, the acquirer's CSR appears to bear a negative and statistically significant relationship with the post-merger employment in target firms.

Finally, another potential concern is that acquirers with greater social performance might close some of the plants because of the social violations in target firms (e.g., child labour, gender diversity, etc.), which leads to a significantly higher likelihood of layoffs. If this were the case, I should observe more asset sales in target firms once they are acquired by socially responsible firms. To address this possibility, my dependent variable is replaced as the *Asset sales* indicator, which equals one if the firm experiences more than a 15% drop in its fixed assets over one year or two years, and zero otherwise. Results are presented in column (6) of Table 13. I do not observe any significant results on asset sales of target firms, suggesting

that my findings are less likely to be driven by targets' asset sales after acquisitions.

6 Conclusion

Despite the plethora of studies on the relations between CSR and M&A performance, the impacts of CSR on post-merger strategies remain under-explored. In this paper, I conduct the first study to investigate whether high CSR acquirers manage targets differently, and in particular, I examine the employment policies of socially responsible acquirers. Using a sample of 921 deals announced between 2003 and 2016 in Europe, I find that acquirers with greater CSR performance lay off more employees in target firms. This empirical result is consistent with the cost-saving story. The underlying idea is that CSR activities increase the labour costs per employee in target firms, which in turn decreases the optimal level of employment. Hence, target firms operate larger employee layoffs after acquisitions, especially for the redundant or overlapping workforce.

In line with the cost-saving view, my findings are mainly driven by the *Social* score rather than by the *Environmental* score. More importantly, I show that the acquiring firm's CSR policies providing monetary benefits to employees are negatively associated with targets' employment after acquisitions. The relationship between acquirers' social performance and post-merger labour restructuring is more pronounced for targets in human-capital-intensive industries, targets that are more financially constrained, and deals or targets with more opportunities for eliminating redundancy. Further, I document consistent evidence that acquirers with greater social performance increase labour productivity, technical efficiency and staff costs in target firms. I also show that socially responsible acquirers can realise higher announcement returns, especially when they do more layoffs. Finally, my results are robust to correct for potential endogeneity problems and a battery of other potential econometric issues. I find very limited evidence that the moral capital and the managerial entrenchment stories drive my main findings.

Overall, this paper contributes to the CSR literature. Anecdotal evidence suggests that socially responsible firms may not act in the best interests of shareholders – either because of their pure altruistic motivations (i.e., sacrifice money for a good cause) or because managers in these firms perceive a personal benefit from the investment. However, in this paper, I do not find any evidence in support of this view. In contrast, I show that socially responsible acquirers are managed to maximise shareholder interests by engaging in more post-merger labour restructuring to realise cost-saving benefits.

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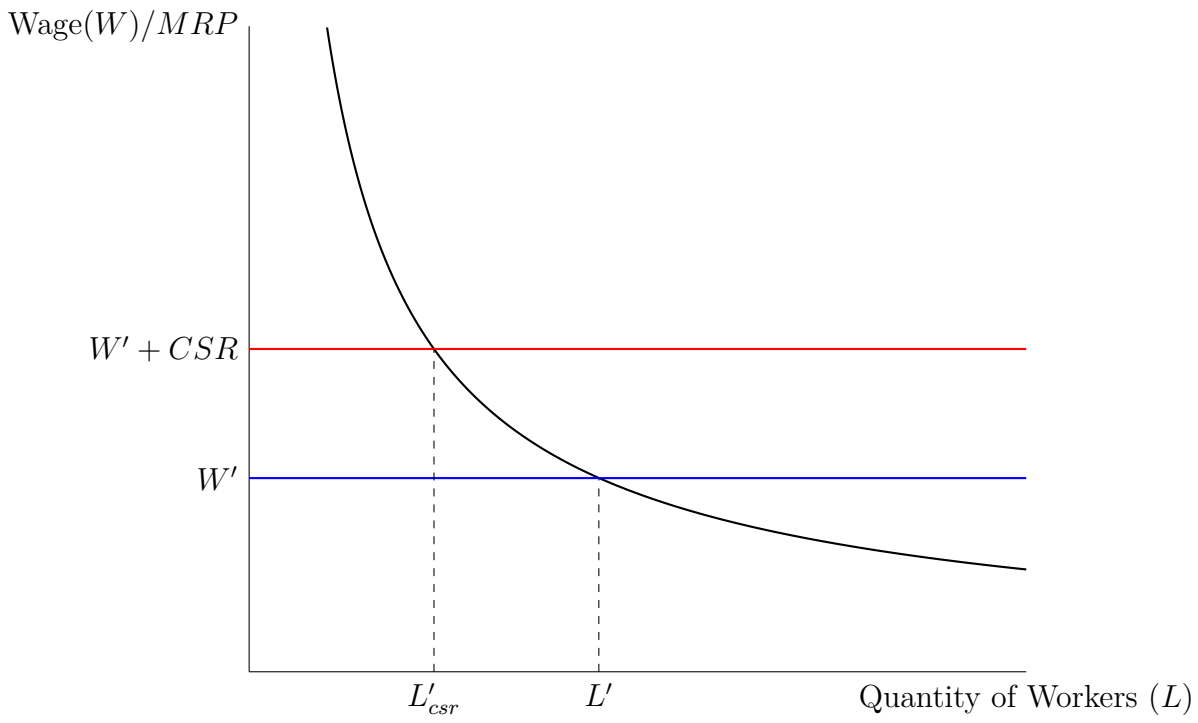


Figure 1 Demand for Labour - Marginal Revenue Product of Labour

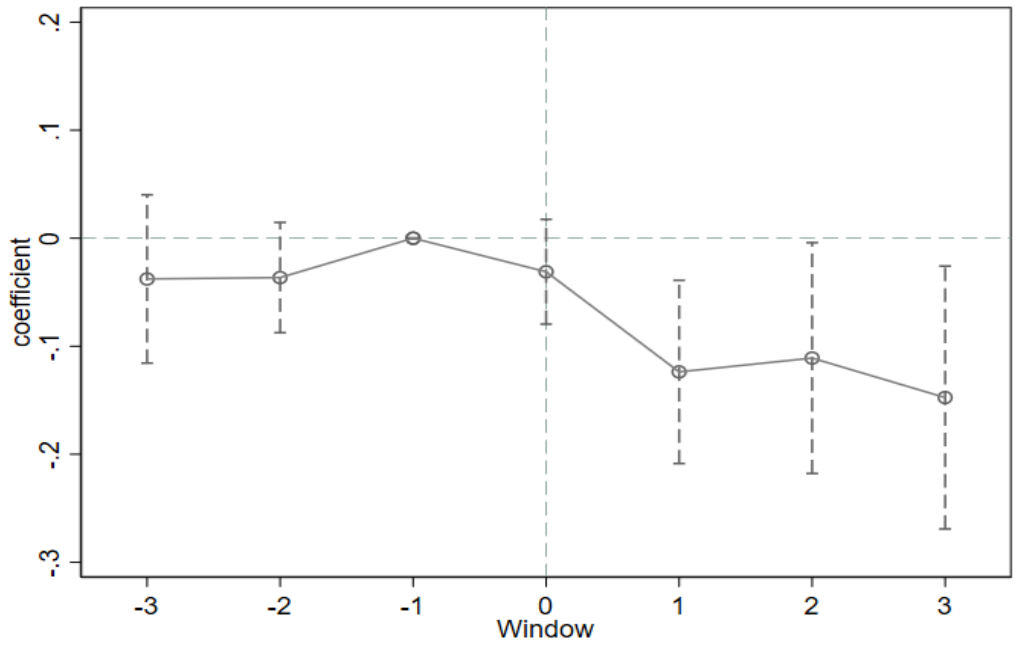


Figure 2 Employment coefficients around M&As
The figure displays coefficient estimates of the fixed effects model for employment in target firms, with 95% confidence intervals. I include target, year and event-time fixed effects in my specification.

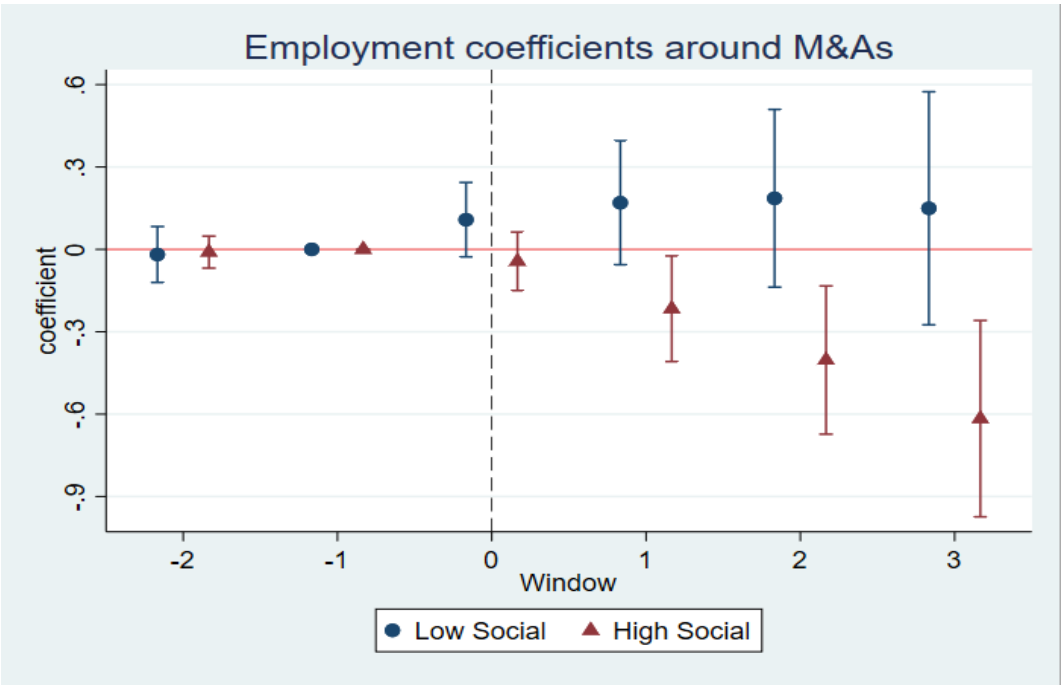


Figure 3 Employment by event year for the matched sample
The figure displays coefficient estimates for employment in a matched sample, with 95% confidence intervals. The match is based on industry, country, size and employment the year before the deal. The regressions include firm and year fixed effects.

Table 1
Sample distribution
This table shows a sample distribution of European targets from 2003 to 2016. Panel A shows the sample distribution by year and industry. Panel B shows the characteristics of acquisitions across targets' countries.

Panel A: Sample distribution by year and industry

Target primary US SIC code (two-digit)	Agriculture, Forestry, and Fishing (01-09)	Mining and Construction (10-17)	Manufacturing (20-39)	Transportation and Communications (40-48)	Wholesale Trade and Retail Trade (50-59)	Finance Insurance and Real Estate (60-67)	Services and Public Administration (70-97)	Total
2003	1	1	9	4	3	4	5	27
2004	0	1	12	6	6	1	10	36
2005	1	4	23	6	6	1	15	56
2006	0	8	29	10	10	4	20	81
2007	0	5	25	12	12	6	28	88
2008	0	3	28	4	6	4	35	80
2009	0	2	13	11	4	2	12	44
2010	0	3	22	6	10	7	24	72
2011	0	4	39	1	7	3	28	82
2012	0	6	23	8	11	5	34	87
2013	1	1	22	1	5	0	21	51
2014	0	3	25	4	4	4	17	57
2015	0	2	35	6	12	6	21	82
2016	1	2	27	3	8	5	31	77
Total	4	45	332	82	104	52	301	920

Panel B: Target and deal characteristics by country

Country	No. of Deals	Target's employment Mean	Target's employment Median	Cross-border Deals (%)	Diversified Deals (%)	Private target (%)
AT	10	94.20	91.50	80.00%	80.00%	100.00%
BE	58	96.64	38.50	82.76%	74.14%	94.83%
DE	118	357.14	79.50	76.27%	72.03%	88.98%
DK	2	76.00	76.00	100.00%	100.00%	100.00%
ES	99	341.23	76.00	74.75%	71.72%	96.97%
FI	20	75.00	30.50	80.00%	65.00%	90.00%
FR	72	305.40	77.00	61.11%	77.46%	83.33%
GB	297	591.01	143.00	59.19%	72.39%	95.29%
GR	1	362.00	362.00	0.00%	100.00%	100.00%
IE	8	123.88	25.50	88.89%	75.00%	100.00%
IT	76	298.25	93.00	82.89%	78.95%	97.37%
NL	50	387.64	25.00	76.00%	72.00%	98.00%
PT	5	95.20	37.00	100.00%	60.00%	80.00%
SE	105	185.09	26.00	78.10%	73.33%	87.62%
Total	921	374.55	78.00	70.61%	73.37%	93.05%

Table 2
Summary statistics
This table shows summary statistics for the firm and deal-level variables (in the year before the acquisition). Acquirers are divided into high and low CSR acquirers according to the sample median of CSR. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

		Full sample				High CSR		Low CSR		Differnce
	Variable	Obs	Mean	Median	SD	Mean	Median	Mean	Median	High - Low
Acquirer	CSR (Log)	921	3.52	3.69	0.71	4.08	4.07	2.97	3.13	1.11***
	Social (log)	921	3.69	3.75	0.57	4.07	4.11	3.31	3.40	0.76***
	Environmental (log)	921	2.99	3.67	1.53	4.06	4.11	1.91	2.42	2.15***
	Total assets (EUR Million)	920	34364.02	4531.64	134000.00	55210.44	6718.96	13517.61	3190.84	41692.82***
	Leverage	920	0.25	0.25	0.15	0.26	0.25	0.24	0.24	0.02*
	Employment	910	42412.13	18533.50	67164.42	60385.26	34625.00	24280.30	10664.00	36104.96***
	ROA	910	0.13	0.12	0.07	0.12	0.12	0.13	0.12	-0.01*
	Tobin Q	918	1.83	1.52	1.04	1.69	1.44	1.96	1.59	-0.028***
	Staff_empl (EUR Million)	290	56.10	47.21	47.87	56.58	52.23	55.77	41.42	0.82
	SG&A(log)	691	13.46	13.43	1.46	14.03	13.88	12.96	13.00	1.06***
	SG&A_toas	691	0.20	0.17	0.15	0.21	0.17	0.19	0.17	0.01
Target	Total assets (EUR Million)	921	210.49	15.83	949.82	274.21	17.35	146.91	14.93	127.29**
	Employment	921	374.55	78.00	1105.17	412.62	77.50	336.55	82.00	76.07
	Leverage	912	0.66	0.62	0.42	0.68	0.62	0.65	0.62	0.03
	Public target	921	0.07	0.00	0.25	0.07	0.00	0.07	0.00	0.00
	Labour productivity	502	5.15	0.23	31.48	2.07	0.23	8.35	0.24	-6.28**
	Labour productivity2	644	0.17	0.07	0.41	0.17	0.08	0.16	0.07	0.01
Deal	Diversify deal	920	0.73	1.00	0.44	0.80	1.00	0.67	1.00	0.13***
	Cross-border deal	921	0.70	1.00	0.46	0.68	1.00	0.72	1.00	-0.04

Table 3
Main results
This table presents estimates of the effect of acquirers' CSR performance on the post-merger employment in target firms. The dependent variable is the natural logarithm of employment plus one. *CSR* is the natural logarithm of the acquirer's CSR score. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. $Win(+k)$ is a dummy equal to one if the year is the kth year after the acquisition. Control variables include *Acquirer Size*, *Acquirer Leverage*, *Acquirer ROA*, *Target Size*, *Target Leverage*, *Diversify*, *Cross*, *GDP per capital* and *GDP growth*. Standard errors are robust and clustered at the acquirer level. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	Number of Employees (log)					
	(1)	(2)	(3)	(4)	(5)	(6)
Post	-0.115***	0.991***				
	(0.03)	(0.37)				
CSR * Post		-0.092**	-0.101**		-0.100**	-0.102**
		(0.05)	(0.05)		(0.05)	(0.05)
CSR*Win (-3)				-0.038		
				(0.04)		
CSR*Win (-2)				-0.036		
				(0.03)		
CSR*Win (0)				-0.031		
				(0.02)		
CSR*Win (1)				-0.124***		
				(0.04)		
CSR*Win (2)				-0.111**		
				(0.05)		
CSR*Win (3)				-0.147**		
				(0.06)		
Acquirer size * Post		0.064**	0.066***	0.065***	0.072***	0.072***
		(0.03)	(0.03)	(0.03)	(0.02)	(0.02)
Acquirer leverage * Post		-0.169	-0.172	-0.171	-0.172	-0.162
		(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
Acquirer ROA * Post		1.048*	1.061*	1.062*	1.055*	1.047*
		(0.60)	(0.60)	(0.60)	(0.62)	(0.62)
Acquirer Q * Post		-0.020	-0.022	-0.022	-0.020	-0.020
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Target size * Post		-0.105***	-0.105***	-0.104***	-0.107***	-0.108***
		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Target leverage * Post		-0.117*	-0.118*	-0.117*	-0.122*	-0.125*
		(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Diversify * Post					-0.107	-0.110*
					(0.07)	(0.07)
Cross * Post					-0.033	-0.033
					(0.07)	(0.07)
GDP Growth						-0.016
						(0.01)
GDP per Capita						-0.878
						(1.03)
Target FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Event FE	No	No	Yes	Yes	Yes	Yes
N	5,958	5,804	5,804	5,804	5,799	5,799
r2	0.873	0.879	0.879	0.879	0.879	0.880

Table 4
Controlling for governance and institutional ownership
This table presents the results that controlling for corporate governance and institutional ownership. The dependent variable is the natural logarithm of employment plus one. *CSR* is the natural logarithm of the acquirer's CSR score. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. *Governance* is the natural logarithm of the acquirer's governance score. *E-index 1* is the sum of the following dummy variables from Datastream: the presence of a poison pill, a golden parachute, a supermajority requirement and a staggered board. *E-index 2* has the same composition as *E-index 1*, except that staggered board is replaced by classified board. *IO_Total* is the percentage of total institutional ownership in the acquiring firm. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	Number of Employees (log)				
	(1)	(2)	(3)	(4)	(5)
CSR * Post	-0.101**	-0.075*	-0.161**	-0.165**	-0.108**
	(0.05)	(0.05)	(0.07)	(0.07)	(0.05)
Governance * Post		-0.104**			
		(0.04)			
E-index 1 * Post			-0.023		
			(0.04)		
E-index 2 * Post				-0.042	
				(0.05)	
IO_Total * Post					-0.250**
					(0.10)
Control * Post	Yes	Yes	Yes	Yes	Yes
Target FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Event FE	Yes	Yes	Yes	Yes	Yes
N	5,804	5,804	2,566	2,566	5,592
r2	0.879	0.880	0.887	0.887	0.886

Table 5
Effects of labour unions and investor protection
This table reports the triple difference-in-differences tests to examine the heterogeneous effects. The dependent variable is the natural logarithm of employment plus one. *CSR* is the natural logarithm of the acquirer's CSR score. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. *Union* is the country-level index which assesses the legal protection of labour unions. *CRL* is the country-level index which measures the protection of collective relations laws. *Source:* Botero et al. (2004). Standard errors are robust and clustered at the acquirer level. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

Panel A: Effects of labour union

	Number of Employees (log)			
	(1)	(2)	(3)	(4)
CSR * Post	-0.185**	-0.230***	-0.251**	-0.311***
	(0.07)	(0.07)	(0.11)	(0.10)
Union * Post	-0.840*	-0.901**		
	(0.45)	(0.43)		
CRL * Post			-1.12	-1.304*
			(0.72)	(0.69)
Union * CSR * Post	0.326**	0.325**		
	(0.13)	(0.13)		
CRL * CSR * Post			0.448**	0.480**
			(0.21)	(0.21)
Control * Post	No	Yes	No	Yes
Target FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Event FE	Yes	Yes	Yes	Yes
N	5,945	5,804	5,945	5,804
r2	0.874	0.880	0.874	0.880

Panel B: Effects of investor protection

	Number of Employees (log)			
	(1)	(2)	(3)	(4)
CSR * Post	0.140*	0.089	0.061	0.039
	(0.08)	(0.08)	(0.08)	(0.09)
ASDI * Post	0.916*	0.981**		
	(0.47)	(0.44)		
Creditor * Post			0.113	0.164*
			(0.10)	(0.09)
ASDI * CSR * Post	-0.348**	-0.341**		
	(0.14)	(0.13)		
Creditor * CSR * Post			-0.043	-0.055*
			(0.03)	(0.03)
Control * Post	No	Yes	No	Yes
Target FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Event FE	Yes	Yes	Yes	Yes
N	5,945	5,804	5,945	5,804
r2	0.874	0.880	0.874	0.880

Table 6
Legal origin and employment
This table presents the effects of the acquirer's legal origin on post-merger labour restructuring. The dependent variable is the natural logarithm of employment plus one. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. *Scandinavian* is a dummy variable that equals one if the acquirer's headquarter is located in a Scandinavian civil law country and zero otherwise. *Civil* is a dummy variable that equals one if the acquirer's headquarter is located in a civil law country and zero otherwise. *English* is a dummy variable that equals one if the acquirer's headquarter is located in a English common law country and zero otherwise. *French* is a dummy variable that equals one if the acquirer's headquarter is located in a French civil law country and zero otherwise. *German* is a dummy variable that equals one if the acquirer's headquarter is located in a German civil law country and zero otherwise. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	Number of Employees (log)		
	(1)	(2)	(3)
Scandinavian * Post	-0.134***		-0.161**
	(0.04)		(0.07)
Civil * Post		-0.023	
		(0.03)	
English * Post			-0.040
			(0.06)
French * Post			0.003
			(0.06)
German * Post			-0.055
			(0.07)
Control * Post	Yes	Yes	Yes
Target FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Event FE	Yes	Yes	Yes
N	10,327	10,327	10,327
r2	0.934	0.934	0.934

Table 7
Unbundling CSR

This table presents the results for unbundling CSR. The dependent variable is the natural logarithm of employment plus one. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. In columns (1)-(3), *Social* is the natural logarithm of the acquirer's social score. *Environmental* is the natural logarithm of the acquirer's environmental score. In column (4), *EF index* is defined as the equal weighting of the workforce and human rights sub-scores from the Refinitiv database. In column (5), *Monetary CSR dummy* is a dummy ranging from 0 to 4, which adds one if the acquirer provides day care services for its employees, has the policy to improve employee health & safety, trains its employees on health & safety, or has the policy to improve the skills training of its employees. In column (6), *Staff_empl* is measured as the acquirer's staff benefits divided by the total number of employees. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	Number of Employees (log)					
	(1)	(2)	(3)	(4)	(5)	(6)
Social * Post	-0.158***		-0.177**			
	(0.06)		(0.07)			
Environmental * Post		-0.014	0.016			
		(0.02)	(0.03)			
EF index * Post				-0.081**		
				(0.04)		
Monetary CSR dummy * Post					-0.064***	
					(0.02)	
Acquirer Staff_empl * Post						-1.611*
						(0.95)
Control * Post	Yes	Yes	Yes	Yes	Yes	Yes
Target FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Event FE	Yes	Yes	Yes	Yes	Yes	Yes
N	5,804	5,804	5,804	5,672	5,608	1,836
r2	0.879	0.879	0.879	0.882	0.880	0.846

Table 8
Cross-sectional variation analysis
This table reports the triple difference-in-differences tests to examine the cost-saving story. The dependent variable is the natural logarithm of employment plus one. *Social* is the natural logarithm of the acquirer's social score. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. In Panel A, the indicator variable *High Skill* takes the value of one if the target belongs to telecommunications, high-tech, and healthcare industries, and zero otherwise. The indicator variable *High R&D* takes the value if the industry-level R&D expenditure (of target firms) is above the sample median, and zero otherwise. The indicator variable *High Skilled employment* takes the value of one if the proportion of skilled workers among all workers is above the sample median, and zero otherwise. In Panel B, the indicator variable *High Financial dependence* takes the value of one if the industry-level financial dependence (of target firms) is above the sample median, and zero otherwise. The indicator variable *High Cash* takes the value if the target's cash holdings is above the sample median, and zero otherwise. In Panel C, the indicator variable *Same-industry* takes the value of one if the target is in the same industry as the acquirer. The indicator variable *Domestic* takes the value of one if the target is in the same country as the acquirer. *Labour productivity* is measured as the ratio of sales (in thousands) to the number of employees. The indicator variable *Low Labour Productivity* takes the value of one if the target's average labour productivity (before the deal) is below the sample median, and zero otherwise. Standard errors are robust and clustered at the acquirer level. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

Panel A: Targets in human-capital-intensive industries

	Number of Employees (log)		
	(1)	(2)	(3)
Social * Post	-0.132**	-0.051	-0.066
	(0.06)	(0.07)	(0.07)
High skill * Post	0.943		
	(0.61)		
High R&D * Post		0.784**	
		(0.37)	
High skilled employment * Post			0.653*
			(0.38)
High skill * Social * Post	-0.292*		
	(0.17)		
High R&D * Social * Post		-0.220**	
		(0.10)	
High skilled employment * Social * Post			-0.189*
			(0.11)
Control * Post	Yes	Yes	Yes
Target FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Event FE	Yes	Yes	Yes
N	5,804	5,642	5,625
r2	0.880	0.880	0.879

Panel B: Targets that are more financially constrained

	Number of Employees (log)	
	(1)	(2)
Social * Post	-0.057	-0.041
	(0.06)	(0.07)
High financial dependence * Post	0.741*	
	(0.38)	
High cash * Post		0.836**
		(0.39)
High financial dependence * Social * Post	-0.228**	
	(0.11)	
High cash* Social * Post		-0.222**
		(0.11)
Control * Post	Yes	Yes
Target FE	Yes	Yes
Year FE	Yes	Yes
Event FE	Yes	Yes
N	5,642	5,699
r2	0.880	0.881

Panel C: More opportunities for eliminating redundancy

	Number of Employees (log)		
	(1)	(2)	(3)
Social * Post	-0.088	-0.138**	-0.047
	(0.06)	(0.06)	(0.10)
Same-industry * Post	0.924**		
	(0.41)		
Domestic * Post		0.304	
		(0.45)	
Low labour productivity * Post			1.188**
			(0.53)
Same-industry * Social * Post	-0.229**		
	(0.11)		
Domestic * Social * Post		-0.076	
		(0.12)	
Low labour productivity * Social * Post			-0.344**
			(0.14)
Control * Post	Yes	Yes	Yes
Target FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Event FE	Yes	Yes	Yes
N	5,799	5,804	3,705
r2	0.880	0.879	0.880

Table 9
Effects on other target firm outcomes
This table presents the estimates of the effect of *Social* score on targets' performance. *Social* is the natural logarithm of the acquirer's social score. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. In columns (1) - (2), the dependent variables are *Sales per Employee* and *Added value per employee*. In columns (3) - (4), the dependent variables are *Material costs per employee* and *Sales to assets*. In columns (5) - (6), the dependent variables are *Staff costs to assets* and *Staff costs per employee*. In columns (7) (8), the dependent variable are *Asset growth* and *Fixed asset growth*. Standard errors are robust and clustered at the acquirer level. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	Sales_empl	Added value_empl	Material_empl	Sales_assets	Staff_assets	Staff_empl	Asset_growth	Asset_growth(fixed)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Social * Post	6.005**	0.035*	-0.074*	32.623**	0.051***	0.008*	-0.044*	-0.076*
	(2.35)	(0.02)	(0.04)	(13.13)	(0.02)	(0.00)	(0.03)	(0.04)
Control * Post	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Target FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Event FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,751	2,778	2,840	3,139	4,269	4,198	4,858	4,563
r2	0.444	0.618	0.875	0.437	0.832	0.617	0.195	0.175

Table 10
Announcement effects
This table examines the effects of social performance on announcement returns for acquiring firms. In Panel A, I report the CARs for the full sample of acquirers as well as the subsamples of high and low *Social* acquirers. Acquirers are divided into high and low *Social* acquirers according to the sample median of their social performance. In Panel B, the dependent variable is the acquirer's three-day CAR around a M&A announcement. *Social* is the natural logarithm of the acquirer's social score. In Panel C, the dependent variable is the acquirer's three-day CAR around a M&A announcement. Large $\Delta log(Emp)$ is an indicator that equals one if the pre-to-post decrease in log-employment is above the sample median, and zero otherwise. Standard errors are robust and clustered at the acquirer level. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

Panel A: Univariate tests

	Full sample		High Social		Low Social		Test of difference	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
CAR(-1, 1)	0.371***	0.077**	0.624***	0.202***	0.12	-0.047	0.504**	0.249**
CAR(-2, 2)	0.467***	0.259***	0.816***	0.412***	0.119	-0.007	0.697***	0.419**
CAR(-3, 3)	0.548***	0.314***	0.825***	0.481***	0.271	0.227	0.554*	0.254*

Panel B: Regressions of CAR (-1, 1)

	Acquirer CAR (-1, 1)		
	(1)	(2)	(3)
Social	0.613**	0.602**	0.563*
	(0.28)	(0.28)	(0.30)
Acquirer controls	Yes	Yes	Yes
Deal controls	No	Yes	Yes
Target controls	No	Yes	Yes
Year FE	Yes	Yes	Yes
Acquirer industry FE	Yes	Yes	Yes
Target industry FE	No	No	Yes
Acquirer and target country FE	No	No	Yes
N	796	786	786
r2	0.190	0.211	0.310

Panel C: Employment and CAR (-1, 1)

	Acquirer CAR (-1, 1)		
	(1)	(2)	(3)
Social	0.197	0.237	0.092
	(0.33)	(0.34)	(0.37)
Large $\Delta log(Emp)$	-3.121**	-2.999*	-3.450*
	(1.55)	(1.55)	(1.76)
Social * Large $\Delta log(Emp)$	0.853**	0.770*	0.933**
	(0.41)	(0.42)	(0.47)
Acquirer controls	Yes	Yes	Yes
Deal controls	No	Yes	Yes
Target controls	No	Yes	Yes
Year FE	Yes	Yes	Yes
Acquirer industry FE	Yes	Yes	Yes
Target industry FE	No	No	Yes
Acquirer and target country FE	No	No	Yes
N	796	786	786
r2	0.194	0.215	0.314

Table 11
Subsidiary-level evidence
This table presents the estimates at the subsidiary level. *CSR* is the natural logarithm of the acquirer's CSR score. *Social* is the natural logarithm of the acquirer's social score. *Environmental* is the natural logarithm of the acquirer's environmental score. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. In columns (1) - (3), the dependent variable is the natural logarithm of employment plus one. In columns (4) - (5), the dependent variables are *Staff costs to assets* and *Staff costs per employee*. In columns (6) - (7), the dependent variables are *Sales per Employee* and *Added value per employee*. In columns (8), the dependent variable is the natural logarithm of the number of subsidiaries plus one. Standard errors are robust and clustered at the acquirer level. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	Number of Employees (log)			Staff_assets	Staff_empl	Sales_empl	Av_empl	No.subsidiaries
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CSR * Post	-0.117*							
	(0.06)							
Social * Post		-0.092*		0.006	0.000	4.414	0.226	-0.042*
		(0.05)		(0.02)	(0.00)	(4.04)	(0.16)	(0.02)
Environmental * Post			-0.044					
			(0.03)					
Control * Post	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Target FE	No	No	No	No	No	No	No	Yes
Sub FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Event FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,446	2,446	2,446	1,865	1,828	1,437	1,363	9,047
r2	0.933	0.933	0.933	0.843	0.703	0.555	0.827	0.849

Table 12
Propensity sore match
This table reports the results using a matched sample. Acquirers are divided into high and low CSR subgroups according to the sample median of their *Social* score. I match targets in the high CSR group with those in the low CSR group on their size and employment in the year before the deal and I ensure targets in these two groups are in the same two-digit SIC code and the same country.

	Number of Employees (log)	
	(1)	(2)
Social * Post	-0.148*	-0.175**
	(0.08)	(0.09)
Control * Post	No	Yes
Target FE	Yes	Yes
Year FE	Yes	Yes
Event FE	Yes	Yes
N	4,157	4,206
r2	0.875	0.871

Table 13
Robustness tests

This table presents the estimates of robustness tests. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. In column (1), I employ an alternative ESG ratings database, Sustainalytics database. In column (2), the dependent variable is replaced as *Layoff*, which is an indicator variable that takes the value as one if the firm experiences a decrease in the number of employees greater than 15% over one year or two years, and zero otherwise. In column (3), I additionally control for the acquirer's management practices (Demerjian et al., 2012). In column (4), I exclude US acquirers. In column (5), I remove target firms in financial industries. Standard errors are robust and clustered at the acquirer level. In column (6), the dependent variable is replaced as *Asset sales*, which is an indicator variable that takes the value as one if the firm experiences more than a 15% drop in its fixed assets over one year or two years, and zero otherwise. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	Sustainalytics	Layoff	Managerial practices	Exclude US acquirers	Exclude financial targets	Asset sales
	(1)	(2)	(3)	(4)	(5)	(6)
Social * Post	-0.460*	0.058**	-0.199*	-0.163**	-0.128**	0.021
	(0.27)	(0.03)	(0.11)	(0.07)	(0.06)	(0.03)
Management * Post			-0.403			
			(0.50)			
Control * Post	Yes	Yes	Yes	Yes	Yes	Yes
Target FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Event FE	Yes	Yes	Yes	Yes	Yes	Yes
N	2,600	4,437	1,784	4,519	5,510	4,480
r2	0.870	0.377	0.861	0.876	0.877	0.375

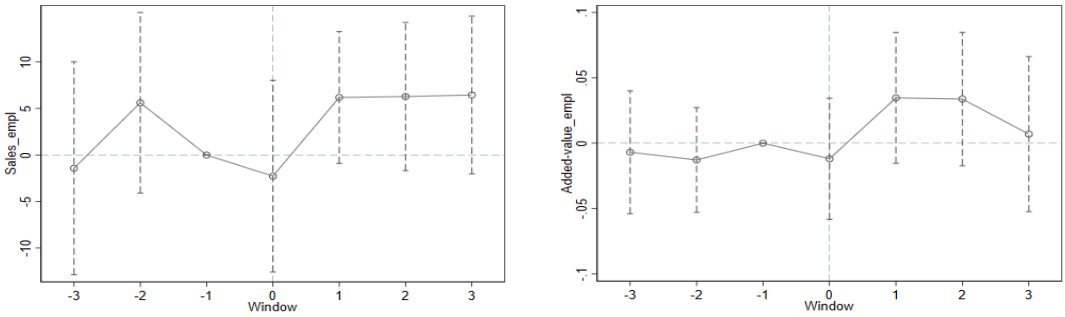
Appendix A Variable Descriptions

Variable	Description
CSR	The logarithm of Acquirer's CSR score, measured by taking the average of the social and environmental scores. Source: Refinitiv ESG.
Social	The logarithm of Acquirer's Social score. Source: Refinitiv ESG.
Environmental	The logarithm of Acquirer's Environmental score. Source: Refinitiv ESG.
Governance	The logarithm of Acquirer's Governance score, measured by taking the average of the management and shareholder scores. Source: Refinitiv ESG.
Acquirer size	The logarithm of the acquirer's total assets. Source: Worldscope.
Acquirer leverage	Acquirer's total debt, divided by the total assets. Source: Worldscope.
Acquirer ROA	Acquirer's EBITDA, divided by the total assets. Source: Worldscope.
Acquirer tobin's q	Acquirer's total assets plus market value of equity minus bookvalue of equity, divided by total assets. Source: Worldscope.
Acquirer staff_empl	Acquirer's staff costs (including salaries, social security, pension, allowances, commissions, share-based payment, etc) in millions of euros, divided by the number of employees. Source: Refinitiv ESG.
Institutional ownership	The percentage of total institutional ownership in the acquirer firm. Source: Factset.
E-index 1	The provisions in E-index include the presence of a posion pill, a golden parachute, a staggered board, and supermajority requirements. Source: Refinitiv ESG.
E-index 2	The provisions in E-index include the presence of a posion pill, a golden parachute, a classified board, and supermajority requirements. Source: Refinitiv ESG.
Monetary CSR dummy	A dummy ranging from 0 to 4, which adds one if the acquirer provides day care services for its employees, has the policy to improve employee health & safety, trains its employees on health & safety, or has the policy to improve the skills training of its employees. Source: Refinitiv ESG.
Target size	The logarithm of the target's total assets. Source: Amadeus.
Target leverage	Target's total debt, divided by the total assets. Source: Amadeus.
Employment	The logarithm of the targets' employment plus one. Source: Amadeus.
Labour productivity (Sales_empl)	Target's sales in millions of euros, divided by the number of employees. Source: Amadeus.

Labour productivity2 (Av_empl)	Target's value added in millions of euros, divided by the number of employees. Source: Amadeus.
Material_empl	Target's material costs in millions of euros, divided by the number of employees. Source: Amadeus.
Sales_assets	Targer's total sales, divided by the total assets. Source: Amadeus.
Staff_assets	Target's staff costs (including salaries, social security costs, pension costs, other staff costs, etc), divided by the total assets. Source: Amadeus.
Staff_empl	Target's staff costs (including salaries, social security costs, pension costs, other staff costs, etc) in thousands of euros, divided by the number of employees. Source: Amadeus.
Asset growth	The difference between targets' logarithm of assets and its lag. Source: Amadeus
Asset growth (fixed)	The difference between targets' logarithm of fixed assets and its lag. Source: Amadeus.
Diversify deal	A dummy equal to one if the acquirer's 3-digit SIC code is different from the target's 3-digit SIC code, and zero otherwise. Source: Zephyr.
Cross-border (domestic) deal	A dummy equal to one if the acquirer and target firms are from the different nations (same nation). Source: Zephyr.
Legal origins	The legal origin of the company of each country in which the acquirer is headquartered. Following Liang and Renneboog (2017), I distinguish five major legal origins: English common law, French civil law, German civil law, Scandinavian civil law, and socialist law. Source: Liang and Renneboog (2017).
Union	A country-level index which measures the legal protection of labour unions. Source: Botero et al. (2004).
CRL	A country-level index which measures the protection of collective relations laws. Source: Botero et al. (2004).
ASDI	A country-level index which measures the investor protection. Source: Djankov et al. (2008).
Creditor	A country-level index which measures the debtholder protection. Source: Djankov et al. (2008).
Egalitarianism	Egalitarianism score: measures the emphasis on cooperative rather than hierarchical relations in a country. Source: Schwartz (2004).
Low labour productivity	A dummy equal to one if the target's labour productivity is below the sample median, and zero otherwise. Source: Amadeus.

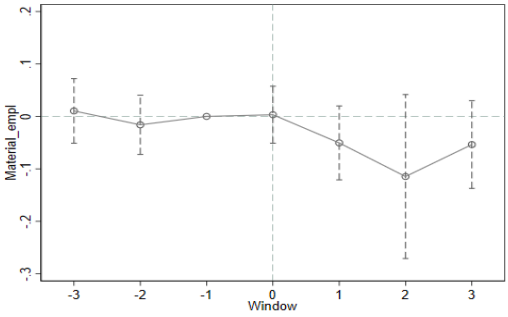
High skill	A dummy equal to one if the target belongs to telecommunications, high-tech, and healthcare industries, and zero otherwise.
High R&D	A dummy equal to one if the target's industry-level R&D expenditure is above the sample median, and zero otherwise. Source: Compustat.
High skilled employment	A dummy equal to one if the proportion of skilled workers among all workers in the industry is above the sample median, and zero otherwise. Sourse: Bureau of Labor Statistics.
High financial dependence	A dummy equal to one if the industry-level financial dependence is above the sample median, and zero otherwise. Source: Compustat.
High cash	A dummy equal to one if the target's cash holdings is above the sample median, and zero otherwise. Source: Amadeus.
Large acquirer	A dummy equal to one if the acquirer's size is above the sample median, and zero otherwise. Source: Worldscope.
High labour volatility	A dummy equal to one if the target's industry-level labour volatility above the sample median, and zero otherwise. Source: Compustat.
Negative GDP change	One year percentage decrease in the target's country GDP, with positive changes set to zero. Source: World bank.
Prior mass layoff	A dummy equal to one if the acquirer has a mass employee layoff in the 5 years before the deal, and zero otherwise. Source: Worldscope.

Appendix B Supplementary Data

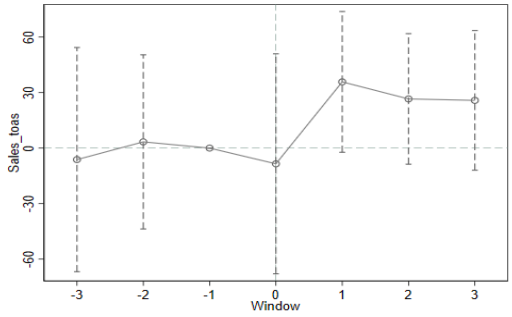


(a) Sales_empl

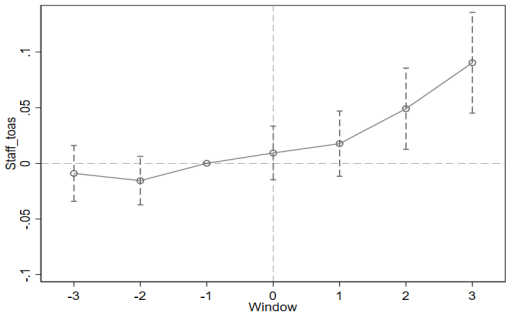
(b) Added-value_empl



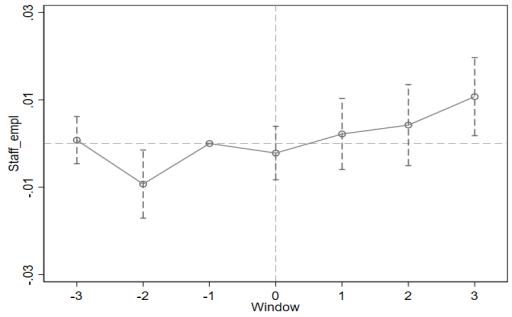
(c) Material-costs_empl



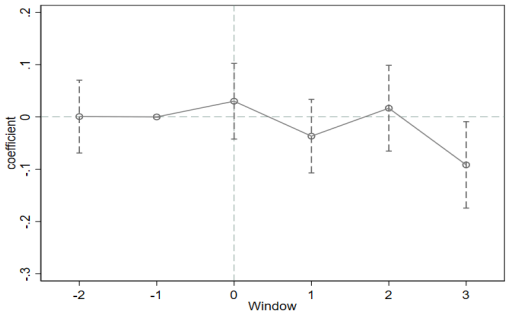
(d) Sales_asset



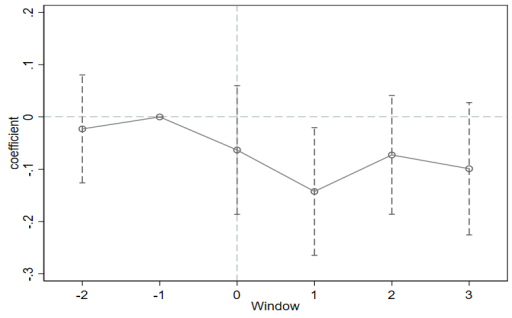
(e) Staff-costs_asset



(f) Staff-costs_empl



(g) Asset_growth



(h) Asset_growth(fixed)

Figure B.1 Effects on other target firm outcomes
The figure displays coefficient estimates of the fixed effects model for labour productivity, technical efficiency, staff costs, and asset growth in target firms, with 95% confidence intervals. I include target, year and event-time fixed effects in my specification.

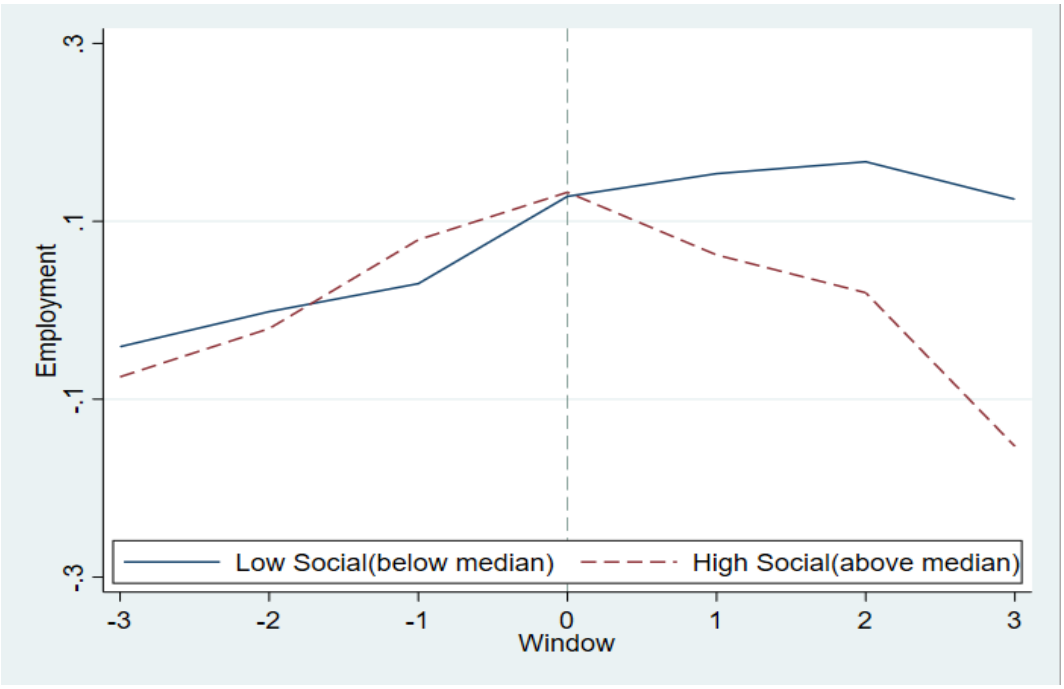


Figure B.2 Rescaled average value of employment
The figure presents the yearly rescaled average values of employment for targets in high and low CSR groups. For each year, the rescaling is done by deducting the three-year average before the deal (i.e. $T-3$ to $T-1$) from each annual average figure of employment.

Table B.1
Sample construction process
This table describes the sample construction process of the deals in this paper.

Total Number of deals	401,156
Deals with targets in Europe	200,116
Deals where the acquirer has less than 50% of the target's shares before the deal and more than 50% after the deal	163,099
Deals for which I have acquirers' CSR data in the year before the deal	6,851
Deals for which I have acquirers' accounting data in the year before the deal	6,813
Deals for which I have targets' accounting data both before and after the deal	921

Table B.2
5-year event window
This table presents the results for a 5-year event window. The dependent variable is the natural logarithm of employment plus one. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. In columns (1)-(3), *Social* is the natural logarithm of the acquirer's social score. *Environmental* is the natural logarithm of the acquirer's environmental score. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	Number of Employees (log)			
	(1)	(2)	(3)	(4)
CSR * Post	-0.094**			
	(0.04)			
Social * Post		-0.133**		-0.136**
		(0.05)		(0.06)
Environmental * Post			-0.020	0.002
			(0.02)	(0.02)
Control * Post	Yes	Yes	Yes	Yes
Target FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Event FE	Yes	Yes	Yes	Yes
N	4,385	4,385	4,385	4,385
r2	0.896	0.896	0.896	0.896

Table B.3
Controlling for domestic and foreign institutional ownership
This table presents the results that controlling for domestic and foreign institutional ownership. The dependent variable is the natural logarithm of employment plus one. *CSR* is the natural logarithm of the acquirer's CSR score. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. *IO_Dom* is the percentage of total domestic institutional ownership in the acquiring firm.*IO_For* is the percentage of total foreign institutional ownership in the acquiring firm. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	Number of Employees (log)		
	(1)	(2)	(3)
CSR * Post	-0.109**	-0.082*	-0.103**
	(0.05)	(0.05)	(0.05)
IO_Dom * Post	-0.191**		-0.263**
	(0.09)		(0.11)
IO_For * Post		-0.122	-0.410
		(0.26)	(0.30)
Control * Post	Yes	Yes	Yes
Target FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Event FE	Yes	Yes	Yes
N	5,592	5,592	5,592
r2	0.886	0.885	0.886

Table B.4
Effects on target firm innovation
This table presents the estimates of the effect of *Social* score on other targets' innovation activities. *Social* is the natural logarithm of social scores plus one. *Post* is a dummy variable that equals one for the years after an acquisition, and zero otherwise. The dependent variable is the natural logarithm of one plus number of patents.

	Patents	
	(1)	(2)
Social * Post	-0.193***	-0.195**
	(0.06)	(0.08)
Control * Post	No	Yes
Year FE	Yes	Yes
Target FE	Yes	Yes
Event FE	Yes	Yes
N	1,727	1,129
r2	0.747	0.762

Table B.5
Announcement effects
This table examines the effects of CSR on announcement returns for acquiring firms. In Panel A, I report the CARs for the full sample of acquirers as well as the subsamples of high and low CSR acquirers. Acquirers are divided into high and low CSR acquirers according to the sample median of their social performance. In Panel B, the dependent variable is the acquirer's three-day CAR around an M&A announcement. *CSR* is the natural logarithm of the acquirer's social score. Standard errors are robust and clustered at the acquirer level. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

Panel A: Univariate tests

	Full sample		High CSR		Low CSR		Test of difference	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
CAR(-1, 1)	0.371***	0.077**	0.560***	0.162***	0.183	-0.007	0.377*	0.169*
CAR(-2, 2)	0.467***	0.259***	0.693***	0.440***	0.241	0.000	0.452*	0.440**
CAR(-3, 3)	0.548***	0.314***	0.599***	0.328***	0.497**	0.293*	0.102	0..035

Panel B: Regressions of CAR (-1, 1)

	Acquirer CAR (-1, 1)			
	(1)	(2)	(3)	(4)
CSR	0.646***	0.655***	0.583**	0.598**
	(0.21)	(0.21)	(0.24)	(0.24)
Acquirer controls	Yes	Yes	Yes	Yes
Deal controls	No	Yes	No	Yes
Target controls	No	Yes	No	Yes
Year FE	Yes	Yes	Yes	Yes
Acquirer industry FE	Yes	Yes	Yes	Yes
Target industry FE	No	No	Yes	Yes
Acquirer and target country FE	No	No	Yes	Yes
N	796	786	795	786
r2	0.154	0.178	0.268	0.286

Table B.6
Employment and announcement return (placebo test)
This table examines the effects of environmental performance on announcement returns for acquiring firms. The dependent variable is the acquirer's three-day CAR around a M&A announcement. *Environmental* is the natural logarithm of the acquirer's environmental score. Large $\Delta log(Emp)$ is an indicator that equals one if the pre-to-post decrease in log-employment is above the sample median, and zero otherwise. Standard errors are robust and clustered at the acquirer level. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	Acquirer CAR (-1, 1)		
	(1)	(2)	(3)
Environmental	0.141	0.162	0.167
	(0.12)	(0.13)	(0.15)
Large $\Delta log(Emp)$	-0.342	-0.499	-0.213
	(0.55)	(0.57)	(0.58)
Environmental * Large $\Delta log(Emp)$	0.130	0.119	0.069
	(0.16)	(0.16)	(0.17)
Acquirer controls	Yes	Yes	Yes
Deal controls	No	Yes	Yes
Target controls	No	Yes	Yes
Year FE	Yes	Yes	Yes
Acquirer industry FE	Yes	Yes	Yes
Target industry FE	No	No	Yes
Acquirer and target country FE	No	No	Yes
N	796	786	786
r2	0.190	0.212	0.310

Table B.7
Moral capital channel

This table reports the triple difference-in-differences tests to examine the moral capital channel. The dependent variable is the natural logarithm of employment plus one. *Social* is the natural logarithm of the acquirer's social score. *Post* is a dummy variable that takes a value of one for observations in the years after the deal, and zero otherwise. In column (1), the indicator variable *Large Acquirer* takes the value of one if the acquirer's size is above the sample median, and zero otherwise. In column (2), *Negative GDP change* is the 1-year percentage decrease in the target's country GDP, with positive changes set to zero. In column (3), the indicator variable *High Labour volatility* takes the value of one if the industry-level labour volatility (of target firms) is above the sample median, and zero otherwise. In column (4), the indicator variable *High Responsibility* takes the value of one if the country level "Responsibility is really important" is above the sample median, and zero otherwise. In column (5), the indicator variable *High Work* takes the value of one if the country level "Work is really important" is above the sample median, and zero otherwise. In column (6), *Prior mass layoff* is an indicator variable that takes the value of one if the acquirer has a mass employee layoff in the 5 years before the deal, and zero otherwise. Standard errors are robust and clustered at the acquirer level. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	Number of Employees (log)					
	(1)	(2)	(3)	(4)	(5)	(6)
Social * Post	-0.149**	-0.166**	-0.170***	-0.230***	-0.047	-0.220***
	(0.07)	-0.07	(0.06)	(0.08)	(0.09)	(0.07)
Acquirer size * Post	-0.015					
	(0.41)					
High Labour volatility * Post		-0.049				
		(0.38)				
Negative GDP change * Post			8.304			
			(6.33)			
High Responsibility * Post				-0.362		
				(0.41)		
High Work * Post					0.343	
					(0.37)	
Prior mass layoff * Post						-0.845**
						(0.40)
Social * Acquirer size * Post	-0.022					
	(0.11)					
Social * High Labour volatility * Post		-0.011				
		(0.11)				
Social * Negative GDP change * Post			-2.719			
			(1.81)			
Social * High Responsibility * Post				0.124		
				(0.11)		
Social * High Work * Post					-0.138	
					(0.11)	
Social * Prior mass layoff * Post						0.195*
						(0.11)
Negative GDP change			1.237			
			(2.05)			
Control * Post	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Target FE	Yes	Yes	Yes	Yes	Yes	Yes
Event FE	Yes	Yes	Yes	Yes	Yes	Yes
N	5,804	5,642	5,804	5,374	5,374	5,465
r2	0.880	0.879	0.880	0.878	0.878	0.882

Table B.8
Propensity sore match (with deal characteristics)
This table reports the results using a matched sample. Acquirers are divided into high and low CSR subgroups according to the sample median of their *Social* score. I match targets in the high CSR group with those in the low CSR group on their size, employment, and deal characteristics in the year before the deal and I ensure targets in these two groups are in the same two-digit SIC code and the same country.

	Number of Employees (log)	
	(1)	(2)
Social * Post	-0.134	-0.165*
	(0.09)	(0.09)
Control * Post	No	Yes
Year FE	Yes	Yes
Target FE	Yes	Yes
Event FE	Yes	Yes
N	3,751	3,667
r2	0.867	0.879

Table B.9
Propensity sore match (Environmental score)
This table reports the results using a matched sample. Acquirers are divided into high and low CSR subgroups according to the sample median of their *Environmental* score. I match targets in the high CSR group with those in the low CSR group on their size, and employment in the year before the deal and I ensure targets in these two groups are in the same two-digit SIC code and the same country.

	Number of Employees (log)	
	(1)	(2)
Environmental * Post	0.045	0.060
	(0.09)	(0.12)
Control * Post	No	Yes
Year FE	Yes	Yes
Target FE	Yes	Yes
Event FE	Yes	Yes
N	4,075	3,994
r2	0.856	0.858

Table B.10
Instrumental variable test
This table presents my two-stage least square estimations. In the first sage, the social score is regressed on two instruments, which are the country's egalitarianism value and the 5-year lagged lagged social score. In the second stage, the dependent variable is the natural logarithm of employment plus one and *Social_adj* is the predicted value of the social score. *, ** and *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	First	Second
	Social * Post	Number of Employees (log)
	(1)	(2)
Egalitarianism * Post	0.225***	
	(0.08)	
Lagged Social * Post	0.473***	
	(0.04)	
Social_adj * Post		-0.299**
		(0.12)
Control * Post	Yes	Yes
Target FE	Yes	Yes
Year FE	Yes	Yes
Event FE	Yes	Yes
Undertidentification test (p-value)	0.000	
K-P F-stat	90.90	
Overidentification test (p-value)		0.132
Observations	3,301	3,301
R-squared		0.035