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Aziza Garsaa et Elisabeth Paulet

Résumé de l'article
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ABSTRACT
This research aims to analyse the link between firm transparency, measured by the quality of environmental, social, and governance (ESG) disclosure, and employee-oriented corporate social performance (CSP). A panel data ordered logit model is estimated using a sample of 280 multinational manufacturing firms listed in the European capital market during the 2010–2017 period. Overall, the findings show that firm transparency is positively associated with employee-oriented CSP. Nevertheless, results obtained from breaking down the sample by company headquarter location and reporting regulation showed that this finding is valid only for European firms for which corporate social responsibility (CSR) reporting is mandatory.

Keywords: ESG disclosure, employee-oriented CSP, panel data ordered logit model

Résumé
Sur la base de 280 entreprises européennes cotées sur la période 2010-2017, ce papier propose d’analyser le lien entre la qualité de la divulgation des données environnementales, sociales et de gouvernance (ESG), et la performance sociale -volet employés (CSP). Globalement, les résultats mettent en évidence une corrélation positive entre ces deux variables. Néanmoins, la prise en compte de la localisation du siège social des entreprises et la réglementation relative à la publication de leurs données sociales montre que ce résultat ne tient que pour les entreprises européennes pour lesquelles la divulgation de ces informations est obligatoire.

Mots-Clés : Divulgation des données ESG, CSP- volet employés, modèle logit ordonné sur données

Resumen
Esta investigación analiza la relación entre transparencia de las empresas, medida por la calidad de comunicación de los criterios ESG (factores ambientales, sociales y de gobernanza) y la SCP (desempeño social en relación a los trabajadores). Una estimación utilizando datos de panel ordenados con un modelo logit con una muestra de 280 empresas multinacionales europeas cotizadas entre 2010-2017 muestra que la transparencia está positivamente asociada con la SCP. Teniendo en cuenta la ubicación de la sede central y la normativa de publicación de datos sociales esta resultado solo se confirma en los países donde esta información es obligatoria.

Palabras Clave: comunicación ESG, desempeño social en relación a los trabajadores (CSP), datos de panel ordenados con un modelo logit
Over the last two decades, firms have made efforts to transform their business management to become more socially responsible. Integrating corporate responsibility data into annual reports has become standard for multinational companies, as 78% of them did so in 2017 (KPMG, 2017). Moreover, more than 60% of companies in all industry sectors reported corporate responsibility data in the same year (KPMG, 2017), which suggests that industrial firms pay particular attention to corporate social responsibility (CSR) reporting since they believe that disclosing CSR practices is a relevant criterion to build legitimacy with stakeholders (Unerman, 2008). Socially responsible human resources management is thus an indispensable component of corporate strategy (Shen and Zhang, 2019). However, most of the time, companies have no choice in this matter since many countries have adopted a mandatory reporting system involving the publication of environmental, social, and governance (ESG) indicators.

Following Yu (2008), this paper refers to the outcome of CSR practices or, in other words, to corporate social performance (CSP). We follow Baron’s method (2009), which employs a model of product and capital markets with strategic consumers, investors and activists to predict the market value of firms, prices, profits, support for activists, and the level of CSP. We specifically investigate the employee-oriented aspect of CSP approximated by human resources policies established by companies in order to improve working conditions.

In a classic labour market context, based on financial incentives, CSR practices are considered as an intrinsic motive that upsets the market equilibrium by combining the preferences of executives and employees (Fombrun and Shanley, 1990). Making the distinction between financial and non-financial (ethical and altruistic) motives, Graafland and Mazereeuw-Van der Duijn Schouten (2012) found that for social aspects of CSR, executives are significantly more driven by intrinsic motives than they are by extrinsic ones. Therefore, CSR allows companies to considerably reduce agency costs by matching their preferences with those of workers (Kitzmueller and Shimshack, 2012). Beyond that, companies are increasingly aware that socially responsible human resource management is considered as a competitive advantage for attracting new talent (Turban and Greening, 1997; Greening and Turban, 2000; Cochrane, 2007) and retaining more skilled workers (Albinger and Freeman, 2004; Bhattacharya et al., 2008).

Several studies have investigated the drivers of CSP (Muller and Kolk, 2010; Brower and Mahajan, 2013) and its stakeholder-specific components (Orlitzky et al., 2017). Others have focused on the determinants of environmental, social, and governance (ESG) disclosure (e.g. Habek and Wolniak, 2015). However, only a few works link ESG disclosure to CSP, in particular its employee-oriented component (Vurro and Perrini, 2011; Graafland and Smid, 2015; etc.), which is the most important, but least empirically explored aspect (Waris et al., 2017).

Consequently, our research attempts to enrich the existing empirical literature in three different ways. Firstly, we explore the relationship between ESG disclosure and employee-oriented CSP by taking into account the influence of institutional context and CSR reporting regulation. Secondly, we approximate employee-oriented CSP by making a calculated score based on six human resources policies that fit in with the “Social Performance Pillar” of the CSP pillars (Ioannou and Serafeim, 2010). Lastly, we provide new evidence from a unique unbalanced panel of European listed firms from 2010–2017 using a panel data ordered logit model.

The remainder of the paper is organized into five sections. We begin, in Section 2, by describing the theoretical framework and hypotheses that stem from it. We present the data, measures, and econometric strategy in Sections 3 and 4 respectively. Our main findings are presented in Section 5 and discussed in Section 6.

Theoretical Background and Hypothesis Development

Theoretical Framework

CSR has been the subject of several theoretical and empirical studies in essentially two fields of research: management science and economics of organizations (Waris, 2015).

While for a long time, the economic approach to CSR denied that firms could be expected to voluntarily act in a socially or environmentally responsible manner (Friedman, 1970), this shareholder view was contested by the stakeholder theory perspective of Freeman (1984), who argued that social and environmental aspects may shape a firm’s strategy. A new economic perspective was highlighted by Kitzmueller and Shimshack (2012) and is currently shared by authors such as
Three drivers of CSR decisions have been defined based on market imperfections theory. First, regulation-related imperfections due to externalities, public goods, and altruism lead to stakeholder pressure, such as regulators, activists, non-governmental organizations, and altruists. Second, imperfect competition due to the presence of product differentiation, asymmetries, and market contestability generates competitive pressure emanating from consumers, competitors, or reputation issues. Third, contract incompleteness based on a firm’s agency relationship with its stakeholders leads to pressure from shareholders, employees, and directors. In this context, firms are encouraged to mitigate regulation and market dysfunctions by being more socially responsible and transparent to create a relationship of trust with their stakeholders (Turker, 2009).

In addition to this firm-centred perspective, researchers in management science have attempted to solve this issue by establishing socio-political theoretical foundations for corporate disclosure of financial and non-financial information. The most common are a non-monetary version of agency theory (Ferrero et al., 2013; Calvo and Calvo, 2018) and legitimacy and stakeholder theories (Deegan, 2002; Deegan et al., 2002). According to these theories, companies disclose information on CSR in order to decrease information asymmetry between the different stakeholders as much as possible, and thus reduce the pressure exerted by them (Bonsón and Bednárová, 2015; Bonsón and Bednárová et al., 2016).

Hence, CSR can be considered as a non-monetary or intrinsic employee incentive that distorts the classic labour market equilibrium by affecting the interaction between employers and employees (Fombrun and Shanley, 1990). This theory was tested and confirmed by Graafland and Mazereeuw-Van der Duijn Schouten (2012), who analysed executives’ motives for being socially and environmentally responsible. They showed that for social aspects of CSR, executives are significantly more driven by intrinsic (ethical and altruistic) motives than by extrinsic (financial) motives. Consequently, CSR acts as a competitive advantage to recruit a high quality workforce (Greening and Turban, 2000).

However, sometimes a gap could exist “between CSR practices and CSR communication (or between “walk” and “talk”)” (Schoeneborn et al., 2020, p.5). This question has been, and still is a central concern within the booming CSR communication literature (Morsing et al., 2008; Bebbington et al., 2009; Livonen and Moisander; 2015; Cooren, 2020; Feix and Philippe, 2020; Schoeneborn et al., 2020, etc.) according to which “CSR walk precedes CSR talk but that CSR talk further informs and shapes CSR walk” (Schoeneborn et al., 2020, p.14). Theoretically, this view is inspired from institutional theories (Meyer and Rowan, 1977; DiMaggio and Powell, 1983, Powell, 1991; Scott, 1995; etc.) that consider communication as a key element in the understanding of organizations, institutions, and society (Fredriksson et al., 2013). This literature “focuses on institutional stability and inertia on the process, which is called “isomorphism”, and which arises from the need for organisations to respond to environmental expectations, guarantee their survival, and increase their success possibilities in a particular environment. Isomorphism emerges through three different mechanisms: coercive, normative, and mimetic (Di Maggio and Powell, 1983). In the same way, phrasing this differently, Scott (1995) argued that legitimacy is based on three pillars of the institutional order: regulative, normative, and cultural/cognitive.” (Baldarelli et al., 2014, p.1073). Hence, “different pressures in one organisational field lead to convergence in organisational forms and practices; thus, the frequency and quality of reporting would converge worldwide.” (Baldarelli et al., 2014, p.1073). Since the institutional theory has been criticized for its limit to cope with change (Greenwood and Hinings, 1996; Hoffman, 1999), several works have adopted the neo-institutional theories (Hoffman, 1999; Jennings and Zandbergen; 1995; Bansal, 2005) as a theoretical framework to analyse the procedures of social and environment reporting (Baldarelli et al., 2014). For example, Larrinaga-González (2007) highlighted an institutional explanation of the local development of sustainability reporting based on a neo-institutional perspective.

The issue here is to highlight how firm transparency, measured by the quality of ESG disclosure, can influence the “ability of an organization to respond to anticipated or existing social demands” (Vurro and Perrini, 2011, p.462), in other words, CSP and, especially the employee-oriented component. The literature in this field of research leads us to deduce that this relationship is conveyed by two different channels.
Firstly, improving employee-oriented CSP, especially through enhancing work conditions, could be considered as a response to stakeholder pressure, especially from employees. A firm’s increasing engagement in CSR is the result of ‘positive’ pressure from stakeholders (Helming et al., 2016) that allows the company to re-establish its legitimacy (Lucchini and Moisello, 2019). Disclosing ESG indicators is one of many ways for companies to prove their good faith to stakeholders and maintain and/or improve their reputation with actual and potential employees (Šontaitė-Petkevičiūnė, 2015). As stated by Rumambi and Marentek (2015), “the annual report becomes the communication instrument between the company and their stakeholders which brings respect values” (p.127). Firms pay increasing attention to their reputation with the workforce essentially for two reasons: (1) improved employee-oriented CSP motivates staff, boosts their commitment and reduces employee turnover; (2) this kind of improvement allows a firm to attract new talent by reducing the gap between the expectations of employees and executives (Weber, 2008; Sprinkle and Maines, 2010; Šontaitė-Petkevičiūnė, 2015 and Moorthy et al., 2017).

Secondly, the link between employee-oriented CSP and ESG disclosure could be determined by institutional and economic pressure (industry characteristics, market structure, conjuncture, etc.) exerted on the firm by some groups of stakeholders. Fernandez-Feijoo et al. (2014) confirmed this hypothesis by demonstrating that pressure from customers, clients, employees, and the environment enhances the quality of firm transparency. According to Young and Marais (2012), who compared French and Australian firms, CSR reporting is highly influenced by institutional context and sectoral characteristics. In the same logic, Cavalcanti Sá de Abreu et al. (2012) found that Brazilian and Chinese firms in the same industry (textiles) do not have the same level of CSR engagement and practices, which are mainly dependent on formal and informal institutional contexts. However, CSR reporting regulation is still the biggest driver of firm transparency (Dubbink et al., 2008; Sassen et al., 2016). According to voluntary disclosure theories, companies with high CSP are more likely to be CSR transparent (Clarkson et al., 2011; Guidry and Patten, 2012; Yang et al., 2017; etc.).

Hypotheses
Since the development of stakeholder theory, employees have been considered as one of the most important stakeholder groups (De Madariaga and Valor, 2007). Most empirical studies on CSR and CSP conclude that employees play an important role in the longevity and success of businesses (Carroll and Buchholtz, 2006; Bhattacharya et al., 2008; Bhattacharya and Korschun, 2008; Zeitz et al., 2009; etc.). Companies are aware of the need to maintain a relationship of trust with all stakeholders (Turker, 2009), especially their workforce (Seitanidi, 2009), since both employees and employers stand to gain from this agreement. Each takes an interest in nurturing and developing this relationship: companies assure social security by offering safe employment positions and decent working practices (Ozcelik et al., 2008); employees contribute to business success and enhance the firm’s value through their competencies, engagement, and loyalty (Nohria et al., 2008; Kim et al., 2010; Shane and Cunningham, 2011; Tuppura et al., 2013). This could explain why some firms are much more transparent about the human resources aspect of CSR activities than they are about the other two aspects (Dropulić and Čular, 2019).

Research on working conditions (Grosser and Moon, 2008; Klein and Vorbohle, 2011; etc.) and human resources practices (Bhattacharya et al., 2009; Basil et al., 2008) sheds light on the great importance given by companies to their employees through the implementation of CSR policies to enhance workforce well-being (e.g. reduction of working hours, flexible working hours, etc.). Nevertheless, most of the time, businesses address social policies in line with labour legislation and regulations (Christmann and Taylor, 2006; Baden et al., 2009) and they do not exert more effort to improve employee satisfaction. Hence, in this context, companies may prefer to limit their ESG disclosure to a minimum requirement (Cordazzo et al., 2020) since a weak nonfinancial could negatively impact investor perception (Grewal et al., 2018).

The key issue here is that, according to stylised facts (KMPG, 2017), in order to reassure stakeholders, for the most part, listed firms are encouraged to be more transparent by showing the implications of their CSR activities, namely CSP. However, this situation pushes them to put more effort on CSR activities to achieve a higher level of social indicators in order to satisfy stakeholders’ requirements, since the latter often use CSR indicators as criteria for judging companies (Dawkins and Lewis, 2003; Lewis, 2003). The annual report thus remains the main communication instrument between a company and its stakeholders (Rumambi and Marentek, 2015). In addition, while more visible firms benefit from...
enhanced legitimacy, they may suffer from a damaged reputation due to inadequate participation in CSR (Udayasankar, 2008). This constitutes an additional pressure to increase their efforts to be, or appear to be, a more socially responsible business so that employees can identify with their organisation for respecting norms adopted by a given stakeholder community (Maignan and Ferrell, 2004). If they do not succeed, employees are more likely to withhold effort (e.g. through striking, social loafing, or free riding) (Kidwell and Bennett, 1993).

With regard to management practices, Vurro and Perrini (2011) argue that “CSR disclosure allows firms to control for potential legitimacy threats, thus improving CSP by means of its favourable impact on stakeholder perceptions…. reporting is a tool to improve managerial awareness of and control over the social impact of corporate activities, a vehicle toward the development of a better ability to manage stakeholder relationships turning into improved CSP” (p.461). They conclude that improved stakeholder management and social responsibility are conditioned by the ability of companies to systematically measure and communicate their CSR engagement. Hence, “the more an organization engages with its stakeholders, the stronger the need is to be accountable toward them in disclosing non-financial information and the larger the impact on social performance becomes” (Vurro and Perrini, 2011, p.462). This leads us to the following hypothesis:

**H1. The quality of ESG disclosure positively impacts employee-oriented CSP.**

However, firm transparency is not the only driver of CSP. Several empirical studies have shown that CSP is predicted by individual corporate characteristics (e.g. Orltizky et al., 2017). It is commonly assumed that large firms are more likely to participate in CSR initiatives because they have better access to financial and human resources than small companies (Spence, 1999; Baumann-Pauly et al., 2013; European Commission, 2019). In addition, “the larger the firm, the more susceptible it may be to public scrutiny” (Cavalcanti Sá de Abreu et al., 2012, p.121), which encourages it to engage in CSR practices to prove its good will (Russo and Perrini, 2010). In contrast, small- and medium-sized enterprises are considered to be less visible and have more limited access to resources (Lepoutre and Heene, 2006; Udayasankar, 2008). Nonetheless, this relationship must be interpreted with precaution as a multitude of factors may influence it. As found by Chang et al. (2012), CSP could be more directly impacted by governance aspects and decisions rather than firm size. However, since empirical research on CSP implicitly converges on the positive effect of firm size on CSP (Artiach et al., 2010; Graafland and Smid, 2015; etc.), we assume that:

**H2. Firm size and employee-oriented CSP are positively related.**

Firm performance may contribute enhancing employee-oriented CSP through two channels: pecuniary incentives (Aguilera et al., 2007; Hilliard, 2013; Korschun et al., 2014; etc.) that could be approximated by financial performance and/or non-financial incentives (Peterson and Luthans, 2006) which could be approximated by firm economic performance. In other words, firm profitability could enhance employee-oriented CSP through the satisfaction of employee financial needs by increasing salaries and/or bonuses (Hope and Mackin, 2007) and, firm efficiency could influence CSP since it proxies employee motivation and thus, reflects employee non-financial needs satisfaction (Graafland and Smid, 2013). Consequently, firm performance has long been considered as one of the most important drivers of CSP (Marom, 2006). Most studies that have focused on the Corporate Financial Performance (CFP) - CSP relationship have found mitigated results, as the sign of this correlation depends on the proxies and data used (Van der Laan et al., 2008; Yang et al., 2010; Nollet et al., 2016). However, studies conducted by Hilliard (2013) and Jacobs and Kraude (2016) highlighted a positive link between economic performance (measured by productivity ratio) and CSP, since stronger engagement from employees thanks to a trusting employer-employee relationship improves firm efficiency (Graafland and Smid, 2013; Tuppura et al., 2013) and thus maintains or enhances CSP. Our last two hypotheses follow:

**H3. Firm’s economic performance is positively related to employee-oriented CSP.**

**H4. Firm’s financial performance positively/negatively influences employee-oriented CSP.**

Data and Sample

**Sample**

We assess the influence of disclosure on employee-oriented CSP using an unbalanced panel of 280 multinational companies (1,637 observations) listed in the European capital market and belonging to the manufacturing sector (Section C, NACE, Rev.2) from 2010 to 2017. Empirical analysis has been limited to the 2010–2017 period in order to avoid any macroeconomic shocks resulting from the 2008–2009 financial crisis.
All financial and non-financial data were extracted from the Bloomberg database. We eliminated from the sample companies with missing data and retained only companies with available data for at least three consecutive years over the selected period. This original database presents a large variety of company profiles whose headquarters are located in different countries all over the world, including more than 70% in Europe. The structure of the sample by country (Table 4) and sub-sector (Table 5) is reported in Appendix 1.

Variables Selection and Measurement

We use the ESG disclosure score as the relevant CSR performance indicator for a global measure of Corporate Social Performance (CSP) [Weber, 2014; Graafland and Smid, 2015; Nollet et al., 2016; Orlitzky et al., 2017]. CSR reporting makes firms more accountable for promoting social value and motivating employees. This leads to an improvement of CSP by heightening scrutiny from stakeholders (Marano et al., 2017). We therefore intend to analyse the link between two different measures of CSP: an aggregated one, namely a proxy of the quality of ESG disclosure, to evaluate the global level of CSR firm transparency; and a disaggregated one, i.e. employee-oriented CSP, to investigate the efforts made by companies in term of human resources management, and more specifically employee working conditions. Although the two variables are calculated in completely different ways, all independent variables have been lagged by one period in order to avoid the potential endogeneity bias that might arise from the way that ESG disclosure and CSP are generally measured (Vurro and Perrini, 2011).

Employee-oriented CSP

Several measures of CSP have emerged from the empirical literature (Muller and Kolk, 2010). Researchers have explored various proxies of CSP, such as dichotomous variables [Dasgupta et al., 2000], scores [Giannarakis, 2014; Arayssi et al., 2016; Tamimi and Sebastianelli, 2017; Yu et al., 2018], and indexes [Artiach et al., 2010; Chen and Delmas, 2011] provided by official agencies or calculated from sustainability reports, etc. Moreover, there is a growing tendency to employ decomposed indicators rather than multidimensional ones (Brammer et al., 2006; Muller and Kolk, 2010; etc.).

Like Orlitzky et al. (2017), we use a disaggregated component of CSP, i.e. an employee-oriented one, approximated by the number of human resources policies adopted by companies to enhance employee well-being through offering decent working conditions. Six policies are taken into account, i.e. policies on health and safety, human rights, child labour, equal opportunities, training, and fair remuneration. Most of these policies enter into the “Social Performance Pillar” of the CSP pillars developed by Ioannou and Serafeim (2010).

Firm Transparency

Since employees’ perception of firm CSR initiatives does not just depend on labour issues [Fernandez-Feijoo et al., 2014], we opted for a global measure of firm transparency instead of a disaggregated one (e.g. socio-economic component) given that the global level of disclosure is considered as the common proxy of firm-stakeholder dialogue [Nitkin and Brooks, 1998]. We consider that employee-oriented CSP depends on the overall level of firm transparency as “employees may ‘disidentify’ with an organisation when its behaviours ‘violate the norms embraced by a stakeholder community’” [Neville et al., 2005, p. 1188].

Following several researchers [Giannarakis, 2014; Arayssi et al., 2016; Tamimi and Sebastianelli, 2017; Yu et al., 2018; Zuraida et al., 2018; etc.], we measure firm transparency using the Bloomberg Disclosure Quality Index, which reflects the quality of a company’s disclosure in terms of ESG values. The retained score ranges from 0.1 for companies that disclose a minimum amount of social and environmental data to 100 for those that disclose every value collected by Bloomberg. The Bloomberg Disclosure Quality Index measures the number of ESG data that a company presents in its public reports. Each value is weighted in terms of its importance. The Bloomberg ESG disclosure score is also adapted to the different economic sectors. In this way, each company is only evaluated for the values relevant to its industry sector, as challenges regarding CSR preoccupations strongly depend on sectorial characteristics. Another reason for this choice is the increased interest in Bloomberg ESG disclosure scores by investors, who use them as management quality indexes [Eccles et al., 2011; Tamimi and Sebastianelli, 2017].

Firm Size

Firm size is considered as a common driver of CSP [Graafland and Smid, 2015; Orlitzky et al., 2017; etc.]. In empirical research, firm size is approximated by economic and financial indicators, such as employment, value added, market value, etc. [Coad, 2007; Vijh and Yang, 2013]. However, according to Dang et al. (2018), “the choice of size measures needs both theoretical and empirical justification” (p.159). Following Van der Laan et al. (2008), we measure firm size by the logarithm of the number of employees ($lnEmp$).
Firm Efficiency
According to Jan van Ree (2002), “there are two important approaches that contribute to organisational performance: (1) achieving greater efficiency by reducing the occupancy costs by reducing the amount of space per employee; and (2) achieving greater effectiveness by improving the productivity of the employees by providing a comfortable and satisfying working environment” (p.357). Hence, firm efficiency could be considered as a proxy of the level of organizational performance (Galliker, 2000; Agwu, 2012).

Firm efficiency (Efficiency) is commonly approximated in the firm level empirical literature by the ratio of value added divided by the number of employees (i.e. labour productivity). Nevertheless, little information on value added is available for the selected period. Therefore, we measure firm efficiency by the ratio of total sales divided by the number of employees (e.g. Lantelme, 2017).

Firm Profitability
Following widespread practice in the empirical literature (e.g. Van der Laan et al., 2008), we measure firms’ financial performance by the ratio of return on assets (ROA) obtained by dividing net income over total assets.

Econometric Strategy
The impact of firm transparency on employee-oriented CSP is highlighted using an empirical specification that includes the Bloomberg ESG disclosure score of the company as an explanatory variable. We consider that employee-oriented CSP reflects the set of a firm’s actions aimed at enhancing the wellbeing of workers. Hence, an employee-oriented CSP score has been calculated as the sum of six binary variables representing policies on working conditions adopted by a company, i.e. health and safety, human rights, child labour, equal opportunities, training, and fair remuneration. All of these dummy variables take the value 1 if the firm opted for a given action (e.g., human rights policy) in a given year, 0 otherwise. According to this definition, the more actions a company adopts in favour of employees’ working conditions, the higher the employee-oriented CSP score will be. We also take into account firm size and financial and economic performance indicators to control for individual firm characteristics that might influence CSP (Bonsón and Bednárová, 2015; Waris et al., 2017; etc.). All explanatory variables have been lagged by one period to minimize potential endogeneity bias due to the simultaneous determination of CSP and ESG disclosure. Empirical specification include year dummies to control for macro-economic fluctuations (Bonsón and Bednárová, 2014). The definitions, descriptive statistics, and correlation matrix of the selected variables are presented in Tables 6 and 7, Appendix 2.

Qualitative models are commonly estimated using probit or logit specification. In practice, both of them produce comparable results (Grimler et al., 2000). However, according to Liao (1994), the logit model is more appropriate in cases where the distribution of the dependent variable has extreme points. Given the characteristics of the sample analysed (more than 70% of the companies in the sample have an employee-oriented CSP score greater than zero), we opted for a logit model. As employee-oriented CSP is an intensity variable, we estimate an ordered logit model that takes into account the qualitative and ordinal characteristics of the dependent variable.

Our model specification can be simplified as follows:

\[
Employed \text{ oriented } CSP_{it} = P[\{X_{it}\}] = \frac{\exp(X_{it}\beta)}{\sum_{h>0} \exp(X_{it}\beta_h)}
\]

where \( j \) is the number of human resources policies adopted by a firm, varying from 0 for firms that have not adopted any human resources policies, to 6 for those that apply the six workforce policies presented above. \( P[\{X_{it}\}] \) is the probability of having an employee-oriented CSP score equal to \( j \) given the values of \( X_{it} \). This leads to the following expression:

\[
Employed \text{ oriented } CSP_{it} = \beta_{10} + \beta_{11} Disclosure_{it} + \beta_{12} Size_{it} + \beta_{14} ROA_{it} + Year_{t} + \varepsilon_{it}
\]

Three estimation techniques have been used to guarantee the robustness of the results obtained: pooled ordered logit, random effects (RE) ordered logit, and fixed effects (FE) ordered logit. The first method allows the analysis of a qualitative dependent variable but does not control for firms’ individual characteristics (Anderson, 1984). The second considers this heterogeneity, but does not suppose that this variability could cause an endogeneity bias driven by the correlation between explanatory variables and error term (Conway, 1990).
The latest technique developed by Baetschmann et al. (2015) takes into account this potential problem and enables us to control for firm fixed effects and check the robustness of our results. We will therefore favour the results of the last econometric method for the rest of the paper.

The conditional fixed effects ordered logit was first developed by Chamberlain (1980), who considered that there was no correlation between the dependent variable and the fixed effect, which cancels out the fixed effect. However, according to Riedl and Geishecker (2014), this kind of estimation is inconsistent for the fixed effect ordered dependent variable. After testing six estimation techniques, they argue that the “Blow Up and Cluster” estimation technique (known as the BUC estimator) implemented by Baetschmann et al., (2015) is the least biased and most efficient estimator for an ordered logit with fixed effects.

Baetschmann et al. (2015) developed a two-stage approach which avoids the problem of small sample sizes associated with some cut-off values. In the first stage, BUC replaces each observation with k-1 observations (k is the number of ordered categories) and dichotomises each observation obtained. In the second stage, the fixed effect logit is used over the entire sample. Observations are dependent by construction and to overcome this problem, the estimation uses the individual cluster. Although this is a relatively recent estimation technique, it has already been used in empirical studies in different fields of research (Ambrey and Fleming, 2017; Fiorillo et al., 2017; Aleksandrova, 2018; Aida, 2018; etc.).

Main Findings

Firm Transparency: A Booster of Employee-Oriented CSP?

Table 1 reports the results for the full sample of the pooled ordered logit, the random effects ordered logit and the fixed effects ordered logit. It presents coefficients and robust2 standard errors (in parentheses). Since the coefficients in the ordered model cannot be interpreted quantitatively as they refer to an underlying latent variable, it has not proved possible to calculate marginal effects based on the FE ordered logit results since (Dickerson et al., 2014).

Overall, our data highlight four major findings.

First, estimated coefficients associated with the variable ESG disclosure are positive and statistically significant whatever the estimation technique used, which confirms our H1. The value of the estimated parameter varies from 0.0697 to 0.150. Hence, being more CSR transparent is positively correlated to a greater likelihood of having a higher level of employee-oriented CSP. This result is consistent with Vurro and Perrini (2011), who showed that the most transparent companies have the best social performance. This finding could be explained by the fact that disclosing sustainability indicators encourages companies to enhance their CSR engagement to maintain or improve their reputation among stakeholders (Udayasankar, 2008), especially the employee group. Hence, the quality of ESG disclosure acts as a booster of employee-oriented CSP by putting pressure on companies.

Second, firm size seems to positively affect the probability of being a more employee-oriented social performer. The sign and the significance of the estimated parameters associated with the Size variable are the same whatever the estimation method used, which confirms our H2. This result is in line with previous studies on the drivers of CSP (Artiach et al., 2010; Graafland and Smid, 2015; Boodoo, 2016; etc.).

Third, economic (Efficiency) and financial (ROA) performances do not seem to be a driver of employee-oriented CSP in European listed firms, which leads us to reject our H3 and H4. This rejection could suggest that the links between economic and financial performance on one hand, and employee-oriented CSP on the other hand, are potentially conditioned by the CSR reporting regulation. More precisely, as explained above (H3 and H4), firm performance could contribute to enhancing employee-oriented CSP through financial incentives that could be approximated by the variable ROA, and/or non-financial incentives which could be approximated by the variable Efficiency. However, companies that are subject to the mandatory reporting regime are more scrutinized than their counterparts (Lucchini and Moisello, 2019). Hence, they may be more preoccupied by the enforcement of CSR strategy in order to keep their trustful relationship with their stakeholders (especially investors) than by a real implementation of employee satisfaction initiatives (Hess, 2007). Consequently, firm performance variables are more likely to be statistically significant for companies voluntarily reporting their CSR information. This hypothesis will be tested in the next section.

---

2. Which are corrected for heteroskedasticity through individual cluster level.
Finally, all estimation techniques produce the same results, which attests to the robustness of our results. Nevertheless, in order to control for firm fixed effects, we opt to use the FE ordered logit technique for the rest of this empirical study.

### Firm Transparency and Employee-Oriented CSP: Does CSR Reporting Regulation Matter?

Research has shown that voluntary reporting is not a trustworthy indicator of CSP [Berthelot et al., 2003] as firms could be tempted to boost their reputation with stakeholders without really changing their CSR strategy [Hess, 2007]. Furthermore, this kind of disclosure is generally incomplete and lacks comparability [Graafland and Smid, 2015]. Therefore, some researchers recommend that national and supranational policymakers make mandatory reporting more general in order to enhance firm transparency [Barth et al., 1997; Dubbink et al., 2008; Sassen et al., 2016; etc.]. The rationale is that mandatory disclosure could incite companies to integrate ESG factors into their firm strategy and initiatives, and so preserve their market value from market fluctuations [Sassen et al., 2016]. Taking this into account, as demonstrated by Gulenko [2018], mandatory CSR reporting increases the overall quantity of reporting, but not necessarily its quality. However, at the European level, Doni et al. [2020] suggest that best practices in non-financial disclosure could positively influence the compliance level when passing from a voluntary to a mandatory disclosure setting.

### Table I

**Determinants of employee-oriented CSP**

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Pooled ordered logit</th>
<th>RE ordered logit</th>
<th>FE ordered logit (BUC estimator)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESG Disclosure</td>
<td>0.104***</td>
<td>0.150***</td>
<td>0.0697*</td>
</tr>
<tr>
<td></td>
<td>(0.00571)</td>
<td>(0.0190)</td>
<td>(0.0370)</td>
</tr>
<tr>
<td>Size</td>
<td>0.0526*</td>
<td>0.230***</td>
<td>0.783*</td>
</tr>
<tr>
<td></td>
<td>(0.0272)</td>
<td>(0.0890)</td>
<td>(0.464)</td>
</tr>
<tr>
<td>Efficiency</td>
<td>-0.188</td>
<td>0.100</td>
<td>0.833</td>
</tr>
<tr>
<td></td>
<td>(0.128)</td>
<td>(0.297)</td>
<td>(0.626)</td>
</tr>
<tr>
<td>ROA</td>
<td>0.143</td>
<td>1.649</td>
<td>2.132</td>
</tr>
<tr>
<td></td>
<td>(0.860)</td>
<td>(1.743)</td>
<td>(3.387)</td>
</tr>
<tr>
<td>Year dummies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>1,637</td>
<td>1,637</td>
<td>1,770</td>
</tr>
<tr>
<td>Number of companies</td>
<td>280</td>
<td>280</td>
<td>280</td>
</tr>
</tbody>
</table>

Note: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. The FE ordered logit model (BUC estimator) has been estimated using an expanded sample of 1,770 observations (see Section 4 for more details about this technique). BUC estimator Stata code is available in Baetschmann et al. (2011).

Lecture (pooled ordered logit): if the ESG disclosure score increases by one point, the ordered log-odds of being in a higher employee-oriented CSP level increase by 0.104 while the other variables in the model remain constant.
Some empirical studies have attempted to test the regulation reporting-CSP relationship. Graafland and Smid (2015) found that mandatory reporting fosters CSP of large international companies. Similarly, Iannou and Serafeim (2017) maintained that reporting regulation increase sustainability disclosure and enhance the probability that Chinese firms will voluntarily adopt report guidelines. Boodoo (2016) confirmed this finding using a sample of Indian companies listed on the Bombay Stock Exchange. He argued that the breadth of this relationship depends on the stakeholder salience typology with the results that governance and social performance progress driven by mandatory CSR reporting regulation are significantly higher than improvements related to the environment. Consequently, we can expect mandatory reporting to accentuate the positive effect of ESG disclosure on employee-oriented CSP. The distribution of the sample by CSR reporting regulation is reported in Table 4, Appendix 1.

Estimation results derived by breaking down the sample according to the nature of CSR reporting regulation confirm this hypothesis, as the employee-oriented CSP level of companies whose country of origin does not require mandatory reporting seems to be insensitive to ESG disclosure (Table 2, Column: Voluntary). As expected, the relationship between firm performance and employee-oriented CSP seems to be conditioned by the CSR reporting regulation since economic (Efficiency) and financial (ROA) performance are the only drivers of employee-oriented CSP. Since firm efficiency is commonly approximated by firm productivity (Guthrie, 2001; Beane, 2007; Lantelme, 2017), we can expect companies to seek to overexploit their employees in order to enhance their performance, which could negatively impact their working conditions (wage compensation, time compensation, etc.) and employee motivation and thus, deteriorate employee-oriented CSP. The same coefficient is positive and statistically significant for companies subject to mandatory CSR reporting, which could make this hypothesis plausible.

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>FE ordered logit model results by CSR reporting regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full sample</td>
</tr>
<tr>
<td>ESG Disclosure</td>
<td>0.0697*</td>
</tr>
<tr>
<td>Size</td>
<td>0.783*</td>
</tr>
<tr>
<td>Efficiency</td>
<td>0.833</td>
</tr>
<tr>
<td>ROA</td>
<td>2.132</td>
</tr>
<tr>
<td>Year dummies</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of observations</td>
<td>1,770</td>
</tr>
</tbody>
</table>

Note: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.
Firm Transparency and Employee-Oriented CSP: Does Institutional Context Matter?

Institutional context is considered to be one of the key drivers of CSR initiatives in both the empirical (Cavalcanti Sá de Abreu et al., 2012) and theoretical literature (Kitzmueller and Shimshack, 2012; Crifo and Forget, 2015). Researchers conclude that there is a positive correlation between institutional pressure and CSR practices (Yang et al., 2017). Furthermore, it is commonly argued that European firms are more engaged in CSR activities than non-European firms (Gallego-Álvarez et al., 2010; Young and Marais, 2012) since “stakeholder dialogue is more established in Europe, where CSR has developed most extensively, than elsewhere” (Tokoro, 2007, p.143). Indeed, the European Commission made huge efforts during the last decade to incite companies to be more socially responsible (European Commission, 2019). The implementation of the CSR strategy in 2011 and the “Trade for All” strategy in 2015, whose purpose is to make the European Union (EU) “trade and investment policy more responsible by enhancing effectiveness, transparency and values” (European Commission, 2019, p.52), aims to encourage European firms to be more transparent and engage more in CSR. Hence, we can expect European firms to be more engaged in CSR activities than non-European ones (Tokoro, 2007).

In order to check this hypothesis, companies have been split into five groups by region and reporting status. Table 3 reports estimation results for European firms, non-European firms, European firms that have an obligation to report their CSR information, European firms for which CSR reporting is voluntary, and non-European companies for which CSR reporting is mandatory. The results obtained clearly show that location and the CSR reporting system have an impact on the relationship between ESG disclosure and employee-oriented CSP. The positive correlation between the two variables is confirmed only for European companies and rejected for non-European ones. However, when we distinguish...
companies according to their CSR reporting system, we find that ESG disclosure does not seem to impact the employee-oriented CSP of European firms, which are not obliged to publish their CSR reports, nor for non-European companies for which CSR reporting is mandatory. In addition, the value of the estimated coefficient associated with ESG disclosure is higher for the European firms for which CSR reporting is mandatory (0.121) than for all European companies (0.0851). Moreover, firm financial performance seems to have a positive impact on the employee-oriented CSP of European companies mandatory reporting CSR information. These results corroborate previous findings and confirm the hypothesis that location and obligation to report CSR information influence the relationship between firm transparency and employee-oriented CSP. These findings can be explained by the fact that most European countries have established a mandatory reporting system in order to promote and generalize CSR initiatives.

Discussion and Conclusion

The goal of the present longitudinal panel study was to determine to what extent a firm's CSR transparency, approximated by the quality of ESG disclosure, influences employee-oriented CSP. Using a panel data ordered logit model, we found that increased firm transparency enhances the probability of having a higher level of employee-oriented CSP. This result was confirmed whatever the estimation technique used. However, the validity of this relationship is strongly dependent on institutional context and CSR reporting regulation. When distinguishing companies according to the country of origin of their headquarters, and the nature of CSR reporting (mandatory or voluntary), we showed that this result is valid only for European firms, which are obliged to report CSR information. These findings could be discussed as follows:

First, estimation results obtained by breaking down the sample according to headquarter region argue for a community trend effect, probably driven by the European Union strategy designed to encourage businesses to be more socially responsible (European Commission, 2019), since "CSR is conditioned on the culture and wider institutional environment in which the company operates" (Graafland and Smid, 2015, p.314). This trend could be due to similar social behaviours in European companies, especially in terms of human resource management (Funk and Lesch, 2004; Poutsma et al., 2006; Rizov and Croucher, 2009).

Second, the non-significance of the ESG disclosure - employee-oriented CSP correlation for European firms for which reporting is voluntary prove that the European trend is not the only antecedent of this link. This finding is in line with several studies (e.g. Sassen et al., 2016) according to which the implementation of a regulatory framework enhances the quality of non-financial information, decreases asymmetry of information (e.g. Martinez-Ferrero et al., 2016), promotes the employee-employer relationship (Turker, 2009) and thus fosters CSP (Graafland and Smid, 2015). Moreover, companies for which reporting is voluntary may adopt labour policies that are generally driven by compliance with legislation (Font et al., 2012) and not necessarily part of a CSR strategy framework. In this context, businesses may attempt to promote their reputation with stakeholders without necessarily improving their CSR strategy (Hess, 2007). The dilution of the European trend in favour of a regulation effect in the ESG disclosure - employee-oriented CSP relationship in our estimation results may have essentially two origins: (1) it could be due to the fact that EU countries are opting for a mix of voluntary and mandatory devices which prevents a kind of harmonization at the European level (Camilleri 2015); (2) and/or to the equity market (EU exchanges) reaction to events associated with the transition from a voluntary to mandatory nonfinancial disclosure setting as demonstrated by Grewal et al., (2018). In this context, authors found that weak nonfinancial performance and disclosure could have a negative effect on investor perception.

Lastly, the positive impact of disclosure on employee-oriented CSP proves that firms pay increasing attention to their reputation among current and potential employees in order to motivate current employees and attract new talents whose expectations match those of their executives (Cochran, 2007; Bhattacharya et al., 2008). Firms are clearly aware that attracting new talents and/or increasing their own employees’ commitment and motivation by focusing on non-financial or intrinsic motives represents an important competitive advantage in a highly competitive global market context (Hilliard, 2013).

The outcomes of this research have consequences on a political level. The findings suggest that the quality of disclosed information could foster employee-oriented CSP only in the context of a well-defined regulatory framework. Consequently, while mandatory CSR reporting is not the best way to enhance employee-oriented CSP as companies may disclose their CSR accomplishments without necessarily changing their CSR strategy (Hess, 2007), the generalization
of a regulatory framework could motivate them to work in this direction. At least, three avenues for improvement can be considered in this sense in order improve and track levels of trust in business: [1] the harmonisation of reporting supports and the creation of a common reporting system whatever the status, activity, or the size of the firm; [2] The implementation of a check procedure to reach a minimum level of information coverage in order to deter companies that limit ESG disclosure to a minimum requirement and then improve the quality of reporting, and not only its quantity; [3] and the implementation of training and awareness campaigns on CSR with businesses.

Despite the contributions, this study is not without limitations. It presents essentially four limitations. First, our core variable used as a proxy of firm transparency, namely the Bloomberg ESG index, measures and weighs (according to the sector characteristics of the firm) the number of ESG data that a firm presents in its public reports, without taking into account the CSR reporting regime. However, this limitation has been controlled by estimating the empirical specification according to the company CSR mandatory reporting in order to evaluate its impact on the relationship between firm transparency and employee-oriented CSP. Second, the employee-oriented CSP variable presents essentially two drawbacks: [1] it measures the number of human resource policies adopted by a company in order to enhance the wellbeing of employees without taking into account the effectiveness and the quality of these initiatives since there is sometimes a gap “between walk and talk” (Schoeneborn et al., 2020, p.5); [2] it does not consider the weight of the different policies adopted by the company according to their nature (global versus local level, international fundamental rights, national laws / obligations, etc.). Third, the empirical analysis does not consider the role played by country obligations in term of social policy (e.g. equal opportunities, remuneration, minimum wages, etc.). In this context, the link found between mandatory CSR reporting and employee wellbeing practices in certain countries could simply signify a high level of obligation in terms of social policies and HRM. The extent of this limitation was reduced by disaggregating the sample according to firm location as the EU aims to promote social progress, and to improve the working conditions of the European people by setting minimum standards (Treaty on the Functioning of the EU, 2012). The fourth and last limitation concerns the absence of governance variables in the empirical specification that could accurately the explanatory power of the model. This missing element is due to the poor quality of data for this kind of measure during the target period in the Bloomberg database.

All these elements could give rise to future avenues of research on the subject. First, employee-oriented CSP proxy could be better defined by including much more policies/initiatives aiming to increase employee wellbeing and by weighing each one according to their intensity/importance/efficiency, etc. Second, empirical specification could be enriched by several control variables like governance proxies. Third, the ESG disclosure index could be disaggregated (at economic, social and environment level) to better apprehend firm transparency. Fourth, more in-depth analyses could be conducted to identify the impact of of the social legislation on the correlation between firm transparency and employee-oriented CSP. Finally, it could be interesting to conduct future research on the ESG disclosure –CSP relationship focus with an international comparison based on approaches in terms of varieties of capitalism (Hall and Soskice, 2001; Wood et al., 2014; Brewster et al., 2016; etc.): the so-called “coordinated” economies with a view to more partnership-based governance and, the “liberal” economies with a particular influence on employment and HRM (Fioretos, 2011).

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### APPENDIX A1

**Sample description**

#### TABLE 4

**Sample distribution by country during the 2010–2017 period**

<table>
<thead>
<tr>
<th>Country</th>
<th>CSR reporting regulation</th>
<th>Number of observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Mandatory</td>
<td>25</td>
</tr>
<tr>
<td>Belgium</td>
<td>Voluntary</td>
<td>22</td>
</tr>
<tr>
<td>Britain</td>
<td>Mandatory</td>
<td>203</td>
</tr>
<tr>
<td>Denmark</td>
<td>Mandatory</td>
<td>58</td>
</tr>
<tr>
<td>Finland</td>
<td>Voluntary</td>
<td>68</td>
</tr>
<tr>
<td>France</td>
<td>Mandatory</td>
<td>156</td>
</tr>
<tr>
<td>Germany</td>
<td>Voluntary</td>
<td>221</td>
</tr>
<tr>
<td>Ireland</td>
<td>Mandatory</td>
<td>145</td>
</tr>
<tr>
<td>India</td>
<td>Mandatory</td>
<td>34</td>
</tr>
<tr>
<td>Italy</td>
<td>Voluntary</td>
<td>52</td>
</tr>
<tr>
<td>Japan</td>
<td>Mandatory</td>
<td>19</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Mandatory</td>
<td>14</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Voluntary</td>
<td>57</td>
</tr>
<tr>
<td>Norway</td>
<td>Mandatory</td>
<td>27</td>
</tr>
<tr>
<td>Portugal</td>
<td>Voluntary for some firms</td>
<td>18</td>
</tr>
<tr>
<td>Russia</td>
<td>Comply-or-explain basis</td>
<td>6</td>
</tr>
<tr>
<td>Singapore</td>
<td>Mandatory</td>
<td>4</td>
</tr>
<tr>
<td>Spain</td>
<td>Mandatory</td>
<td>47</td>
</tr>
<tr>
<td>Sweden</td>
<td>Mandatory</td>
<td>142</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Voluntary</td>
<td>122</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Mandatory for some firms</td>
<td>7</td>
</tr>
<tr>
<td>United States</td>
<td>Mandatory</td>
<td>190</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1,637</strong></td>
</tr>
</tbody>
</table>

#### TABLE 5

**Sample distribution by sector during the 2010–2017 period**

<table>
<thead>
<tr>
<th>Sector (NACE, Rev. 2)</th>
<th>Number of observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical</td>
<td>339</td>
</tr>
<tr>
<td>Computer and Electronic</td>
<td>277</td>
</tr>
<tr>
<td>Food</td>
<td>171</td>
</tr>
<tr>
<td>Machinery and Transport</td>
<td>466</td>
</tr>
<tr>
<td>Metals</td>
<td>207</td>
</tr>
<tr>
<td>Textile and Wood</td>
<td>177</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,637</strong></td>
</tr>
</tbody>
</table>

---

4. “Mandatory for public firm in water supply, waste management, transports, postal services and administration of harbours” (Crifo and Rebérioux, 2016, p.29).
APPENDIX A2
Variable definitions and descriptive statistics

<table>
<thead>
<tr>
<th>TABLE 6</th>
<th>Variables and descriptive statistics over the 2010–2017 period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Definition</td>
</tr>
<tr>
<td>Explained variables</td>
<td></td>
</tr>
<tr>
<td>Employee-oriented CSP</td>
<td>Employee-oriented CSP score calculated as a sum of six ESG indicators (health and safety policy, human rights policy, policy against child labour, equal opportunity policy, training policy, and fair remuneration policy)</td>
</tr>
<tr>
<td>Explanatory variables</td>
<td></td>
</tr>
<tr>
<td>Variable of interest</td>
<td></td>
</tr>
<tr>
<td>ESG Disclosure</td>
<td>Bloomberg Disclosure Quality Index ranges from 0.1 for companies that disclose a minimum amount of ESG data to 100 for those that disclose every data point collected by Bloomberg</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>Logarithm of the number of employees</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Employees’ performance = (Total sales/number of employees)</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on assets = (Net income/Total assets)</td>
</tr>
</tbody>
</table>

Note: All independent variables have been lagged by one period. Number of observations = 1,637.

<table>
<thead>
<tr>
<th>TABLE 7</th>
<th>Correlation matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employee-oriented CSP</td>
</tr>
<tr>
<td>Employee-oriented CSP</td>
<td>1.000</td>
</tr>
<tr>
<td>ESG Disclosure</td>
<td>0.618***</td>
</tr>
<tr>
<td>Size</td>
<td>0.357***</td>
</tr>
<tr>
<td>Efficiency</td>
<td>0.096***</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.007</td>
</tr>
</tbody>
</table>

Note: *p < 0.10, **p < 0.05, ***p < 0.01. Number of observations = 1,637.