# The influence of Unions on CSR: is there a trade-off between employee-oriented and non-employee-oriented policies?

Word count: 10788

**Abstract**

Strategic managers are consistently faced with decisions of how to allocate a company's scarce resources to meet the demands of shareholders and other powerful and legimate stakeholders. This paper analyses whether higher union density at company level pushes management to engage more in CSR. Drawing from stakeholder theory and the resource allocation approach of CSR as well as union voice and monopoly models, this paper finds that companies have to substitute non-employee-oriented CSR with employee-oriented CSR as union density increases but is still at low levels. At higher levels of union density, companies can complement both types of CSR. This perhaps represents a reinforcement of mutual interests between management and organised labour, which has implications for managerial prerogatives as well as union positioning in the labour and political process.

Keywords: Corporate Social Responsibility, Unions, Stakeholder theory

## 1 Introduction

The spread of voluntary corporate initiatives in the environmental, social, and governance domains - commonly referred to as "corporate social responsibility (CSR)" - can be attributed to increased institutional and social pressures for ethical, responsible, and sustainable business practices (Carroll, 1979; Aupperle, 1991; Campbell, 2007; Waddock, 2008). Firms can respond to such pressures by taking actions that are visible and directly related to its external stakeholders (e.g suppliers, consumers) via better disclosure practices, branding, low involvement with 'sinful' industries, and improved product quality control. They can also take actions that are most salient to internal stakeholders (e.g. employees). Such actions can be in the form of setting up conditions and work environments that foster health and safety. The scope of CSR activities that a company may undertake can, therefore, affect multiple stakeholders both inside and outside the firm.

The traditional boundary between internal and external stakeholders is based on the level of direct supervisory control that management has over the stakeholder. However, as research points out, it is possible to manage external stakeholder relationships as well, making the distinctions blurred between internal and external stakeholders (Harrison and St. John, 1996). This paper distinguishes between internal and external stakeholders based on the three-dimensional differences between insiders and outsiders by Fanelli and Misangyi (2006). First, internal stakeholders are motivated by management to produce and maintain internal effectiveness whereas external stakeholders are motivated at arms' length by management to participate in order to facilitate the firm's activities via, for example, supplier contracts and consumer purchases. Second, the relationship between internal stakeholders and management is hierarchical, while the relationship between outsiders and management is network-based. Third, management communication with internal stakeholders is captive, where the social distance between the stakeholder and management does not impact the salience and effect of the communication from management. With external stakeholders, management communication is more competitive, where management is competing with other firms and actors for the attention of the outsiders. Mattingly and Berman (2006) also distinguishes corporate social action between technical stakeholders and institutional stakeholders. Employees are more closely associated with the technical environment of the firm based on resource exchanges between input (effort) and output (production) rather than the institutional environment of the firm, which governs the normative expectations from the firm. They are, therefore, primarily technical internal stakeholders rather than instutional external stakeholders. Corporate social action towards employees would consist of elements different to corporate social action towards insitutional external stakeholders.

While a big section of the literature on CSR has been populated with studies that have related social performance to financial performance (see Margolis et al. (2007) for a meta analysis), there still remains a relative paucity of papers with regards to the influence of stakeholder demand on corporate supply of CSR. In other words, the particular stakeholder pressure that impacts CSR has not been well established. The gaps are both theoretical and empirical. Consider, specifically, the case of employees as a stakeholder group. Do they have enough power internally - or can they draw sufficient attention to the company - such that their employment rights are upheld in the most suitable manner? Can they, as a stakeholder, pressure the company to mend and improve its health and safety procedures? Can they push the company to indulge in practices that are also beneficial to society and to the environment?

The main theoretical focus of this paper is the influence of stakeholder pressure on corporate delivery of CSR. Stakeholder theory (e.g. Freeman, 1984) as well as the resource allocation approach of CSR based on slack resources theory are the main driving factors from the supply side that guide this discussion. I take the view that companies want to meet the demands of their relevant stakeholders (consumers, suppliers, investors, employees) who have legitimacy, urgent needs and who have power vis-à-vis management. In particular, this paper looks at the role of trade unions in the British context. The British context of employment relations (in the private sector) probably offers the best setting to study this question because unions have not been eroded via anti-union legislation such as in the United States, and unions are not institutionalized such as in continental European countries. Instead, unions can (freely) organize bargaining units within individual firms (Metcalf, 2003; Hyman, 2010), and this allows for a comparison across time of the interplay between stakeholder (union) pressure and idiosyncratic corporate delivery of CSR. The underlying union frameworks that are used alongside the aforementioned theories are the union voice (Freeman and Medoff, 1984) and the union monopoly (power) models (e.g. Reynolds, 1981; Oswald, 1985). These models are used from the stakeholder demand-side of CSR.

To test the theoretical predictions, I use an originally-crafted dataset on CSR from SustainAlytics. Financial data are added from DataStream to create a longitudinal sample of firms listed on the FTSE100 index, one of the main market indices in the United Kingdom. Using fixed-effects estimation techniques, this paper finds that higher union density is associated with more employee-oriented CSR. As union density rises, firms create more policies and programs that are geared towards improving employee relations. On the other hand, estimations show that the relationship between non-employee-oriented CSR and union density is more complex. At low levels of unionization, as union density rises, companies have to "sacrifice" non-employee-oriented CSR in order to meet the demands of unions. However, at higher levels of unionisation, firms are able to invest in policies and programs that are more directly related to external stakeholders as well as meet the demands of employees and unions. In other words, at low levels of unionization, companies have to substitute non-employee-oriented with employee-oriented CSR, but as unions become more entrenched, companies invest in both components of CSR in complementary fashion.

This paper makes at least three contributions to the literature on CSR and on the impact of stakeholders, in particular labor unions, on CSR profiles. First, from a theoretical point of view, although there have been many papers that have looked at institutional differences among countries leading to different CSR practices (e.g. Matten and Moon, 2008; Iaonnou and Serafeim, 2012), there have been very few that have taken an inside look at the corporation, in particular with regards to the particular and sometimes conflicting demands of key internal and external stakeholders. In industrial relations, the literature is ripe in terms of the influence of unions on R&D (Hirsch, 1992), innovation (Bradley et al., 2015), and profitability and share value (Ruback and Zimmerman, 1984; Abowd, 1989; Lee and Mas, 2012). This paper, to the author's knowledge, is the first to look at the influence of unions on corporate social responsibility. Second, this paper adds a layer of complexity not studied before in the comparative CSR literature. While most papers that deal with comparative CSR ignore within-country idiosyncratic company differences, this paper proposes that these differences are important and play a significant role in explaining individual company profiles of CSR. As such, future papers in the comparative CSR sphere could or should exploit these differences as well. Third, from an empirical perspective, this paper adds to a debate that has emerged in the literature about the substitutability or complementarity between internal and external CSR. On the one hand, Matten and Moon (2008) argues that there may be a *substitution* that is necessary between implicit elements of CSR (e.g. bounded by rules and regulations such as collective bargaining) and explicit elements (such as social community involvement and support). On the other hand, Gjolberg (2009) argues that they are complements. The findings of this paper, more robust and closer to the corporate stakeholder approach and not limited to using national proxies for collective bargaining strength, suggest that both are at play. At low levels of power exercised by internal stakeholders, substitution takes place, whereas at higher levels, there is complementarity. A finding which has interesting implications for management and perhaps union renewal debates.

The rest of the paper is organized as follows. Section 2 explains the theoretical lenses through which union influence on CSR will be analyzed and develops some testable hypotheses. Section 3 describes the data and methodology that will be used to test the hypotheses. Section 4 details the results of the paper while Section 5 leads the discussions and concludes.

## 2 Corporate Supply and Stakeholder Demand of CSR

With globalisation and continued demand from watchdog groups, amongst others, for companies to engage in and improve on a broad range of social activities, management is often faced with the strenuous task of allocating a company's scarce resources in order to build shareholder value as well as earn goodwill from stakeholders. The neo-classical view of allocating resources to activities other than those that directly maximise shareholder returns is an agency loss (Friedman, 1970). The strategic management literature has taken a more pluralistic view on the link between social activities and firm/shareholder profitability. Several papers have been written to empirically demonstrate a link between social activities generated in a CSR setting and financial returns (e.g. Hillman and Keim, 2001, McWilliams and Siegel, 2001). Given that the meta-analytic evidence from Margolis et al. (2007) yielded a modest positive relationship between social and financial performance at best, curvilinear relationships (e.g. Barnett and Salomon, 2006, 2012) have been proposed and tested, and mediating relationships have also been proposed and tested (Surroca et al. 2010). With the link between CSR and financial performance being curvilinear and dependent on intervening variables, it begs the questions: why do companies engage in CSR and in what type of CSR do they engage?

While the purpose of this paper is not to examine all the reasons behind CSR engagement, I will focus on two elements: 1) instrumental stakeholder approach, and 2) resource allocation approach based on slack resources theory. According to instrumental stakeholder theory (Donaldson and Preston, 1995), when a firm develops a close and trusting relationship with a broad base of primary stakeholders, this leads to intangible benefits that generate competitive advantage for the firm. As such, managing for stakeholders can lead to higher financial performance, which is beneficial to shareholder value as well (Harrison et al., 2010). A key question here is: who are the stakeholders and to what extent can management meet all of their demands, particularly if these demands are contradictory and if they cause too high a strain on the company's scarce resources? To get a better comprehension of this, we refer to the resource allocation approach of CSR and to stakeholder salience theories. The resource allocation approach of CSR (e.g. McWilliams and Siegel, 2001; Waddock and Graves, 1997) suggests that when firms have to allocate slack resources emanating from higher financial returns, they will target CSR activities that are "ideal" to the firm given its size and position in the industry. Mackey et al. (2007) suggests that this allocation is determined by the market and industry. Ideal may also mean prioritisation given to primary stakeholders' demands (Clarkson, 1995; Harrison et al., 2010). In particular, management may allocate resources to and prioritise the demands of salient stakeholders over others. Salience, in Mitchell et al. (1997), depends on three elements: urgency of claim/need, legitimacy of claim, and power of stakeholder. The higher the salience of a stakeholder to a decision-maker at a particular time, the higher the level of priority given to the demands and needs of that stakeholder (Magness, 2008). I argue that corporate allocation and supply of CSR resources is contingent on the level of salience of respective stakeholders. In the particular context of this paper, I differentiate between employee-oriented and non-employee-oriented CSR by focusing on the salience of the employee stakeholder.

## 2.1 Union power and employee-oriented CSR

On the demand side of CSR, employees can be classified as primary stakeholders (Clarkson, 1995). Michell et al. (1997) classify employees as dependent stakeholders. In other words, this stakeholder group has both legitimate needs and urgent needs from management. However, when these employees are unionised, I argue that they gain from the power of the union and, therefore, unionised employees become definitely salient stakeholders. The union literature offers clear insights about this. Unions represent a collective voice of employees (Freeman and Medoff, 1984). This model suggests 'positive voice effects' such that if unions voice their members' concerns via the collective bargaining process, this will bring the issues to the attention of management, which will then respond by making some necessary concessions in favour of employees. Such concessions or positive changes have been reported in the literature on job quality where unions' voice acted as a positive catalyst for change (e.g. Wood, 2008; Hoque et al., 2017). Under the voice model, another way of contemplating positive voice effects is through unions' monitoring and reporting role. When a company adopts a CSR practice that is employee-oriented, the union can monitor and report on the successful or unsuccessful implementation of this practice, i.e. the union can use its voice to hold the company to account. However, whether or not the expression of collective voice is heard by and acted upon by management largely depends on the union's bargaining strength. In a liberal market economy such as the UK where unions are not protected via co-determination laws, for example, the ability of unions to successfully plead their case to management depends on the power of these unions (Guest and Conway, 2004). Union power can be a complex construct, but at firm level, power has generally been proxied by union density (e.g. Barth et al., 2017). Union decline (in power) has also been proxied by falling union densities (see Crouch, 2017). The higher the power of the unions, the more they can generate positive voice effects. In the context of CSR, this would be akin to union power positively influencing employee-oriented CSR.

Hypothesis 1. At higher levels of union density, companies develop more employee-oriented policies and programs of CSR

## 2.2 Union power and non-employee-oriented CSR

How does one analyze the relationship between unions and non-employee-oriented CSR? A convenient place to start is to consider how European unions view CSR in general. In some major European economies, the industrial relations system is such that unions are heavily institutionalized (and protected) within the system. Research by Preuss et al. (2006) suggests five possible union responses to CSR, with most of the unions citing CSR as a threat since it transfers more power and discretion to managers. One of five possibilities that is discussed is that CSR is only a method to improving corporate image (to external stakeholders) while diverting attention away from other less popular actions (typically towards internal stakeholders such as employees). Overall, across Europe Preuss et al. (2006) finds that unsurprisingly unions emphasize the employee-oriented actions of CSR more than the external actions. Unions, for example, emphasize improved work-life balance, better child care facilities, flexible working arrangements. However, unions are less interested in non-employee-related elements. Few unions in the research by Preuss et al. (2006) mention corporate community involvement, and even fewer unions are interested in the preservation of the natural environment.

In Britain, the interviews of union officials on CSR quoted in Gold et al. (2015) can shed some light on the perception of CSR by unions in the UK. Three points came from those interviews. First, unions are of the opinion that companies have broadened their scope of CSR by focusing not only on philanthropic activities but also by engaging more directly with multiple stakeholders in order to foster better management-stakeholder relationships. Second, unions consider CSR-branded domestic labour practices as part of their bargaining agenda rather than CSR conducted by the company. In other words, they take ownership of the good domestic practices enacted by companies through their own bargaining power. CSR, on the other hand, refers mostly to compliance with international conventions and regulations in the company's dealings with NGOs such as the fair trade movement. Third, some unions are still sceptical of CSR: they point out that companies can voluntarily choose their own CSR agenda and may focus on anti-corruption rather than labour standards. The possibility of cherry-picking by companies seems to be a source of high scepticism about union leaders. At the same time, unions may sometimes use CSR as a "marketing" technique to gain some leverage with management. For example, one of the unions interviewed in Gold et al. (2015) campaigned against the relocation of a plant purely on environmental ground (and not on the grounds of labour practices). In other words, while unions are sceptical of CSR, they are also using the CSR tools to defend their own interests in pragmatic fashion (appealing to external stakeholders' interests) in the UK.

To theorize the relationship between unions and non-employee-oriented CSR, I will draw from the union monopoly model. The monopoly theory of labour unions (e.g. Reynolds, 1981; Oswald, 1985) posits that union decision makers will negotiate wage rates (and other benefits) which maximise the monetary surplus above the supply price of labour and hence raise costs for the company. If unions perceive that companies have limited resources devoted to CSR (Gomez and Verma, 2012), the monopoly model suggests that powerful unions will extract maximum rent for their members (employee-oriented CSR) leaving companies with fewer resources for non-employee-oriented CSR. A substitution of non-employee-oriented with employee-oriented CSR is expected (Matten and Moon, 2008).

However, the institutional peculiarity of the UK industrial relations system merits further analysis of the aforementioned. In a country where unions are free to organise but where neither collective bargaining nor unionization is entrenched, what role do external constituents play in a particular union's utility function? Are external constituents perceived as competitors for company resources or can they be collaborators in pursuing common interests? In Sweden, where collective bargaining is broader and union density significantly higher than the UK, collaboration between unions and NGOs interested in supply chains and labour rights has been successful despite difficulties (Egels-Zanden and Hyllman, 2011). In the UK, interviews by Gold et al. (2015) also suggest that unions are able to explicitly further the causes of environmental NGOs while implicitly protecting their members' rights by campaigning against the relocation of some manufacturing plants on environmental grounds. Some unions have perhaps realised that mutual gains between external constituents (particularly supply chains and NGOs) and union members are possible. Wright (2011) exemplifies how some unions in the UK are putting pressure on client firms in their own employers' value chains in order to raise labour standards and improve labour practices in the client firms. In other words, unions are not only bargaining with their own employers but they are also going beyond in the value chain. Some UK unions seem to be working with external constituents for a variety of good reasons. However, while this complementarity (Gjolberg, 2009) can happen across the board in Sweden given the spread and socio-political dimension of unionization, the same cannot be said about the UK. Not all unions are the same and not all have the same power and same breadth of operation. Importantly, given the interviews from Gold et al. (2015), we do not know whether the needs of external constituents are even important to unions. That is, we do not know whether and to what extent the utility function of unions is dependent on the needs of external constituents.

At first glance, if we are to restrict ourselves to union power, without any recognition of the utility function of specfic unions and their differential relationships to various management bodies, then we can posit a curvilinear relationship such that at low levels of power (union density), unions do not influence non-employee-oriented CSR, whereas as higher levels of power (union density), unions can influence non-employee oriented CSR. The direction of influence is, however, ambiguous. According to the union monopoly model, unions will extract maximum rent for their members and leave fewer slack resources for management to devote to external stakeholders. Hence, we expect a substitution from non-employee-oriented CSR to employee-oriented CSR. However, it is also possible that powerful unions see a bigger picture such that external stakeholders are important to them and become an agent of positive change, as aforementioned with the union-NGO partnerships. In such cases, unions will induce management to complement employee-oriented with non-employee-oriented CSR. In general, therefore, the relationship between union power and non-employee-oriented CSR is neutral, similar to posited relationships in the CSR-financial performance link (e.g. Lee et al., 2018; McWilliams & Siegel, 2001; Surroca et al, 2010). There can exist a trade-off such that there can be 1) competition for slack resources, giving rise to a substitution effect, or 2) mutual rent-sharing giving rise to complementarity between employee-oriented and non-employee-oriented CSR.

**Hypothesis 2** *The relationship between union density and non-employee-oriented CSR is neutral.*

# 3 Empirical Methodology

## 3.1 Sample and data collection

The sample is constructed from a number of databases. The CSR data for this study were provided directly by SustainAlytics, a global leader in sustainability reporting and Environment-Social-Governance (ESG) metrics. The primary objective of SustainAlytics, it should be noted, is to provide reliable and comparable information to investors who want to integrate ethical and other social issues into their investment strategy and portfolio. For example, pension funds are often mandated to include CSR in their due diligence process of portfolio decisions. Analysts working for SustainAlytics collect raw data from company reports and other third-party reports (e.g. unions, NGOs, government and Stock Exchange documents) and standardize them into consistent units so that they can arrive at final scores that are comparable across companies. Usually, these scores are at three levels: 1) Environmental, 2) Social, and 3) Governance, and each firm is scored and ranked on a monthly basis relative to a comparable peer group. For example, oil and gas companies would typically be lower in terms of their environment score, as a result of which they cannot be compared to banks and other financial institutions. Rather, SustainAlytics analysts rank companies on a peer-group basis, where companies in similar 'baskets' of ESG are pooled together. This idiosyncracy is not a problem for this paper because I will be using SustainAlytics' raw scores and industry controls to create my own measures.

ESG data is divided into its three components and each component is then further subdivided into several subcomponents (see Appendix Figure A 1 for the categories employed by SustainAlytics). For the purpose of this study, I will focus only on the social theme, and its three subcomponents because it is not clear which aspects of governance and environment apply more to employees or to external stakeholders. The theoretical approach in Hawn and Iaonnou (2016) is mostly based on neo-institutional theory and they do consider some aspects such as "percentage of women on the Board of Directors" as internal CSR. However, given that this paper is looking at CSR from the perspective of stakeholders who benefit from such CSR, I cannot do that. Percentage of women on the Board of Directors may be appealing to internal stakeholders such as management and labour, but it may also be appealing to investors and potential investors who may view women as more ethical in their business conduct. Similarly, programs to reduce water and energy usage is viewed as an aspect of internal CSR in Hawn and Iaonnou, 2016, which may be of interest to employee morale, but it may be of more interest to environmental stakeholders, the media, and other external stakeholders including "green" investors. In other words, I take the view that governance and environment are noisier measures of my constructs of employee-oriented and non-employee-oriented CSR. However, the social element is clearer given that SustainAlytics can delineate between CSR that affects employees (internal stakeholders), and suppliers, clients and the community (external stakeholders).[i] Employee-oriented CSR will, therefore, consist of elements of CSR that fall under the topic 'employees', whereas non-employee-oriented CSR will comprise of CSR elements that pertain to suppliers, clients, and society, local communities and philanthropy. To give a couple of examples, under employee-oriented CSR, items such as policies with regards to health and safety, work-life balance are considered. For non-employee-oriented, items such as policy on certifying suppliers, programs to increase purchase of fair-trade materials, community engagement programs are used. A full set of variables is listed in Appendix Table A 1. Each item is scored out of 100, whereby best performance is 100, next best would be 75 or 50, and so on until the company scores 0 for an item where it fails considerably. In total, the data contains 14 items that make up the employee-oriented CSR score (15 - 1(degree of unionisation)), and 43 items that make up the non-employee-oriented CSR score. Degree of unionization is left out and is used separately as an explanatory variable. Table 1 gives an overview of the ESG data.

Financial data are obtained from Thomson Reuters DataStream database. In particular, the items used are size (log of revenue), profitability (return on equity), opportunistic value or potential of the firm (calculated as Tobin's Q), liquidity position (calculated as quick ratio). The final sample is an unbalanced panel with 98 unique firms from the FTSE100 resulting in 1,204 firm-quarter observations from the fourth quarter of 2009 to the fourth quarter of 2013. Note that the independent variables will be lagged by 1 quarter. Financial data were obtained on a monthly basis and then collapsed to a quarterly basis, starting from the third quarter of 2009.

### 3.2 Dependent variables

Both of the CSR scores are obtained by first totalling the scores for all of their respective items, and this is done for each company $i$ at time $t$. Note that SustainAlytics usually uses a proprietary weighting standard to score and rank companies contingent on industry (or peer group) belonging. However, I will not use this approach for this study because I have no method to validate or invalidate their proprietary weighting standard. Instead each item that forms the employee-oriented CSR score and each item that forms the non-employee-oriented CSR score will be assigned equal weight. This follows the convention in the literature from Waddock and

Graves (1997), Hillman and Keim (2001) and Iaonnou and Serafeim (2012). Nonetheless, the scores may still be heavily tilted in terms of industry dependence (e.g. certain industries may have more supply chain monitoring issues in general), and therefore, relative standardized scores of each company $i$ at time $t$ are then calculated for each of employee-oriented and non-employee-oriented CSR with respect to an industry $j$ benchmark at time $t$.

$$RelCSRscore_{it} = \frac{CSRTotal_{it} - Min(CSRTotal_{jt})}{Max(CSRTotal_{jt}) - Min(CSRTotal_{jt})} \quad (1)$$

where CSR refers to any *one* ofemployee-oriented (EMP) or non-employee-oriented (NON)CSR score. This method also allows to bound the measures between 0 and 1, and make interpretations more standard, as per Baron (2009). Appendix Table A 2 shows the various CSR scores by industry.

## 3.3 Independent variables

With regards to independent variables, union density, as provided by SustainAlytics is used. Some companies have zero unions and, therefore, zero union density. One of the questions that may be posed is whether union density represents the best understanding of union voice and union power. The simple answer is yes as this has been used in prior research (see Hoque et al., 2017) and higher union densities do indicate a heavier presence of unions that act as a more powerful voice mechanism for employees. However, if better data was available (at firm and not only at plant level), a more complex measure of union power and voice would have included on-site representation of union representatives (e.g. Hoque et al., 2017), union affiliation with national and international labour organisations etc. At plant level, this data does not exist but may be tediously constructed. Constructing such a dataset at company-level can prove to be largely inaccurate because data at plant level would need to be aggregated and weighted. As such, I use union density at company-level as the best available proxy for union power and voice. With regards to firm size, inverse hyperbolic sine transformation is applied to total revenue given large variations in the data and given that some companies report negative revenues as allowed by international financial reporting standards (IFRS)[ii], while the other variables (Return on Equity, Quick Ratio, and Tobin's Q) are kept the same.

## 3.4 Econometric specification

With the unbalanced panel of 98 firms observed over 17 quarters and to test the aforementioned hypotheses, I adapt a specification that has been used in the CSR literature by Baron (2009) and Iaonnou and Serafeim (2014). Equation 2 gives the specification that will be used in this analysis.

$$RelCSRscore_{it} = \alpha_i + \beta_0 + \beta_1 QuickRatio_{it-1} + \beta_2 \ln FirmSize_{it-1} + \beta_3 ReturnonEquity_{it-1} + \beta_4 UnionDensity_{it-1} + \beta_6 UnionDensitySquared_{it-1}\varepsilon_{it} \quad (2)$$

where $RelCSRscore_{it}$ can be either Relative employee-oriented or Relative non-employee-oriented CSR score of company $i$ at time $t$.[iii]. Equation 2 is estimated using the fixed effects methodology, as a result of which industry controls are not used. Random effects were used as a check but a Hausmann test suggested that fixed effects estimation will produce more consistent results (p-value of test around 0.004).

# 4 Results

Table 2 reports descriptive statistics for the variables of interest (employee-oriented CSR, non-employee-oriented CSR, and union density) as well as for the control variables (quick ratio, Tobin's Q, total revenue, and return on equity). Note that I also show the weighted scores (environment, social, governance, total) provided by SustainAlytics. I divide their scores by 100 to make comparisons easy with my internal and external CSR scores which are bounded between 0 and 1. The means, standard deviations, minimums and maximums are shown both across firms and within firms. The summary statistics reveal that there is quite a large variation in the data, whether it be the scores provided by SustainAlytics, or my calculated CSR scores. The same observation holds for the independent variables as well. Overall, most of the variation happens across firms rather than within firms. However, the variations within are substantial enough to warrant the use of fixed effect modelling. Note that out of the 98 companies, 38 firms experienced some changes in their levels of union density over the study period. 60 companies experienced no change, out of which 40 were non-unionized companies altogether. The results that follow will control for these variations by clustering standard errors at the firm level. Note that calculating standard errors for 98 clusters greatly reduces the degrees of freedom of the models and reduces the significance of many variables. Separate results (not shown) using White's method of controlling for heteroskedasticity show qualitatively similar results but the levels of significance of some variables are higher.

A good indication for the regression results would be to compare the CSR profile of companies with no unions against companies with varying levels of union density. To achieve this, I cluster companies into several bins: first bin contains companies that have zero unions throughout the period of study; second bin contains companies that had low levels of unionization throughout (above 0 but below 0.3); third bin contains companies with medium levels of unionization (between 0.3 and 0.5); fourth bin has firms with union levels between 0.5 and 0.7; fifth bin contains companies with union levels above 0.7. Figure 1 depicts this summary statistic. As can be seen, higher levels of union density seems to be associated with higher levels of CSR in general, both employee-oriented and non-employee-oriented. However, there are some indications regarding the choice between both types of CSR. At low levels of union density, employee-oriented CSR dominates non-employee-oriented CSR, while at high levels of union density, non-employee-oriented CSR is higher than employee-oriented CSR. This summary statistic is counter-intuitive to the union monopoly model, which would have predicted that unions extract maximum rent for their members at the expense of other stakeholders. However, these are plainly summary statistics and a deeper analysis will follow with the fixed effects model.

Table 3 shows the pairwise correlations between the variables of interest. Significance levels are not shown but one observation about union density and company measures is that unions tend to organize more in larger firms, as measured by log of revenue. Also, and this goes in line with Metcalf (2003), unions overall are associated with under-performing firms, as measured by both the Tobin's Q and Return on Equity. However, with regards to CSR, they do seem to be associated with more socially responsible firms, across all dimensions and measures used. Interestingly, the correlation between unions and employee-oriented CSR is much higher than the correlation between unions and non-employee-oriented CSR.

Table 4 presents the main regression results of estimating the employee-oriented CSR scores with standard errors clustered at the firm level. Model 1 represents a basic model without the main independent variable of interest: union density. Return on Equity in period $t-1$ is negatively correlated with employee-oriented CSR in period $t$. This is an interesting finding, implying that companies that financially do poorly in a certain period will increase the quality of their employee-oriented policies and programs in the next period. This is akin to the "damage mitigation" hypothesis posited by Gomez and Verma (2012). Model 2 adds a linear measure of union density, and we find that the previous observations remain and that union density in period $t-1$ is positively related to employee-oriented CSR. A 1 standard deviation increase in union density is associated with a 0.05 (obtained by multiplying the coefficient with the standard deviation of union density in Table 1) standard deviation increase in employee-oriented CSR. Hypothesis 1 is, therefore, sustained. Model 3 also adds the square term of union density in order to capture non-linear trends of internal policies and programs as a function of union density. Results show that there is no non-linear trend. In specifications that use White's method of controlling for heteroskedasticity instead of firm-level clustering of standard errors, the non-linearity is sustained even though the coefficient on the quadratic term is negative, implying slower rate of expansion of internal programs and policies as union density rises.

Table 5 presents the main regression results of estimating the non-employee-oriented CSR scores with standard errors clustered at the firm level. Model 1 again represents a basic model without the main independent variable of interest: union density. The results show that Return on Equity in period $t-1$ is positively correlated with non-employee-oriented CSR in period $t$, going against the "damage mitigation" hypothesis posited by Gomez and Verma (2012). Firms work more with suppliers, clients, and the community when they perform better in the previous period. This result stands in contrast to the result that is obtained when employee-oriented CSR is considered. Different corporate approaches to CSR seem to be working here. When financial results are bad in a certain period, firms invest more in employee-oriented CSR and less in non-employee-oriented CSR in the next period. Perhaps, British firms view CSR as a morale and productivity-boosting endeavour. The fact that liquidity position and size and opportunistic value of the firm are not correlated with non-employee-oriented CSR in a significant manner also adds credence to the idea that (non-employee-oriented) CSR is perhaps a marketing tool employed to improve performance, rather than reflect past performance (the insurance hypothesis in Gomez and Verma, 2012). Model 2 adds a linear measure of union density, and results show that union density in period $t-1$ has no significant relationship to non-employee-oriented CSR in period $t$. Model 3, however, shows that there is a very high non-linearity in the relationship between union density and non-employee-oriented CSR. The linear effect of unions on non-employee-oriented CSR is negative, implying that there is a substitution effect that takes place. With unions, companies invest less in non-employee-oriented CSR, perhaps because they have to devote more resources to internal policies and programs.. However, this substitution is not binding. The high positive on the square term suggests that substitution ends after some degree of unionisation, and in fact the trend reverses such that both components of CSR go hand-in-hand. In other words, results show that there is both a substitution effect (Matten and Moon, 2008) and a complement effect (Gjolberg, 2009) between employee-oriented and non-employee-oriented CSR.

Given the above findings, a further relationship merits attention: the relationship between union density and the difference between the two types of CSR. Table 6 shows the results where the dependent variables are 'employee-oriented MINUS non-employee-oriented' scores. This new variable has mean -0.045, standard deviation of 0.398 and given the standardisation method ranges from -1 to 1. On average, firms have higher external CSR than internal CSR, though it must be noted that the standard deviation is quite high. The three models follow the same procedure as before, with unionization entering in phases. Model 2 suggests a positive relationship between unionization and the difference between the two scores, although the result is statistically insignificant. When union density is entered in as a square term, the results show that the difference increases with union density but only up to a point, after which the reverse happens. Non-employee-oriented CSR picks up more pace so that the difference progressively becomes smaller as union density rises. Interpreting these results with non-linear terms is easier with post-regression graphs of the marginal effects of increasing union density, as depicted in Figures 2 and 3.

As can be seen from Figure 2, employee-oriented CSR scores rise with union density but at a diminishing rate. Statistically, given the conservative methods used for estimating standard errors, the observed non-linear effects are not significant. With regards to non-employee-oriented CSR scores shown on the right panel, we note these scores initially fall as union density starts to pick up, but after about 40% union density, the trend is reverse. Non-employee-oriented CSR picks up rather significantly. With regards to the difference between the two types of CSR,Figure 3 leads to some interesting observations. First, the post-regression estimates, holding all else at their means, show that below 10% unionization, companies invest more in non-employee-oriented rather than employee-oriented policies and programs. Beyond 10% of union density, the trend changes and companies score higher on employee-oriented rather than non-employee-oriented CSR.

A further observation is that there are both substitution and complement effects between the two measures. Companies substitute non-employee-oriented CSR with employee-oriented CSR up to union density levels of approximately 60%. The upward trend means that the difference between employee-oriented and non-employee-oriented CSR keeps growing as a function of union density, albeit at a diminishing rate. After 60% unionisation, both types of CSR work in tandem. They complement each other, and from Figure 2, we can attribute this to a sharp improvement in external policies and programs. As such, the difference between the two measures falls.

### 4.1 Robustness checks

One of the interpretative concerns of the above results is that union density within firms can change because of two factors, given that union density is measured as the ratio of unionized employees to total number of employees. If we consider specifically the case where union density is rising within firms, there could be two broad reasons for this. First, unions may be getting better at organizing within firms over time. Second, firms may be shrinking in size and total employment, where presumably non-union employees are being laid off rather than union employees, who are generally better protected (Freeman and Medoff, 1984). As such, union density rising may not necessarily mean that unions are getting better at organizing and at (directly) influencing employee-oriented CSR, and the difference between employee-oriented and non-employee-oriented CSR. It may be the case that the company is shrinking in size, as a result of which union density is going up. To consider this aspect, I estimate equation 2 and add the difference in firm size between times $t-1$ and $t-2$ as an independent variable. Size is here measured by log of revenue since it is more correlated with total number of employees at the firm level.[iv] This will help control for firm size variations over time. If results are consistent with the earlier reported main estimations, then the interpretation can be that union density is more closely measuring unions' ability to organize and influence the CSR profile of companies. Table 7 reports the results when difference in size is considered. Models 1 and 2 report results for employee-oriented CSR, with union density entering as a linear term only in Model 1 and as a quadratic term in Model 2. The same exposition is done for non-employee-oriented CSR (Models 3 and 4), and difference between both scores (Models 5 and 6).

A comparison between the estimates in Table 7 and the earlier estimates in Tables 4, 5, and 6 show that the earlier results are robust to the inclusion of size difference within firms. The union density effects have not changed much, both in terms of economic as well as statistical significance. Union influence on employee-oriented and non-employee-oriented CSR seems to be occurring because unions are better at organizing and/or better at driving corporate policy.

## 5 Discussion and Conclusions

In order to gain a better understanding of the stakeholder approach to CSR, it is critical to investigate CSR as a good. On the one hand, who demands CSR, and on the other hand, how much CSR can be supplied by a company? This paper uses the stakeholder approach (Freeman, 1984) and a resource allocation approach based on slack resources theoryto investigate how unions wielding their power, urgency, and legitimacy as stakeholders (Mitchell et al., 1997) can affect the CSR profile of companies where their members work.

In this endeavour, this paper has attempted to bridge a gap between two streams in the CSR literature. As Bluhm and Trappmann (2012) point out, Matten and Moon (2008) propose that there is a substitution effect between "implicit" CSR and "explicit" CSR, whereby some firms generally devote more attention to following rules and regulations and maintain their image as such, while other firms are more explicit in their CSR practices, often with community and other social programs that reach a broader range of stakeholders. Similarly, Gomez and Verma (2012) and Hawn and Iaonnou (2016) point that CSR is costly and companies do not actually do both internal and external CSR concurrently and at the same rate. The flip side comes from Bluhm and Trappmann (2012) and Gjolberg (2009) who argue that in certain countries, internal and external CSR are actually complements, and both serve to reinforce each other. The findings of this paper, which uses more detailed data and analyses companies rather than country-wide averages mostly used in cross-country comparisons of CSR, show that both elements of substitution and complementarity are at work. A result that is interesting and may be analogous to the threshold effects of union density on wages (Hamermesh, 1970) where union density needs to reach certain thresholds to have a certain effect on wage bargaining. What this paper finds is that at very low levels of unionization, companies do more non-employee-oriented than employee-oriented CSR, catering to the needs of outside stakeholders more than internal stakeholders. Then, after approximately 10% unionization rate, companies start substituting external with internal policies and programs and this substitution goes on, albeit at a diminishing rate. However, the trend reverses after unionization reaches approximately 60%. Non-employee-oriented CSR gathers pace and work more as a complement to employee-oriented CSR such that the difference between the two narrows.

How can we explain these interesting results? Literature from labour relations other than union voice and monopoly models may help explain why we see the aforementioned results. First, Metcalf (2003) points out that unions in the UK and USA have been shown to reduce investment in physical capital but increase investment in human capital. This aspect of increasing investment in human capital may extend to the CSR sphere but not necessarily in a narrow sense. It is possible that part of collective agreements and union pressure incentivises or forces companies to invest in human capital inside but also outside the firm, through educational grants, health care grants, and other donations to the community (external stakeholders). This could be an explanation that could help understand why non-employee-oriented CSR goes up after approximately 40 % unionization rate. Unions could achieve this through negotiations but also through their role of monitoring work. For example, Pencavel (1977) emphasizes the role that unions may play in overseeing work performance given that they are in a position of high power and have been allowed to disseminate work payments to workers. A trust-based relationship between management and labour could be at the core of why we see high non-employee-oriented CSR when union density goes up. It is possible that unions, when entrenced and quite powerful, bargain not only for the direct interests of their members but also for the larger community. In other words, non-employee-oriented CSR would be part of their utility function and union leaders could be bargaining along broader lines than previously thought (Clark and Oswald, 1993). This is interesting in the UK context and does mimic some of the findings from Scandinavian countries where overall unions are more entrenched (Gjolberg, 2009; Egels-Zanden and Hyllman, 2011).

At low levels of unionization, management may have to deal with the shock factor of having to deal with unions while maintaining fairness across the board. Slichter et al. (1960) and Metcalf (2003) term this the shock effect of unionization. In the context of this paper, this refers to management initially "sacrificing" non-employee-oriented CSR at lower levels of unionization. Freeman and Medoff (1984) proposes that managerial responses to unionism take the form of more rational personnel policies such as lean production techniques and more careful monitoring of work, which reduces organizational slack. As such, it is possible that more rational personnel policies are leaving resources on the table, which the company is shielding from unions and giving to external stakeholders in the guise of external policies and programs. As unions gain power in these companies, they slowly but surely seek out these slack resources in their favour and against the interests of external stakeholders. These would explain why we initially see a substitution effect between employee-oriented and non-employee-oriented CSR.

Despite these results, there is an inherent issue with the measurement of the independent variable. Union density does not measure union power and voice fully. More importantly, union density does not indicate where the interests (utility) of the union lies. While the (average) effects of union density on employee-oriented and non-employee-oriented CSR are statistically and economically robust in this analysis, questions about different unions' utility functions still remain. For example, two unions that have the same density in two companies might have different utility functions. More research is warranted on knowing how union density is linked to union policies on non-employee-oriented CSR in particular. Nevertheless, this paper is the first to the author's knowledge to explore a link between a measure of union power/demands and corporate supply of CSR. The effects found in the paper pose some questions about union organising strategies and breadth of influence, as well as management responses to union demands. Unions, it seems, do not prize away slack resources for their members at the expense of external stakeholders. Mutual interests between management and densely-organised unions are possible even in a British context characterised by conflictual union-management relationships. The threshold points found in this paper also contributes to the threshold effects of union density on outcomes other than employee wages. Apart from the contribution to the literature, this paper has implications on union tactics and management implications. Below 10% union density, unions do not seem able to increase the company's CSR activities for the sake of employees, but between 10% to 60%, unions have more power to do so, and they do. When union density is higher than 60%, unions will consider non-employee-oriented CSR as a complement to employee-oriented CSR. Therefore, rather than curtailing unions, perhaps management should focus on finding grounds for common interests.

In conclusion, this paper has demonstrated that unions using their voice and power can influence a company's CSR profile. The results indicate that companies which are subjected to rising union densities but still have low levels of union density initially have to substitute non-employee-oriented with employee-oriented CSR. While the data cannot ascertain the reasons for this, from a theoretical point of view, this can be deemed as a 'shock effect' of dealing with unions. At higher levels of union density, companies seem to be able to complement both types of CSR. There is perhaps a reinforcement of mutual interests between management and unions.

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*Table 1: Description of data used*

| Theme | Topics | Employee-Oriented CSR | Non-Employee-Oriented CSR |
|---|---|---|---|
| Social: the social theme measures how a company is performing in its policies and practices regarding the stakeholders listed under 'Topics'.<br><br>Other themes used by SustainAlytics are Governance, and Environment. These are not used in the calculation of employee-oriented and non-employee-oriented CSR. | Social theme is divided into the following:<br>1) Employees<br>2) Suppliers<br>3) Clients/Customers<br>4) Society, local communities and philanthropy | Employee-Oriented CSR only consists of company policies towards employees. Items scored out of 100 include (non-exhaustive):<br>1) Policy on Freedom of Association<br>2) Programmes to increase workforce diversity<br>3) Precentage of temporary workers<br>4) Programmes and Targets to Reduce Health and Safety Incidents<br><br>10 more items are listed in Online Appendix Table A 1. Note that union density is not used as an item in calculating employee-oriented CSR. It is a separate explanatory variable of interest. | Non-Employee-Oriented CSR consists of policies and programmes towards suppliers, clients/customers, society, local communities and philanthopy. Items scored out of 100 include (non-exhaustive):<br>1) Supply chain monitoring system<br>2) Supply chain audits<br>3) External social certification of suppliers<br>4) Public position statement on health consequences of products<br>5) Programmes and Targets to reduce Energy/Water use by Customers<br>6) Community engagement programmes<br>7) Percentage cash donations of net earnings before taxes<br><br>36 more items are listed in Online Appendix Table A 1. |

*Table 2: Summary statistics*

| Variable | Variation | Mean | Std. Dev. | Min. | Max. |
|---|---|---|---|---|---|
| Total Score | overall | 0.519 | 0.358 | 0.000 | 1.000 |
| | between | | 0.331 | 0.000 | 1.000 |
| | within | | 0.172 | -0.364 | 1.166 |
| | | | | | |
| Environment Score | overall | 0.526 | 0.349 | 0.000 | 1.000 |
| | between | | 0.318 | 0.000 | 1.000 |
| | within | | 0.182 | -0.359 | 1.173 |
| | | | | | |
| Social Score | overall | 0.506 | 0.358 | 0.000 | 1.000 |
| | between | | 0.334 | 0.000 | 1.000 |
| | within | | 0.168 | -0.326 | 1.182 |
| | | | | | |
| Governance Score | overall | 0.504 | 0.359 | 0.000 | 1.000 |
| | between | | 0.318 | 0.000 | 1.000 |
| | within | | 0.196 | -0.341 | 1.239 |
| | | | | | |
| Employee-Oriented Score | overall | 0.428 | 0.370 | 0.000 | 1.000 |
| | between | | 0.333 | 0.000 | 1.000 |
| | within | | 0.192 | -0.305 | 1.250 |
| | | | | | |
| Non-employee-oriented Score | overall | 0.415 | 0.351 | 0.000 | 1.000 |
| | between | | 0.303 | 0.000 | 1.000 |
| | within | | 0.186 | -0.467 | 1.194 |
| | | | | | |
| Quick Ratio | overall | 0.409 | 1.399 | 0.000 | 21.195 |
| | between | | 1.044 | 0.000 | 9.140 |
| | within | | 0.876 | -8.638 | 12.464 |
| | | | | | |
| Tobin's Q | overall | 1.599 | 0.949 | 0.547 | 9.949 |
| | between | | 1.300 | 0.678 | 9.949 |
| | within | | 0.261 | 0.407 | 3.302 |
| | | | | | |
| Total Revenue (£ millions) | overall | 12.958 | 25.763 | -5.929 | 242.990 |

| | | | | | |
|---|---|---|---|---|---|
| | between | | 23.214 | 0.005 | 209.485 |
| | within | | 4.424 | -54.379 | 46.463 |
| | | | | | |
| Return on Equity (%) | overall | 33.889 | 266.250 | -131.290 | 7206.450 |
| | between | | 128.221 | -131.290 | 1365.863 |
| | within | | 231.882 | -1195.704 | 5874.476 |
| | | | | | |
| Union Density | overall | 0.178 | 0.265 | 0.000 | 1.000 |
| | between | | 0.229 | 0.000 | 1.000 |
| | within | | 0.121 | -0.347 | 0.693 |

*Table 3: Pair-wise correlations between variables*

| | Total Score | Environment Score | Social Score | Governance Score | Employee-Oriented (EMP) CSR | Non-Employee-Oriented (NON) CSR | Quick Ratio | Tobin's Q | Total Revenue | Return on Equity | Union Density |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Score | 1 | | | | | | | | | | |
| Environment Score | 0.825*** | 1 | | | | | | | | | |
| Social Score | 0.809*** | 0.554*** | 1 | | | | | | | | |
| Governance Score | 0.649*** | 0.442*** | 0.412*** | 1 | | | | | | | |
| EMP CSR | 0.558*** | 0.346*** | 0.615*** | 0.410*** | 1 | | | | | | |
| NON CSR | 0.549*** | 0.389*** | 0.601*** | 0.402*** | 0.393*** | 1 | | | | | |
| Quick Ratio | 0.0396 | 0.0249 | 0.0746 | -0.00501** | 0.0272* | 0.0243 | 1 | | | | |
| Tobin's Q | 0.128*** | 0.163*** | 0.139*** | 0.0685*** | 0.0244 | 0.0556** | -0.0769* | 1 | | | |
| Total Revenue | -0.0451* | -0.0811*** | -0.0538** | 0.0470** | 0.00341 | 0.196*** | -0.0570** | -0.104*** | 1 | | |
| Return on Equity | -0.0139 | 0.00878 | 0.0115 | -0.000599 | -0.0459* | 0.0238 | 0.00684 | 0.0490* | -0.0333 | 1 | |
| Union density | 0.0722*** | 0.0915*** | 0.0109+ | 0.100*** | 0.191*** | 0.0193 | 0.00683*** | -0.157*** | 0.238*** | -0.0410* | 1 |

Statistical significance denoted by: + p<0.10, * p<0.05, ** p<0.01, *** p<0.001

*Table 4: Fixed effects estimates of Employee-Oriented CSR score*

| | (1) | (2) | (3) |
|---|---|---|---|
| | Employee-Oriented CSR | Employee-Oriented CSR | Employee-Oriented CSR |
| Quick Ratio | -0.0453<br>(0.0492) | -0.0530<br>(0.0483) | -0.0528<br>(0.0478) |
| Tobin's Q | -0.0547<br>(0.0554) | -0.0547<br>(0.0534) | -0.0541<br>(0.0526) |
| Size (Log Revenue) | -0.0448<br>(0.0367) | -0.0509<br>(0.0363) | -0.0508<br>(0.0361) |
| Return on Equity | -0.00119 $^{***}$<br>(0.000220) | -0.000562<br>(0.000366) | -0.000484<br>(0.000683) |
| Union density | | 0.195 $*$<br>(0.0931) | 0.229<br>(0.253) |
| Union density squared | | | -0.0443<br>(0.227) |
| Constant | 1.273$^{+}$<br>(0.649) | 1.338$^{*}$<br>(0.632) | 1.334$^{*}$<br>(0.625) |
| Observations | 1204 | 1204 | 1204 |
| $R^2$ within | 0.012 | 0.023 | 0.023 |

All independent variables are lagged by 1 quarter
Standard errors clustered at the firm level in parentheses
$^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

*Table 5: Fixed effects estimates of Non-Employee-Oriented CSR score*

| | (1) | (2) | (3) |
|---|---|---|---|
| | Non-Employee-Oriented CSR | Non-Employee-Oriented CSR | Non-Employee-Oriented CSR |
| Quick Ratio | -0.00158<br>(0.0546) | -0.000365<br>(0.0549) | -0.00278<br>(0.0526) |
| Tobin's Q | -0.0356<br>(0.0303) | -0.0356<br>(0.0303) | -0.0422<br>(0.0298) |
| Size (Log Revenue) | 0.00240<br>(0.0414) | 0.00336<br>(0.0416) | 0.00266<br>(0.0403) |
| Return on Equity | 0.00461 ***<br>(0.000488) | 0.00451 ***<br>(0.000581) | 0.00358 ***<br>(0.000769) |
| Union density | | -0.0306<br>(0.105) | -0.446 +<br>(0.230) |
| Union density squared | | | 0.532 *<br>(0.244) |
| Constant | 0.461<br>(0.692) | 0.451<br>(0.695) | 0.495<br>(0.667) |
| Observations | 1204 | 1204 | 1204 |
| $R^2$ within | 0.009 | 0.009 | 0.027 |

All independent variables are lagged by 1 quarter
Standard errors clustered at the firm level in parentheses

$^{+}\ p < 0.10$, $^{*}\ p < 0.05$, $^{**}\ p < 0.01$, $^{***}\ p < 0.001$

*Table 6: Fixed effects estimates of the difference between Employee-Oriented and Non-Employee-Oriented CSR scores*

| | (1) | (2) | (3) |
|---|---|---|---|
| | Employee-Oriented MINUS Non-Employee-Oriented CSR | Employee-Oriented MINUS Non-Employee-Oriented CSR | Employee-Oriented MINUS Non-Employee-Oriented CSR |
| Quick Ratio | -0.0437 $^{*}$ (0.0603) | -0.0526 (0.0616) | -0.0500 (0.0563) |
| Tobin's Q | -0.0191 (0.0630) | -0.0191 (0.0605) | -0.0120 (0.0574) |
| Size (Log Revenue) | -0.0472 (0.0459) | -0.0542 (0.0470) | -0.0535 (0.0435) |
| Return on Equity | -0.00580 $^{***}$ (0.000671) | -0.00507 $^{***}$ (0.000764) | -0.00406 $^{***}$ (0.00103) |
| Union density | | 0.225$^{+}$ (0.118) | 0.675 $^{*}$ (0.295) |
| Union density squared | | | -0.577 $^{*}$ (0.273) |
| Constant | 0.812 (0.784) | 0.887 (0.791) | 0.839 (0.726) |
| Observations | 1204 | 1204 | 1204 |
| $R^2$ within | 0.010 | 0.019 | 0.030 |

All independent variables are lagged by 1 quarter
Standard errors clustered at the firm level in parentheses
$^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

*Table 7: Fixed effects estimates of Employee-Oriented and Non-Employee-Oriented, when size differences are considered*

| | Employee-Oriented CSR | | Non-Employee-Oriented CSR | | Employee-Oriented MINUS Non-Employee-Oriented CSR | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Quick Ratio | -0.0343<br>(0.0513) | -0.0341<br>(0.0507) | 0.0249<br>(0.0575) | 0.0225<br>(0.0548) | -0.0592<br>(0.0697) | -0.0565<br>(0.0637) |
| Tobin's Q | -0.0560<br>(0.0534) | -0.0555<br>(0.0526) | -0.0368<br>(0.0301) | -0.0432<br>(0.0297) | -0.0192<br>(0.0606) | -0.0123<br>(0.0574) |
| Size (Log Revenue) | -0.0397<br>(0.0394) | -0.0397<br>(0.0391) | 0.0213<br>(0.0439) | 0.0212<br>(0.0426) | -0.0610<br>(0.0543) | -0.0608<br>(0.0506) |
| Return on Equity | -0.00596<br>(0.000371) | -0.000516<br>(0.000701) | 0.00448 $^{***}$<br>(0.000579) | 0.00353 $^{***}$<br>(0.000774) | -0.00507 $^{***}$<br>(0.000766) | -0.00404 $^{***}$<br>(0.00104) |
| Union density | 0.192 $^{+}$<br>(0.0943) | 0.228<br>(0.259) | -0.0334<br>(0.105) | -0.457 $^{+}$<br>(0.231) | 0.225$^{+}$<br>(0.119) | 0.684 $^{*}$<br>(0.299) |
| Union density squared | | -0.0453<br>(0.230) | | 0.540 $^{*}$<br>(0.241) | | -0.586 $^{*}$<br>(0.275) |
| Size at $t-1$ *MINUS* size at $t-2$ (Log Revenue) | -0.00009<br>(0.0007) | -0.00005<br>(0.0007) | -0.0012$^{+}$<br>(0.0007) | -0.000349<br>(0.0007) | 0.00114$^{**}$<br>(0.000367) | 0.000346<br>(0.000366) |
| Constant | 1.156$^{+}$<br>(0.681) | 1.153$^{+}$<br>(0.674) | 0.156<br>(0.731) | 0.192<br>(0.704) | 1.000<br>(0.907) | 0.961<br>(0.837) |
| Observations | 1204 | 1204 | 1204 | 1204 | 1204 | 1204 |
| $R^2$ within | 0.021 | 0.021 | 0.011 | 0.030 | 0.018 | 0.030 |

All independent variables are lagged by 1 quarter
Standard errors clustered at the firm level in parentheses

$^{+}\ p < 0.10$, $^{*}\ p < 0.05$, $^{**}\ p < 0.01$, $^{***}\ p < 0.001$

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[i] The summary statistics will nonetheless include the SustainAlytics measures of total, governance, social, and environment scores.

[ii] In other specifications, market capitalization and total assets are used as proxies for firm size. The results are similar with regards to the influence of unions on CSR.

[iii] I also use the scores provided by SustainAlytics (i.e. Total, Environment, Social, Governance). Also, the weights used by SustainAlytics is proprietary and serves towards purposes of ranking companies: not an objective of this study.

[iv] Note that I do not have total number of employees in my dataset, which is why I am using the size proxy of log of revenue.

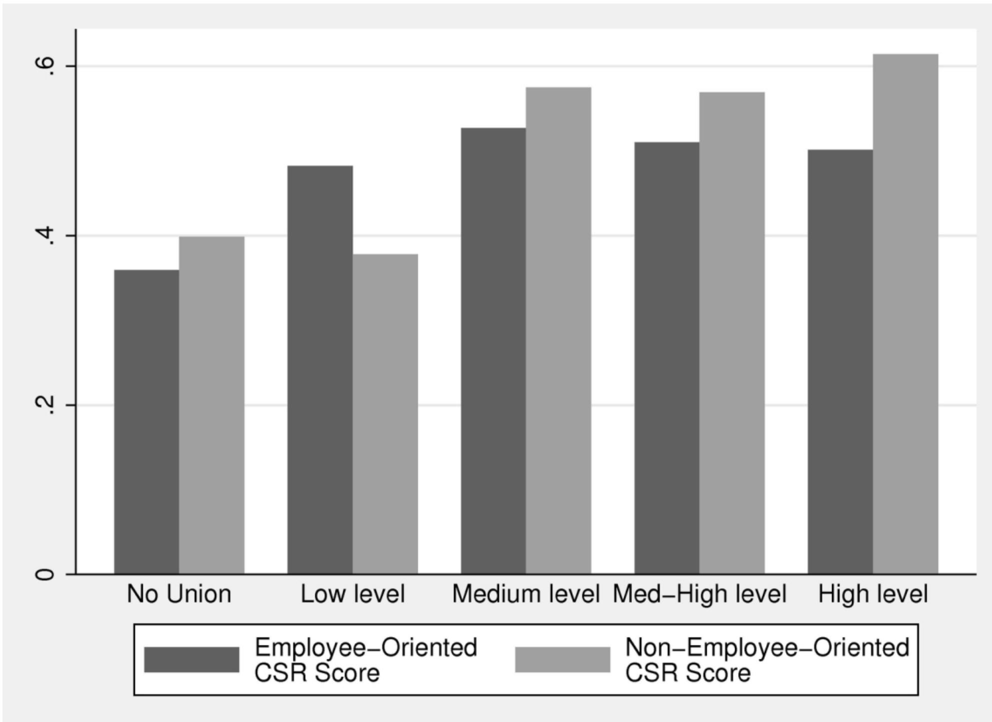


Figure1: Employee-Oriented and Non-Employee-Oriented CSR score means, by various categorical levels of unionisationof union density

139x101mm (300 x 300 DPI)

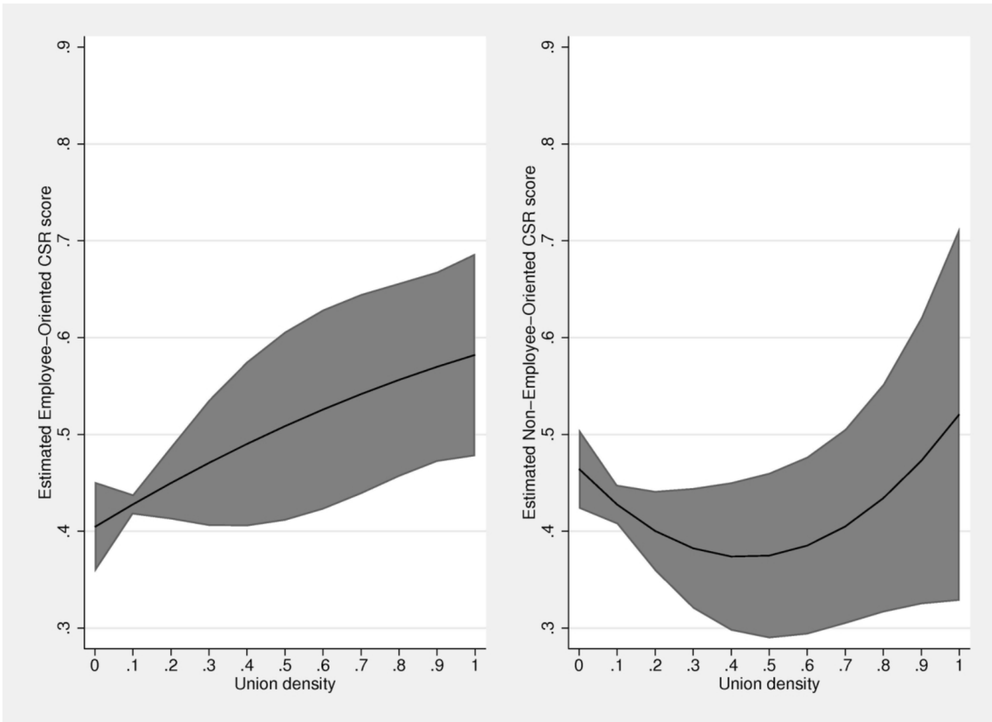


Figure 2: Estimated Employee-Oriented and Non-Employee-Oriented CSR scores, by union density

139x101mm (300 x 300 DPI)

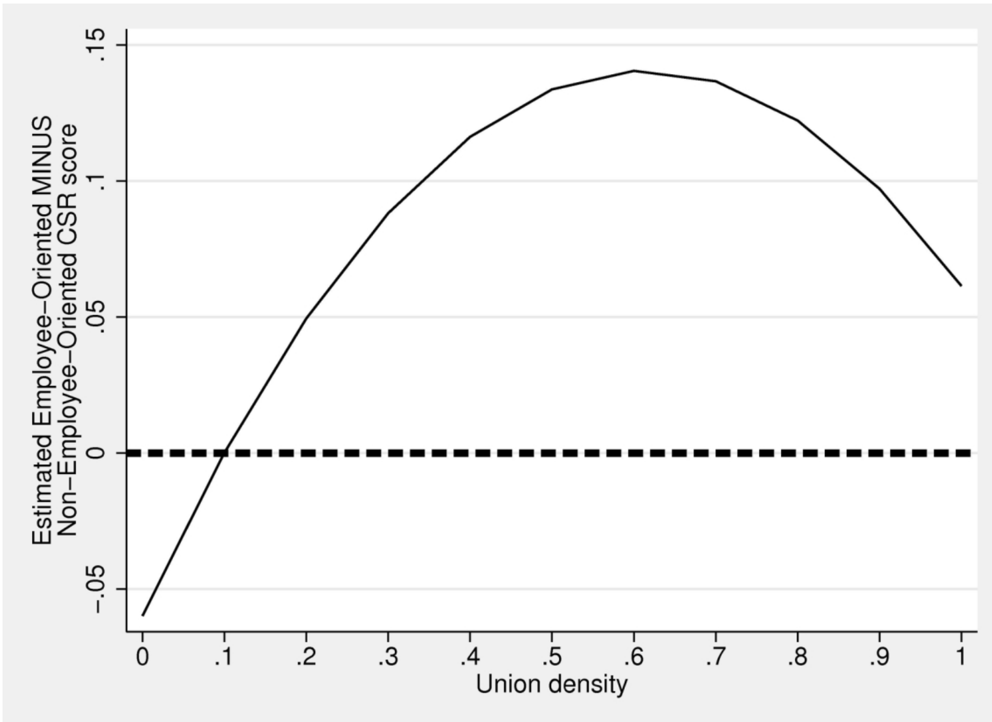


Figure 3: Estimated difference between Employee-Oriented and Non-Employee-Oriented CSR scores, by union density

139x101mm (300 x 300 DPI)