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The Legal Origins of Corporate Social Responsibility

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Abstract

The legal origin literature documents that civil and common law traditions have different impact on rules and economic outcomes. We contribute to this literature by investigating the relationship between corporate social responsibility and legal origins. Consistently with the main differences in historical and legal backgrounds and net of industry specific effects, the common law origin has a significant and positive impact on the Corporate Governance and Community Involvement domains, while the French legal tradition of civil law on the Human Resources domain. We also document that the lack of observable differences in the environmental domain can be explained by firms' progressive convergence to industry sustainability standards.

JEL: K10; K20; K31; K32; D60.

Keywords: legal origins, corporate social responsibility, environmental standards, corporate governance, civil law, common law.

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1. Introduction

Advertising social and environmental friendly behavior, issuing sustainability reports and hiring Corporate Social Responsibility (CSR, hereon) experts has become increasing corporate practice in the most recent years.¹ The growing relevance of CSR is leading academicians to reflect on whether the latter represents a major change in the economic paradigm with respect to the standard approach. In the latter, on the one hand, forces of market competition transform individual and corporate self-interested behavior into an efficient and socially optimal outcome. On the other hand, the state intervenes with taxes and regulation to address the problem of externalities and public goods redistributing income and wealth according to the dominating social standards (Benabou and Tirole, 2010).

The demand for CSR has emerged mainly in the last decades. CSR was an almost irrelevant issue in pre-globalization high income economies where domestically producing firms already strived to comply with demanding domestic social and environmental rules and did not have much room for additional voluntary compliance to above the law standards.² Quite to the contrary, in globally integrated economies in which production is delocalized, with institutions and rules kept highly heterogeneous amongst nations, regulatory arbitrage and “race to the bottom” have made the role of CSR progressively more important in the eyes of consumers, domestic institutions and investors.³

¹ In 2005, 90 percent of Japanese companies, 71 percent of UK companies and 32 percent of US companies participated in CSR reporting. According to KPMG International Survey of Corporate Responsibility Reporting, in 2011 CSR reporting rose up to involve 95 percent of the 250 largest companies in the world (KPMG Global Sustainability Services, 2005 and 2011). Moreover, the Corporate Social Responsibility Report (ICCA, 2010) documents that 31 percent of the top 500 Fortune companies have a separate CSR department.

² We implicitly refer here to the EU Commission (2001) definition of CSR as “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis”. From a different point of view, based on standard CSR measures (see VIGEO criteria in Appendix B), we may consider the latter as a move from the goal of maximizing shareholders' wealth to the more complex goal of satisfying the wellbeing of a broader range of stakeholders.

³ The Report on Socially Responsible Investing Trends in the United States (Social Investment Forum Foundation, 2010) documents that the share of privately and institutionally managed SRI assets in the US totaled 2.71 trillion dollars in the same year (around 11 percent of asset under management in the US). In 2011 the amount rose to 3.74 trillion dollars (the combined value of GDP of Brazil and Canada). The Global Report on Socially Conscious Consumers (Nielsen Global Report, 2012) calculates that 46 percent of the interviewed consumers are willing to pay more for socially and environmentally sustainable products. Even though the willingness to pay for CSR tends to be upward biased as documented by the contingent evaluation literature (Carson et al., 2001), these figures reveal that the phenomenon is quantitatively relevant.

While most of the literature has focused so far on the nexus between CSR and corporate performance, very few empirical contributions analyze how different legal cultures affect CSR choices around the world. This is the goal of our paper.

A good reference to start our investigation on the nexus between CSR and different country cultures is the legal origin literature. This literature surveyed by La Porta et al. (2008) argues that historical origins of domestic legal systems deeply affect legal rules, regulatory practices and economic outcomes. As is well known, La Porta et al. (2008) identify two main roots (civil and common law) giving birth to four legal families (the Anglo-Saxon for the common law and the French, the German and the Scandinavian for the civil law).⁴

From an historical point of view common law is generally considered as taking origin from the desire of land aristocrats and merchants to limit the power of the crown, while the French version of civil law from the Napoleon desire to “use state power to alter property rights” and in the attempt “to insure that judges did not interfere” (La Porta, 2008). Due to these heterogeneous historical roots two markedly different cultures originated from civil and common law, with state control prevailing in the first, while support to private outcomes in the second. According to Hayek (1960) the two cultures imply two different conceptions of freedom: a freedom “from” and “of” for the common law, against a freedom “for” in the civil law where social goals inspire the system of law and regulation. Using Djankov et al. (2003) expression, in the dilemma between addressing market failure with regulation and avoiding state abuse, civil law is more oriented toward the former and common law toward the latter. This explains why civil law is “policy implementing”, while common law is “dispute resolving” (Damaska, 1986).

The legal origin literature also demonstrates that the two different cultures produce significant disparities in terms of rules and economic outcomes. Common law countries generally have higher shareholders’ and creditors’ protection and more capitalized stock exchanges (La Porta et al., 1998 and 2008) than civil law ones. The latter are also shown to have higher government ownership and regulation than the former which are characterized in turn by greater independence of the judicial power with better contract enforcement as well as security of property rights.

⁴ La Porta et al. (2008) identify three different civil law traditions arguing that the Scandinavian law is less derivative from Roman law, while the German law introduced by Bismarck has more judicial law making with respect to French one.

The question we pose in our research is how these different institutional features rooted in differences in legal origins translate into CSR characteristics. The paper is divided into six sections. In the second and third we analyze whether a given legal tradition may be expected to be more favorable to compliance toward a given CSR domain and formulate our theoretical hypotheses. In the fourth we present our data. In the fifth we illustrate descriptive and econometric findings. The sixth section concludes.

2. Legal Origin Culture and Stakeholder Rights

The classic view of the legal purpose of the corporation originated in common law countries - *shareholder primacy* - seems to leave almost no room for corporate social responsibility if we intend it as a departure from profit maximization toward the satisfaction of a broader range of stakeholders (Reinhardt 2008, Springer 1999; Fisch 2006; Craig 2005). According to this view the manager receives a mandate from her/his employees (the shareholders) to maximize profits of the company in the respect of the law.⁵ Viewed in this perspective CSR entails the risk that the manager abuses of her/his own power to perform actions which waste corporate cash flow and are directed to increase her/his prestige beyond the screen of promoting the wellbeing of the other corporate stakeholders. A view which is quite similar in its consequences to that of shareholder primacy considers the company as a *nexus of contracts* between suppliers and various production factors (Jensen and Meckling 1976; Easterbrook and Fischel 1991). Such contracts establish that factors of production receive a fixed payment in exchange for their services, while shareholders are residual claimants of all the remaining cash flow. Similarly to the shareholder primacy view, the *nexus of contracts* view regards any reduction of the shareholder residual as something which is unfairly subtracted from her/his pockets. The legitimacy of the shareholder claim on the residual cash flow is generally based on the idea that shareholders are those who

⁵ In the famous 1919 lawsuit of John and Horace Dodge (Stout, 2007), owners of 10 percent of shares of the Ford company, the Supreme Court of Michigan condemned Henry Ford accused of subtracting wealth to shareholders with its package of measures aimed at improving wellbeing of his employees. The Court motivated its sentence by arguing that, while Ford was allowed to use part of his own dividends for philanthropic causes, he should not have done it with profits going to the other shareholders (“A *business corporation is organized and carried on primarily for the profit of the stockholders. The powers of directors are to be employed for that end. The discretion of directors is to be exercised in the choice of means to attain that end, and does not extend to a change in the end itself, to the reduction of profit, or to the non-distribution of profits among stockholders in order to devote them to other purposes*”).

bear most of the risk in the corporate venture since their remuneration is more volatile than the fixed payment due to workers. A third novel view of the legal purpose of the corporation developed by Blair and Stout (1999) starts from a critique to this point placing emphasis on the fact that resources invested by shareholders (money) are much more diversifiable than those invested by suppliers and workers (their skills and human capital) in the venture. As a matter of fact, in case of corporate failure, a shareholder with a well diversified stock portfolio may suffer less negative consequences than middle-aged low skilled workers who invested all in job skills which may become obsolete after corporate failure. This is one of the reasons why Blair and Stout (1999) view the company as a team and consider reasonable that the company uses the value added it produces to remunerate stakeholders in proportion to their merit and contribution. This third view is obviously much more favorable to non shareholder oriented CSR domains than the previous two.

Reinhardt's (2010) conclusion on the US view of the legal purpose of the company is that the first two approaches (shareholder primacy and firm as a nexus of contracts) remain prevalent. What is however noted is that a "two-step" approach to CSR, where many states recognize the right of businesses to make charitable contributions after satisfying profit maximization, is quite popular in the US and, more in general, in Anglo-Saxon countries.⁶ This tradition of corporate philanthropy traces back to the well-known examples of Andrew Carnegie, John D. Rockefeller and Henry Ford among others.⁷ Critics of this two-step approach have argued that it was in contradiction with the harsh labor conditions prevailing in the same companies at the time.⁸ What must also be considered as a weakening of the shareholder primacy tenet in the US is that courts are generally quite indulgent toward managerial behavior. This is because they admit that it is difficult to bridge the informational asymmetry toward managers to establish "second guesses" beyond their actions that were not directed to the benefit of corporate profits. Last but not least, many US

⁶ Reinhardt (2010) remembers that charitable donations (even when reducing corporate benefits) are legal in seven US states, while other nineteen states allow them only if they benefit the business or advance the public welfare (Choper, Coffee and Gilson 2004). The remaining 24 states do not clarify whether only donations affecting positively corporate business are allowed.

⁷ According to Henry Ford's *Gospel of wealth* "wealth concentrated in the hand of a single man is the result of the work of all the community and must return to it in a way or in another. The rich enjoys a fortune which must be made available for the common good and his career has two moments: acquisition and distribution" (Picard, 1999, p.26)

⁸ The US Congress refused the first proposal of creation of a public Ford foundation and the Walsh commission denounced it as an expedient to hide poor labor conditions in his company (Zunz, 2002, p.73).

jurisdictions have adopted “non-shareholder constituency statutes” which mitigate the shareholder primacy principle (Velasco, 2004).

In conclusion, in spite of the prevalence of the first two views which are quite hostile to non-shareholder oriented CSR, the “two-step” tradition of corporate philanthropy and the indulgence of tribunals leads us to expect a development of CSR in the US (and more in general in Anglo-Saxon countries) also beyond traditional corporate governance rules protecting shareholders, and especially in the direction of monetary donations to local communities.

On the opposite side, it is reasonable to expect that attitudes toward CSR in civil law countries reflect characteristics described in the legal origin theory: generally lower shareholder protection and a cultural *milieu* in which economic activity must be oriented toward social goals (which mitigates shareholders’ interest and aim to increase the wellbeing of other stakeholders). In this sense civil law countries have a tradition which is much closer to the Blair and Stout’s (1999) conception of the corporation as a team where the added value generated by the creativity of corporate activities must be redistributed across different shareholders, with the board of director acting to balance the competing demands of team members (stakeholders). This view is supported by Roe (2000) who argues that in countries such as Germany and France stakeholders, and in particular employees, have much stronger legal power than in the United States. This different attitude may be fostered also by differences in shareholders’ ownership where few large shareholders may be more likely (and have more power) to commit socially than dispersed shareholders of US companies.

3. Our Research Hypotheses

The main question we aim to answer in this paper is which CSR domains are correlated with civil and which with common law, or, more broadly, with the four families of legal origins (Anglo-Saxon, French, Scandinavian and German).

Based on the literature surveyed above we expect what follows:

- i) Common law countries have higher CSR scores in the Corporate Governance domain (which is traditionally oriented to promote shareholders’ wellbeing);

- ii) Common law countries have higher CSR scores in the Community Involvement domain (due to the two-step culture of profit maximization followed by philanthropic donations typical of the Anglo-Saxon culture described in the section above);
- iii) Civil law countries (and, more specifically, the French tradition) have higher scores in the CSR labor domain (Human Resources) due to their cultural traditions where law rules in favor of workers are higher and shareholders' protection lower.

A final important and related research question we want to address is whether and in which domains there is convergence between civil and common law countries in CSR ratings. This question is related to the broader issue posed by La Porta et al. (2008) on the general convergence between civil and common law countries on rules and economic outcomes but may also be affected by other factors such as benchmarking practices and the progressive emergence of global social norms fostered by the implementation of CSR standards.

4. Data

Our sample period goes from 2003 to 2013 and includes 1834 unique companies. The dataset is created by merging three different sources: i) data on CSR scores at company level are from the VIGEO world dataset; ii) price and size (proxied by Total Assets) at company level are from DATASTREAM;⁹ and iii) information on legal origins are taken from La Porta et al. (2008).

VIGEO assesses corporate social responsibility (CSR) scores on six domains: Human Resources, Environment, Business Behavior, Corporate Governance, Community Involvement, and Human Rights. In each domain d , company i is evaluated with a score n_{id} which is the unweighted average of scores on each specific sustainability driver k .¹⁰

The final score of company i belonging to industry j in each domain d , $FS_d(ij)$, is the weighted sum of the score n_{ijk} of each activated sustainability driver k multiplied

⁹ DATASTREAM Help Desk is acknowledged for technical support in downloading data.

¹⁰ Details on each domain and sustainability driver are provided in Appendix B.

by the weight w_{jdk} (from 0 to 3) of the sustainability driver k for the domain d in industry j to which company i belongs.¹¹ The overall score - $OS(ij)$ - is the weighted sum of the final scores - $FS_d(ij)$ - achieved in each domain d divided by the sum of the weights as in the following formula in a given instant of time (where t is omitted for simplicity):

$$OS(ij) = \sum_{d=1}^6 \frac{FS_d(ij)}{w_{jdk}}. \quad (1)$$

Sector-specific weights w_{jdk} are computed by VIGEO taking into account the relative difficulty of each specific industry j in implementing CSR standards in each specific sustainability driver k .

To make an example, the performance of the banking industry in the *environment* domain is underweighted since the respect of environmentally responsible waste/emission standards is relatively easier in this industry vis-à-vis other industries.¹²

In order to control the robustness of our results to the VIGEO weighting approach, we introduce fixed industry effects as regressors in our econometric estimates and, alternatively, we calculate scores as deviations from industry averages in the empirical analysis presented in the next sections.

5. Descriptive Statistics

Following La Porta et al. (2008)'s classification, we divide countries according their legal origins in four categories, namely French, German, Scandinavian and English. Countries belonging to the first three categories are also grouped into the

¹¹ If the sustainability driver k is not considered relevant for industry j , the weight w_{jdk} is equal to zero.

¹² Another example relates to the sustainability driver assessing transparency in information to customers which achieves the highest weight in the banking sector, since this CSR objective represents a highly relevant and sensitive CSR issue in this specific industry given its fundamental and direct contribution to general interest in terms, for example, of protecting public order and trade and market security. Moreover, stakeholders' exposure for this driver is high, since controversies related to the violation of this right are very frequent. Finally, banks that do not ensure an adequate information to customers face a number of risks, not only legal and reputational but also human capital risks as the motivation and sense of belonging of employees could be affected because of banks' unfair practices that could be perceived as driven by a corporate culture irrespective of consumers' rights.

broader category *Civil law*, while those belonging the fourth are grouped into the *Common law* category (see Table 1 for country allocation to the different families).

In Table 2 we report summary statistics for all the variables used in descriptive and econometric analysis. Civil and common law groups are almost balanced (52 against 48 percent), while the French and the German families are much larger within the civil law origin (each of them accounting for 23 percent of the overall sample against 7 percent of the Scandinavian family). In order to have first descriptive evidence on what required to test our hypotheses, we provide in Table 3 a breakdown of CSR criteria by legal origins. More specifically, when we consider simple CSR means, civil law countries display higher CSR scores than common law countries under all criteria but Corporate Governance (all the differences are significant under parametric tests).¹³ The higher performance of civil law countries seems to be driven by countries with French legal origins which enjoy higher CSR scores in all criteria relative to those with English legal origins, with the only exception of the Corporate Governance criterion under which the latter perform better than the former.

This preliminary statistical testing is oriented toward the non rejection of our hypotheses i) and iii) since common law countries exhibit better CSR performance in the Corporate Governance domain, whereas civil law countries in the Human Resources and Human Rights domains.

However, the comparison of CSR means can be misleading if we do not consider the potential source of heterogeneity coming from industry-specific characteristics (which the VIGEO's weighting approach described above tries to address). To control for that we calculate in each period and domain deviations of firm CSR scores from the average of the industry it belongs to (i.e. $FS_a(ij) - \sum_j FS_a(ij)$). The effect will be further controlled for in econometric estimates where industry effects will be used as regressors. The descriptive analysis of industry deviation scores modifies the previously described patterns (Table 4). In particular, for the overall CSR score civil law countries are now on average below the mean industry overall CSR score.¹⁴ However, and consistently with the previous results, the former perform better (i.e.

¹³ Non parametric tests provide results which are not qualitatively different. Results are omitted for reasons of space and available upon request.

¹⁴ Such result might appear in principle inconsistent with the superior overall CSR-performance of civil law countries in terms of average scores reported in Table 3. The combination of the two suggests that civil law countries have a higher number of firms in CSR-friendly sectors than common law countries. The difference between the two results confirms the importance of taking into account industry characteristics in the econometric estimates which follow.

are above the industry average) under the Human Rights and Human Resources criteria, whereas the latter are in general above the industry average in all the other domains (all the differences are significant under parametric tests).

This last evidence gives additional support to our hypotheses i) and iii) and leads us also not to reject hypothesis ii) since common law countries exhibit higher CSR performance also in the Community Involvement domain after netting out industry-specific characteristics (i.e. are above the industry CSR average in that domain).

Last but not least, in order to analyze how corporate social responsibility has changed across years, we display in Figures 1a-1g the time dynamics of average CSR scores. These figures reveal the presence of a marked convergence pattern across different legal origin areas in the overall CSR score and particularly in the Environment domain where the two groups converge to a mean sample value (Figure 1c). This descriptive evidence induces us to test econometrically the convergence hypothesis in the next sections.

5.1 Econometric findings

The descriptive statistics and parametric tests presented so far did not take into account the panel structure of our dataset and did not allow us to isolate the impact of legal origin from other time, industry and country specific characteristics that are also expected to influence CSR scores. Moreover, even though we have no reason to doubt that the VIGEO's weighting system reflect an expert intervention on a scoring process which is in any case subjective and arbitrary also before the weighting intervention, we may be interested in checking whether our main results are robust to an attenuation of such weighting effect. For these reasons, we run an econometric analysis using a standard linear random effects model. The baseline model we estimate is the following:

$$\begin{aligned}
 CSR_{it} = & \alpha + \beta Legal_Origins_i + \gamma_1 Total_Assets_{it} + \gamma_2 GDP_{it} + \gamma_3 G/GDP_{it} + \\
 & + \sum \delta_j Dyear_j + \sum \omega_k Dindustry_k + \nu_i + \varepsilon_{it}
 \end{aligned}
 \tag{2}$$

where for firm i at time t the dependent variable CSR is, in some specifications, the overall or the domain-specific CSR score while, in alternative ones, is the firm i 's deviation from the industry-average (overall or domain-specific) CSR score calculated at time t . *Legal_Origins* is our main variable of interest which, according to the implemented specification, takes the form of a (0/1) dummy for countries belonging to the civil law group (variable *Civil Law*) or, alternatively, of a set of (0/1) dummies for countries belonging to the French, Scandinavian, German and English legal origin groups (variables *French*, *Scandinavian*, *German* and *English*), with the latter used as omitted benchmark. Among controls, *Total_Assets* is the value of assets in US\$ owned by firm i at time t and is a proxy for firm size, *GDP* and *G/GDP* are respectively the country per capita GDP in US\$PPP and the country government expenditure (total expense and the net acquisition of nonfinancial assets) as percentage of GDP for firm i at time t ;¹⁵ *Dyear* and *Dindustry* are respectively dummy variables for each year with no missing observations in all the CSR criteria (2003 is the omitted benchmark) and dummies for the industry firm i belongs to (the aerospace industry is the omitted category). Last, ε_{it} is an idiosyncratic error while ν_i captures firm's time invariant characteristics which, as is standard in random effect panel models, are assumed to be independent from all the other regressors. In all estimates, errors are clustered at country level.

In Tables 5a-5b we report estimate findings for determinants of the overall CSR and of all CSR domains using before the *Civil Law* dummy (Table 5a) and after the *French*, *Scandinavian*, *German* dummies (Table 5b) as legal origin variables. The first specification confirms previous descriptive findings since common law countries perform better in the overall CSR score than civil law countries (Table 5a, column 1). When considering the specific domains, the same holds true for Community Involvement and Corporate Governance (Table 5a, columns 5 and 6). If we consider the legal origin groups, we find that French legal origins are associated with higher CSR scores in the Human Resources domain than English legal origins (Table 5b, column 2), whereas the latter outperform under the Corporate Governance and Community Involvement criteria (Table 5b, columns 5 and 6). In terms of economic significance the common law effect on Corporate Governance is remarkable (1.49 times the standard deviation of the dependent variable) and much stronger than the effect of the same legal origin group on Community Involvement (.37 percent of the

¹⁵ *Total Assets* and *GDP* have been divided respectively by 10 billion and 1,000.

standard deviation) and the French law effect on Human Resources (.37 percent of the standard deviation). Looking at the impact of our controls we do not find evidence of substitutability between public welfare and corporate social responsibility (no evidence of negative and significant effect, while in very few cases a positive and significant effect).

In order to net out the effect of industry specific weights we evaluate the robustness of the previous findings with the alternative approach of considering as dependent variable deviations of CSR scores from industry averages for each company and CSR criterion. Regression results are again consistent with descriptive evidence (Tables 6a-6b), with common (civil) law firms above (below) their industry average when considering the overall score and the Corporate Governance and Community Involvement domains (Table 6a, columns 5 and 6). In these estimates, firms belonging to the French legal origin family are more likely to be above their industry average score in the Human Resources domain (Table 6b, column 2) than those in the English family. On the contrary, the latter tend to outperform all the other legal origin groups in the Corporate Governance and Community Involvement domains as well as when considering the overall CSR score (Table 6b, columns 5 and 6).¹⁶

We repeat our estimates for any single sustainability driver in order to verify which of them drives the aggregate domain results (see Table A5 in Appendix A). What we observe here is that the superior performance of the civil law origin is significant for all items for which we have a sufficient number of observations in the Corporate Governance and Community Involvement domains. Results are mixed in the Human Rights domain (where civil law origin significantly outperforms in the Promotion of Labor Relations and Encouraging Employee Participation sustainability drivers, while it significantly underperforms in the Improvement of Health and Safety Conditions and Respect and Management of Working Hours sustainability drivers) and in the Human Resources domain (where civil law origin significantly outperforms in the Respect for Freedom of Association and Right to Collective Bargaining and Non-Discrimination sustainability drivers). Note however that, when looking at the performance of families within the two legal origin groups, the French family outperforms in six of the Human Resources sustainability drivers (Promotion of Labor Relations, Encouraging Employee Participation, Training and Development,

¹⁶ Results are robust to the exclusion of industry dummies (see Tables A1-A2 in Appendix A).

Responsible Management and Restructurings, Career Management and Promotion of Employability) thereby confirming our previous findings on this point.

What emerges from the statistical tests and regressions is also the lack of a statistically significant impact of legal origins on CSR scores regarding the Environment criteria both in aggregate domain (column 3 in Tables 5a-6b) and in sustainability driver estimates (Table A5 in Appendix A), with the exception of the management of atmospheric emissions. A plausible explanation for this phenomenon may hinge on CSR convergence between firms in civil and common law countries in those specific domains, convergence which we already envisaged in the inspection of CSR score time dynamics (Figures 1a-1g). In order to test for this hypothesis in the last ten year sample period, we average each domain-specific CSR score over five main periods (2003-2005, 2006-2007, 2008-2009, 2010-2011, 2012-2013), construct for each domain the growth rate of CSR between the first and the last period¹⁷ and regress it on the same controls as in eq. 2 with the addition of the level of CSR score for the relevant domain in the first period (2003-2005). A negative and significant coefficient in the latter would confirm the above-mentioned convergence hypothesis.

Results from the OLS regression are reported in Tables 7a-7b and confirm our hypothesis since the coefficient on the domain-specific CRS score level variable (*Score Level 03-05*) is negative and significant for all CSR domains - hence indicating a general convergence for all criteria - while the coefficients on the legal origin variables (either *Civil Law* variable or the legal origin group dummies) are not significant just for the Business Behavior and Environment domains (Tables 7a, columns 3 and 4). Note that the presence of significant convergence effects also in the other CSR domains does not contradict descriptive evidence in Figures 1a-1g. What is probably at work is a convergence process which is mostly within, but not between, legal origin groups in these cases. And this justifies both convergence and the permanence of significant effects of the legal origin dummies.¹⁸

We regard that the observed convergence effect may be in part due to the fact that globalization reduced country of origin influences on corporate practices. Another plausible explanation for the convergence in the Environment domain is the generalized adoption of world standards (i.e. the Forest Stewardship Council standard

¹⁷ CSR growth rate is calculated as follows: $\frac{CSR_{i,t=2012-13} - CSR_{i,t=2003-05}}{CSR_{i,t=2003-05}}$.

¹⁸ Evidence of within legal group convergence is omitted for reasons of space and are available from the authors upon request.

on the use of sustainable paper which developed quite rapidly around the world). A third and related rationale is that companies increasingly adopt benchmarking practices in their competitive strategies. The application of them to environmental standards may contribute to explain both the reinforcement of global social norms on environmental sustainability and the convergence to common industry standards. All these potential explanations are not the main core of this paper and may indeed be a promising ground for further studies on CSR.

To conclude this section, our hypothesis finds empirical support also under the econometric analysis taking into account industry heterogeneity and time structure of our dataset. Companies in Common law countries perform better under Community Involvement and Corporate Governance criteria, while firms in countries with French legal origins receive higher ratings in the Human Resources domain. Finally, under the Environment criteria there is no significant difference among countries in terms of their legal origins since in this domain they tend to converge more significantly than under the others to a common global industry standard.

5.2 Robustness Checks

A problem which usually arises when running the standard linear random effects model concerns the assumption of zero correlation between the firm characteristics ν_i and all the other regressors. If this assumption can be realistic with respect to the legal origin variables, it may be posed under discussion when considering the other regressors. We cannot solve the problem with a fixed effect model since the effect of the (time-invariant) main variable of interest (*Legal_Origin*) would be absorbed in firm-specific intercepts. We therefore run our robustness check by implementing the Mundlak (1978)'s approach. The latter implies the re-estimation of the random effect model with the addition of group-means of the time variant variables *GDP*, *G/GDP* and *Total Assets*, which we name respectively \overline{GDP} , $\overline{G/GDP}$ and $\overline{Total\ Assets}$. All the results are consistent with those commented in the previous section and are reported in Tables 7a-7b when the dependent variable is the firms' CSR score (overall and in the specific sustainability drivers) and in Tables 8a-8b when

the dependent variable is firm's deviation from its CSR industry average (overall and in the different sub-domains).¹⁹

Another potential bias in our estimates arising from the sample composition of the VIGEO dataset derives from non-random attrition since the probability firms enter and exit our panel may depend on observable and/or unobservable factors possibly correlated with the main variable of interest (the CSR scores). In order to reduce this potential bias in the main estimates, we first estimate the firms' attrition probability controlling for year, sector and country effects with the addition of the country per-capita GDP and a proxy for the difficulty of doing business in a given country (i.e. the number of procedures necessary to start up a new business).²⁰ Then we use the predicted attrition probabilities to (inversely) weight each observation in the main equation -- i.e. equation n. 2 in its different specifications.²¹ Estimation results of the attrition probit model and of the main CSR equations through pooled OLS and weighted least squares (WLS) are reported respectively in column A and columns 1-14 of Table 10. Since, in general, WLS estimates do not significantly differ from the pooled-OLS ones and are consistent with those reported in Tables 5a-b, we can conclude firms' non-random attrition is not likely to be the main driver of our results.

6. Conclusions

Corporate social responsibility is an emerging and growing phenomenon in contemporary globally integrated economies. In spite of its increasing importance there is yet no theoretical and empirical analysis on the impact that different legal origins may have on the implementation of CSR practices in the different CSR domains. Our paper aims to bridge this gap by providing an original contribution to both the CSR and the legal origin literature.

¹⁹ For random effect estimations with Mundlak's correction without industry dummies see Tables A3-A4 in the appendix A.

²⁰ Data on the number of procedures necessary to start a new business in a given country vary at yearly basis and are taken from the "Doing Business" panel available at <http://www.doingbusiness.org/custom-query> - variable: *Starting a Business (Procedures Numbers)*. Since this panel starts from 2004, we restricted the analysis only to the period 2004-2013 and consider for each firm the yearly average of its CSR scores.

²¹ The weights are constructed as $1/p(A_i)$, where $p(A_i)$ is the estimated probability of attrition for each firm. With such a weighting method, each observation in the main equation is inversely weighted by its attrition probability so that less importance in the estimation is given to those firms more likely to attrite.

We start by wondering whether the two different (civil and common) law traditions may have intrinsic characteristics which justify different patterns of adoption of CSR practices. We argue that this is the case since, as is well known, in the distribution of benefits from corporate action, common law is much more oriented toward shareholder protection, while civil law (especially in the French family) toward worker rights. Based on the history of the two different cultures we also formulate the hypothesis that the Anglo-Saxon tradition of corporate philanthropy could tilt the balance toward common law countries in the related CSR domain (Community Involvement).

Our descriptive and econometric findings document strong and robust evidence in the three indicated directions. Common law origin has a positive and significant impact on the Corporate Governance and Community Involvement domains (respectively concerning shareholder rights and corporate philanthropy), while the French family in the civil law origin on Human Resources (the CSR domain concerning worker rights).

We finally document the absence of legal origin influence on the environmental domain. We explain more in depth this “non result” by showing that it is actually the outcome of a remarkable process of convergence between the two legal origin groups. We further document that convergence actually occurs in all domains but it cancels out legal origin effects only in the Environment and in the Business Behavior domains.

We interpret this last evidence in three ways. First, globalization reduces the influence of country of origin effects (producing convergence both within and between legal origin areas). Second, in some specific domains, such as that of environmental sustainability, the emergence of a global social norm (probably fostered by the creation and generalized voluntary adoption of some international standards) rapidly reduced differences among corporations coming from different legal cultures. Third, the increased use of benchmarking practices reinforces processes of creation of global social norms around commonly accepted environmental standards. Further research in this direction is welcome and may significantly contribute to enrich this field of the literature.

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Tables

Table 1. Classification of countries by legal origins

COMMON LAW <i>English</i>	CIVIL LAW		
	<i>French</i>	<i>Scandinavian</i>	<i>German</i>
Australia, Canada, Hong-Kong, Ireland, New Zealand Singapore, United Kingdom, United States	Belgium, France, Portugal Greece, Italy, Spain, Netherlands	Denmark, Finland, Sweden, Norway	Austria, Bermuda, China, Luxembourg Germany, Iceland, Japan, Russia, Switzerland

Table 2. Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	[95% Conf. Interval]		Min	Max
<i>CSR score</i>							
Overall Score	7000	36.064	12.301	35.378	36.751	4	77
Human resources	8137	28.990	17.646	28.029	29.951	0	84
Environment	8137	31.352	18.381	30.357	32.348	0	87
Business Behaviour	8137	38.892	13.275	38.281	39.504	4	82
Corporate governance	8137	46.239	17.078	45.392	47.087	1	94
Community involvement	8137	36.064	18.547	35.086	37.041	0	96
Human rights	7000	39.391	14.422	38.619	40.163	3	91
<i>Legal Origin</i>							
Civil Law	8135	0.520	0.495	0.491	0.548	0	1
English	8137	0.480	0.495	0.452	0.509	0	1
French	8137	0.229	0.453	0.203	0.255	0	1
German	8137	0.225	0.411	0.201	0.248	0	1
Scandinavian	8137	0.066	0.247	0.053	0.080	0	1
<i>Other variables</i>							
Total Assets / 10,billion	7749	0.076	0.632	0.044	0.108	0	21.834
GDP (per capita, PPP) /1,000	8135	38.857	8.095	38.451	39.263	6.781	81.104
G/GDP	8135	43.782	7.048	43.391	44.173	14.432	64.902

Table 3. CSR by legal origins

<i>Legal Origin</i>	A) Mean CSR score by legal origin						
	<i>Overall score</i>	<i>Human Resources</i>	<i>Environment</i>	<i>Business Behavior</i>	<i>Corporate Governance</i>	<i>Community Involvement</i>	<i>Human Rights</i>
ENGLISH	35.794 (10.989)	24.554 (14.282)	29.842 (17.874)	39.150 (12.663)	55.757 (13.002)	36.996 (18.398)	37.298 (12.625)
FRENCH	40.097 (12.856)	43.340 (16.052)	39.334 (17.369)	44.560 (13.396)	43.557 (13.819)	44.566 (17.556)	44.625 (15.326)
SCANDINAVIAN	36.845 (11.229)	35.269 (15.959)	34.771 (18.285)	40.741 (13.167)	44.399 (12.381)	32.718 (17.689)	42.855 (14.847)
GERMAN	32.120 (13.320)	30.363 (18.088)	34.356 (18.757)	38.013 (13.156)	32.581 (18.324)	33.266 (17.953)	37.501 (15.362)
COMMON LAW	35.800 (10.989)	24.555 (14.284)	29.849 (17.877)	39.162 (12.656)	55.763 (13.002)	36.998 (18.395)	37.303 (12.624)
CIVIL LAW	36.239 (13.387)	37.494 (17.908)	36.923 (18.173)	41.639 (13.625)	39.495 (16.451)	38.922 (18.618)	41.327 (15.644)
B) Test of mean CSR score by legal origin (<i>t</i> -statistics)							
<i>Common vs. Civil Law</i>	-3.9544***	-15.7723***	-6.9578***	-5.7715***	17.3054***	-2.1211***	-8.9743***
<i>English vs. French</i>	-4.9787***	-17.3151***	-7.2738***	-6.8656***	15.2730***	-6.2778***	-8.3713***
<i>English vs. German</i>	-1.3065*	-9.7134***	-5.4665***	-2.6640***	15.4367***	0.8974	-6.0205***
<i>English vs. Scandinavian</i>	-2.6224***	-10.1105***	-3.4363***	-3.5419***	9.7071***	3.2803***	-7.7834***
<i>French vs. German</i>	3.2572***	5.5955***	0.6951	3.7528***	3.0236***	6.9431***	1.5557*
<i>French vs. Scandinavian</i>	1.6488**	3.9014***	2.4252***	2.0189***	-2.8465***	8.7892***	-0.8435
<i>German vs. Scandinavian</i>	1.3130*	1.0514	-1.5323*	1.1957	4.9836***	-2.4288***	2.0718**

Std. dev. are reported in parentheses; * Significant at the 1 % level; ** Significant at the 5 % level; *** Significant at the 10 % level

Table 4. Deviations from industry average CSR by legal origins.

A) Mean deviations from industry average CSR by legal origin							
Legal Origin	Overall score	Human Resources	Environment	Business Behavior	Corporate Governance	Community Involvement	Human Rights
ENGLISH	1.095 (8.317)	-0.895 (9.756)	0.459 (13.344)	0.283 (9.811)	5.869 (12.026)	1.221 (13.776)	-0.225 (9.685)
FRENCH	-0.007 (10.152)	2.056 (12.673)	-0.622 (13.076)	0.294 (10.207)	-3.879 (12.303)	0.692 (14.332)	0.986 (12.523)
SCANDINAVIAN	-2.215 (9.766)	-1.206 (12.728)	-1.316 (14.113)	-0.808 (11.138)	-4.033 (11.360)	-5.945 (15.152)	0.156 (12.741)
GERMAN	-1.650 (9.206)	-0.587 (11.625)	0.311 (13.744)	-0.714 (9.547)	-5.351 (11.572)	-1.566 (12.520)	-0.575 (11.230)
COMMON LAW	1.100 (8.316)	-0.894 (9.755)	0.468 (13.342)	0.295 (9.801)	5.863 (12.027)	1.224 (13.777)	-0.220 (9.684)
CIVIL LAW	-1.002 (9.744)	0.679 (12.371)	-0.348 (13.463)	-0.215 (10.087)	-4.454 (11.943)	-0.927 (13.930)	0.206 (12.032)

B) Test of mean deviations from industry average CSR by legal origin (f-statistics)							
Common vs. Civil Law	3.9577***	-4.2117***	-0.4823	-0.2473	20.2065***	3.4607***	-1.9829**
English vs. French	2.5585***	-4.9788***	-0.2827	-0.8787	18.0384***	0.4510	-1.7040**
English vs. German	4.0470***	-2.2191**	-1.0706	0.3612	15.8392***	3.8860***	-0.9515
English vs. Scandinavian	3.4012***	-2.4585***	-0.2366	-0.3054	11.9200***	6.6926***	-2.7290***
French vs. German	1.4541*	2.5351***	-0.8375	1.1751	-0.7165	3.2695***	0.7045
French vs. Scandinavian	1.1658	1.5031*	-0.0149	0.3781	-2.7185***	6.3368***	-1.1678
German vs. Scandinavian	0.1050	0.6110	-0.6567	0.5695	2.1098*	-3.5324***	1.7726**

Std. dev are reported in parentheses; * Significant at the 1 % level; ** Significant at the 5 % level; *** Significant at the 10 % level

Table 5a. Determinants of CSR over time: random effects.

Variables	(1) Overall score	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.115 (0.104)	-0.314** (0.123)	-0.217 (0.192)	0.139 (0.175)	-0.210 (0.199)	-0.102 (0.405)	0.0387 (0.131)
Civil Law	-5.842*** (1.379)	1.407 (1.806)	-2.368 (1.889)	-2.126* (1.177)	-25.37*** (2.818)	-6.911*** (1.494)	-1.060 (1.070)
GDP	0.0212 (0.0901)	0.0304 (0.0982)	-0.166 (0.105)	0.00910 (0.0764)	0.168 (0.146)	-0.0508 (0.110)	0.0538 (0.0841)
G/GDP	0.174** (0.0848)	0.183 (0.154)	0.0873 (0.107)	0.128 (0.0877)	0.173 (0.134)	0.301* (0.155)	0.257** (0.104)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year)

Table 5b. Determinants of CSR over time: random effects.

Variables	(1) Overall score	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.0863 (0.121)	-0.235 (0.147)	-0.216 (0.188)	0.170 (0.188)	-0.172 (0.188)	-0.0779 (0.417)	0.0643 (0.141)
French Origins	-3.708* (2.119)	6.576** (2.755)	-2.067 (3.060)	-0.240 (1.871)	-23.52*** (3.036)	-4.307* (2.402)	0.516 (1.952)
Scandinavian Origins	-6.710** (2.632)	-0.396 (2.681)	-3.627 (3.303)	-2.818 (2.373)	-23.43*** (3.842)	-14.24*** (2.668)	-1.359 (2.718)
German Origins	-7.016*** (1.300)	-1.393 (1.725)	-2.279 (1.861)	-3.106** (1.237)	-26.87*** (3.085)	-7.008*** (1.193)	-1.941* (1.125)
GDP	0.0336 (0.0925)	0.0588 (0.108)	-0.150 (0.108)	0.0195 (0.0792)	0.141 (0.146)	0.0575 (0.114)	0.0585 (0.0852)
G/GDP	0.154* (0.0793)	0.125 (0.115)	0.0958 (0.108)	0.104 (0.0848)	0.120 (0.132)	0.348** (0.145)	0.234** (0.0927)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year); English Origins.

Table 6a. Determinants of deviations from industry average CSR over time: random effects.

Variables	(1) OverallScore	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.0549 (0.119)	-0.220 (0.177)	-0.268 (0.219)	0.136 (0.225)	-0.139 (0.177)	-0.0693 (0.360)	0.0367 (0.151)
Civil Law	-5.335*** (1.248)	1.106 (1.544)	-2.772* (1.541)	-1.757 (1.085)	-22.57*** (2.867)	-5.733*** (1.091)	-0.983 (0.968)
GDP	-0.0309 (0.0834)	0.0157 (0.0923)	-0.152* (0.0914)	0.0107 (0.0823)	0.0941 (0.136)	-0.164* (0.0935)	0.0164 (0.0737)
G/GDP	0.118 (0.0864)	0.165 (0.146)	0.163* (0.0898)	0.106 (0.0815)	0.0636 (0.114)	0.106 (0.113)	0.211** (0.0906)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year)

Table 6b. Determinants of deviations from industry average CSR over time: random effects.

Variables	(1) OverallScore	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.0863 (0.121)	-0.235 (0.147)	-0.216 (0.188)	0.170 (0.188)	-0.172 (0.188)	-0.0779 (0.417)	0.0643 (0.141)
French Origins	-3.708* (2.119)	6.576** (2.755)	-2.067 (3.060)	-0.240 (1.871)	-23.52*** (3.036)	-4.307* (2.402)	0.516 (1.952)
Scandinavian Origins	-6.710** (2.632)	-0.396 (2.681)	-3.627 (3.303)	-2.818 (2.373)	-23.43*** (3.842)	-14.24*** (2.668)	-1.359 (2.718)
German Origins	-7.016*** (1.300)	-1.393 (1.725)	-2.279 (1.861)	-3.106** (1.237)	-26.87*** (3.085)	-7.008*** (1.193)	-1.941* (1.125)
GDP	0.0336 (0.0925)	0.0588 (0.108)	-0.150 (0.108)	0.0195 (0.0792)	0.141 (0.146)	0.0575 (0.114)	0.0585 (0.0852)
G/GDP	0.154* (0.0793)	0.125 (0.115)	0.0958 (0.108)	0.104 (0.0848)	0.120 (0.132)	0.348** (0.145)	0.234** (0.0927)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year); English Origins.

Table 7a. CSR convergence between civil and common law countries.

Variables	(1) Overall score	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.0210*** (0.00517)	-0.0156* (0.00796)	-0.0882*** (0.0129)	-0.0165 (0.0161)	-0.00167 (0.00255)	-0.0219 (0.0153)	-0.00966** (0.00372)
Civil Law	0.0773** (0.0345)	0.234*** (0.0348)	-0.0890 (0.225)	0.0781* (0.0437)	-0.383*** (0.0660)	0.323** (0.137)	0.169*** (0.0402)
GDP	-0.00301 (0.00332)	0.000322 (0.00321)	0.0132 (0.0171)	-0.00379 (0.00291)	0.00474 (0.00306)	0.000675 (0.0112)	-0.00219 (0.00384)
G/GDP	0.00189 (0.00285)	0.00745* (0.00360)	0.00751 (0.0131)	-0.00563 (0.00331)	0.00140 (0.00391)	-0.0392** (0.0172)	-0.000361 (0.00223)
Score Level (03-05)	-0.0255*** (0.00140)	-0.0187*** (0.00202)	-0.0446*** (0.00756)	-0.0230*** (0.00266)	-0.0220*** (0.00212)	-0.0372** (0.0165)	-0.0167*** (0.000953)
Dummy 2006-2007	-0.0155 (0.0230)	-0.0337* (0.0181)	-0.0879 (0.0838)	-0.0868 (0.0954)	-0.0662 (0.0594)	0.0765 (0.0975)	-0.0438 (0.0421)
Dummy 2008-2009	-0.0127 (0.0273)	-0.0373* (0.0193)	-0.115 (0.131)	-0.0631 (0.104)	-0.0812 (0.0634)	0.186 (0.119)	-0.0316 (0.0449)
Dummy 2010-2011	-0.0182 (0.0296)	-0.0488** (0.0224)	-0.149 (0.169)	-0.0570 (0.106)	-0.0802 (0.0688)	0.246* (0.141)	-0.0467 (0.0484)
Dummy 2012-2013	-0.0124 (0.0315)	-0.0529** (0.0240)	-0.184 (0.185)	-0.0522 (0.100)	-0.0968 (0.0661)	0.173 (0.131)	-0.0253 (0.0484)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Observations	765	774	768	774	774	773	765
R-squared	0.751	0.520	0.440	0.570	0.554	0.248	0.535

Robust standard errors clustered at country level are reported in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Dependent variable: $\frac{CSR_{i,t=2012-13} - CSR_{i,t=2003-2005}}{CSR_{i,t=2003-2005}}$.

Omitted categories: Aerospace (Industry); 2003-2005 (Year)

Table 7b. CSR convergence between countries with different legal origins.

Variables	(1) Overall score	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.0199*** (0.00534)	-0.0145* (0.00794)	-0.0867*** (0.0135)	-0.0163 (0.0161)	-0.00168 (0.00254)	-0.0197 (0.0155)	-0.0101** (0.00389)
French Origins	0.149*** (0.0355)	0.293*** (0.0467)	-0.0683 (0.317)	0.112* (0.0625)	-0.405*** (0.0802)	0.382** (0.157)	0.148** (0.0557)
Scandinavian Origins	-0.0255 (0.0606)	0.0633 (0.0547)	-0.340 (0.351)	0.0995 (0.0594)	-0.410*** (0.0967)	-0.0115 (0.163)	0.225*** (0.0643)
German Origins	0.0243 (0.0289)	0.203*** (0.0203)	-0.0669 (0.155)	0.0423 (0.0418)	-0.360*** (0.0695)	0.310 (0.268)	0.182*** (0.0415)
GDP	-0.00124 (0.00219)	0.00310 (0.00219)	0.0170 (0.0195)	-0.00398 (0.00288)	0.00504 (0.00310)	0.00591 (0.0134)	-0.00308 (0.00372)
G/GDP	-0.00159 (0.00262)	0.00611 (0.00353)	0.0104 (0.0216)	-0.00842* (0.00417)	0.00333 (0.00422)	-0.0381** (0.0149)	0.000331 (0.00398)
Score Level (03-05)	-0.0253*** (0.00148)	-0.0188*** (0.00203)	-0.0442*** (0.00762)	-0.0230*** (0.00263)	-0.0220*** (0.00215)	-0.0375** (0.0165)	-0.0167*** (0.000989)
Dummy 2006-2007	-0.0213 (0.0289)	-0.0485** (0.0226)	-0.114 (0.108)	-0.0814 (0.0949)	-0.0708 (0.0583)	0.0433 (0.0875)	-0.0392 (0.0409)
Dummy 2008-2009	-0.0175 (0.0340)	-0.0566** (0.0264)	-0.155 (0.171)	-0.0530 (0.104)	-0.0896 (0.0621)	0.139 (0.109)	-0.0258 (0.0457)
Dummy 2010-2011	-0.0141 (0.0360)	-0.0648** (0.0301)	-0.197 (0.233)	-0.0396 (0.107)	-0.0936 (0.0673)	0.196 (0.127)	-0.0426 (0.0538)
Dummy 2012-2013	-0.0150 (0.0346)	-0.0748** (0.0325)	-0.235 (0.242)	-0.0377 (0.0992)	-0.108 (0.0653)	0.115 (0.127)	-0.0191 (0.0527)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Observations	765	774	768	774	774	773	765
R-squared	0.760	0.537	0.442	0.571	0.555	0.252	0.538

Robust standard errors clustered at country level are reported in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Dependent variable: $\frac{CSR_{i,t=2012-13} - CSR_{i,t=2003-2005}}{CSR_{i,t=2003-2005}}$.

Omitted categories: Aerospace (Industry); 2003-2005 (Year); English Origins.

Table 8a. Determinants of CSR over time: random effects (Mundlak correction).

Variables	(1) Overallscore	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.217 (0.318)	-0.250 (0.523)	-0.734* (0.433)	0.142 (0.545)	-0.115 (0.189)	-1.010*** (0.277)	0.190 (0.480)
Civil Law	-6.566*** (1.259)	-0.128 (1.516)	-3.557** (1.719)	-2.745*** (1.045)	-25.83*** (2.945)	-6.544*** (1.266)	-1.428 (1.011)
GDP	0.514** (0.250)	0.793*** (0.245)	0.377 (0.303)	0.702*** (0.223)	0.524* (0.308)	0.764** (0.344)	0.678** (0.271)
G/GDP	0.170* (0.0990)	0.0378 (0.0955)	0.0388 (0.120)	0.104 (0.111)	0.140 (0.207)	0.521* (0.280)	0.284** (0.115)
<u>Total Assets</u>	0.158 (0.442)	-0.0692 (0.841)	0.800 (0.557)	0.00696 (0.825)	-0.119 (0.140)	1.134 (0.753)	-0.189 (0.699)
<u>GDP</u>	-0.612** (0.244)	-0.860*** (0.242)	-0.664* (0.348)	-0.789*** (0.236)	-0.409 (0.249)	-0.954*** (0.323)	-0.724*** (0.269)
<u>G/GDP</u>	0.0238 (0.148)	0.274 (0.180)	0.127 (0.171)	0.0334 (0.139)	0.0553 (0.279)	-0.361 (0.282)	-0.0490 (0.132)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year)

Table 8b. Determinants of CSR over time: random effects (Mundlak correction).

Variables	(1) Overallscore	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.216 (0.318)	-0.246 (0.517)	-0.734* (0.433)	0.144 (0.544)	-0.115 (0.189)	-1.003*** (0.279)	0.190 (0.479)
French Origins	-4.899** (1.974)	4.384** (2.186)	-4.138 (2.844)	-1.460 (1.721)	-24.18*** (3.181)	-4.549** (2.204)	-0.352 (1.835)
Scandinavian Origins	-6.372*** (2.457)	-1.300 (2.777)	-4.201 (3.131)	-2.370 (2.223)	-23.11*** (3.732)	-12.36*** (2.406)	-0.491 (2.765)
German Origins	-7.451*** (1.300)	-2.280 (1.540)	-3.168** (1.589)	-3.455*** (1.085)	-27.05*** (3.264)	-6.791*** (1.077)	-2.106** (1.021)
GDP	0.487** (0.248)	0.704*** (0.217)	0.387 (0.309)	0.672*** (0.221)	0.491* (0.288)	0.710** (0.347)	0.654** (0.269)
G/GDP	0.158 (0.0962)	0.000377 (0.0868)	0.0433 (0.120)	0.0903 (0.109)	0.122 (0.202)	0.506* (0.279)	0.272** (0.111)
<u>Total Assets</u>	0.191 (0.445)	0.0120 (0.837)	0.786 (0.563)	0.0327 (0.827)	-0.0752 (0.145)	1.146 (0.758)	-0.164 (0.702)
<u>GDP</u>	-0.581** (0.249)	-0.732*** (0.218)	-0.664* (0.361)	-0.762*** (0.245)	-0.419* (0.243)	-0.788** (0.336)	-0.713*** (0.268)
<u>G/GDP</u>	0.000241 -0.216	0.246* -0.246	0.145 -0.734*	0.0149 0.144	-0.00888 -0.115	-0.278 -1.003***	-0.0756 0.190
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	23	23	23	23	23	23	23
Number of Firms	1,822	1,822	1,822	1,822	1,822	1,822	1,822

Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year); English Origins.

Table 9a. Determinants of deviations from industry average CSR: random effects (Mundlak correction).

Variables	(1) Overall score	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.253 (0.215)	-0.0117 (0.307)	-1.524*** (0.314)	0.00124 (0.369)	-0.157 (0.154)	-1.271*** (0.266)	0.0872 (0.367)
Civil Law	-6.015*** (1.182)	-0.0581 (1.306)	-3.391** (1.593)	-2.351** (0.981)	-23.30*** (3.015)	-5.881*** (1.060)	-1.429 (0.906)
GDP	0.409 (0.269)	0.700*** (0.257)	0.367 (0.317)	0.615** (0.242)	0.314 (0.324)	0.385 (0.340)	0.589*** (0.221)
G/GDP	0.0736 (0.0881)	0.0226 (0.104)	0.145 (0.116)	0.0663 (0.0988)	-0.0850 (0.116)	0.152 (0.122)	0.192** (0.0862)
<u>Total Assets</u>	0.275 (0.275)	-0.250 (0.595)	1.718*** (0.345)	0.180 (0.604)	0.0304 (0.318)	1.450** (0.695)	-0.0536 (0.549)
<u>GDP</u>	-0.505** (0.254)	-0.755*** (0.244)	-0.607* (0.342)	-0.681*** (0.233)	-0.225 (0.263)	-0.612* (0.319)	-0.642*** (0.215)
<u>G/GDP</u>	0.0868 (0.127)	0.235 (0.163)	0.0387 (0.164)	0.0576 (0.126)	0.232 (0.219)	-0.0745 (0.128)	0.0224 (0.0995)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year)

Table 9b. Determinants of deviations from industry average CSR: random effects (Mundlak correction).

Variables	(1) Overall score	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.251 (0.217)	-0.00706 (0.306)	-1.525*** (0.315)	0.00239 (0.370)	-0.156 (0.159)	-1.263*** (0.273)	0.0874 (0.367)
French Origins	-4.529*** (1.747)	3.704** (1.806)	-4.145* (2.514)	-1.354 (1.529)	-21.33*** (2.928)	-3.963** (1.837)	-0.405 (1.555)
Scandinavian Origins	-5.840*** (2.134)	-0.994 (2.431)	-4.061 (2.734)	-2.348 (1.995)	-21.02*** (3.477)	-10.81*** (1.877)	-0.0718 (2.339)
German Origins	-6.802*** (1.232)	-1.858 (1.371)	-2.913** (1.392)	-2.863*** (1.034)	-24.61*** (3.365)	-6.217*** (0.879)	-2.135** (0.905)
GDP	0.378 (0.261)	0.614*** (0.215)	0.382 (0.318)	0.591** (0.239)	0.269 (0.304)	0.326 (0.333)	0.565*** (0.210)
G/GDP	0.0603 (0.0840)	-0.0144 (0.0981)	0.152 (0.115)	0.0554 (0.0971)	-0.110 (0.107)	0.134 (0.113)	0.179** (0.0829)
<u>Total Assets</u>	0.304 (0.272)	-0.184 (0.586)	1.701*** (0.351)	0.199 (0.604)	0.0774 (0.305)	1.463** (0.701)	-0.0286 (0.554)
<u>GDP</u>	-0.472* (0.255)	-0.640*** (0.210)	-0.613* (0.348)	-0.654*** (0.241)	-0.214 (0.261)	-0.459 (0.327)	-0.639*** (0.203)
<u>G/GDP</u>	0.0681 (0.121)	0.216* (0.126)	0.0582 (0.156)	0.0486 (0.126)	0.175 (0.228)	-0.00395 (0.0935)	-0.00980 (0.0927)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	23	23	23	23	23	23	23
Number of Firms	1,822	1,822	1,822	1,822	1,822	1,822	1,822

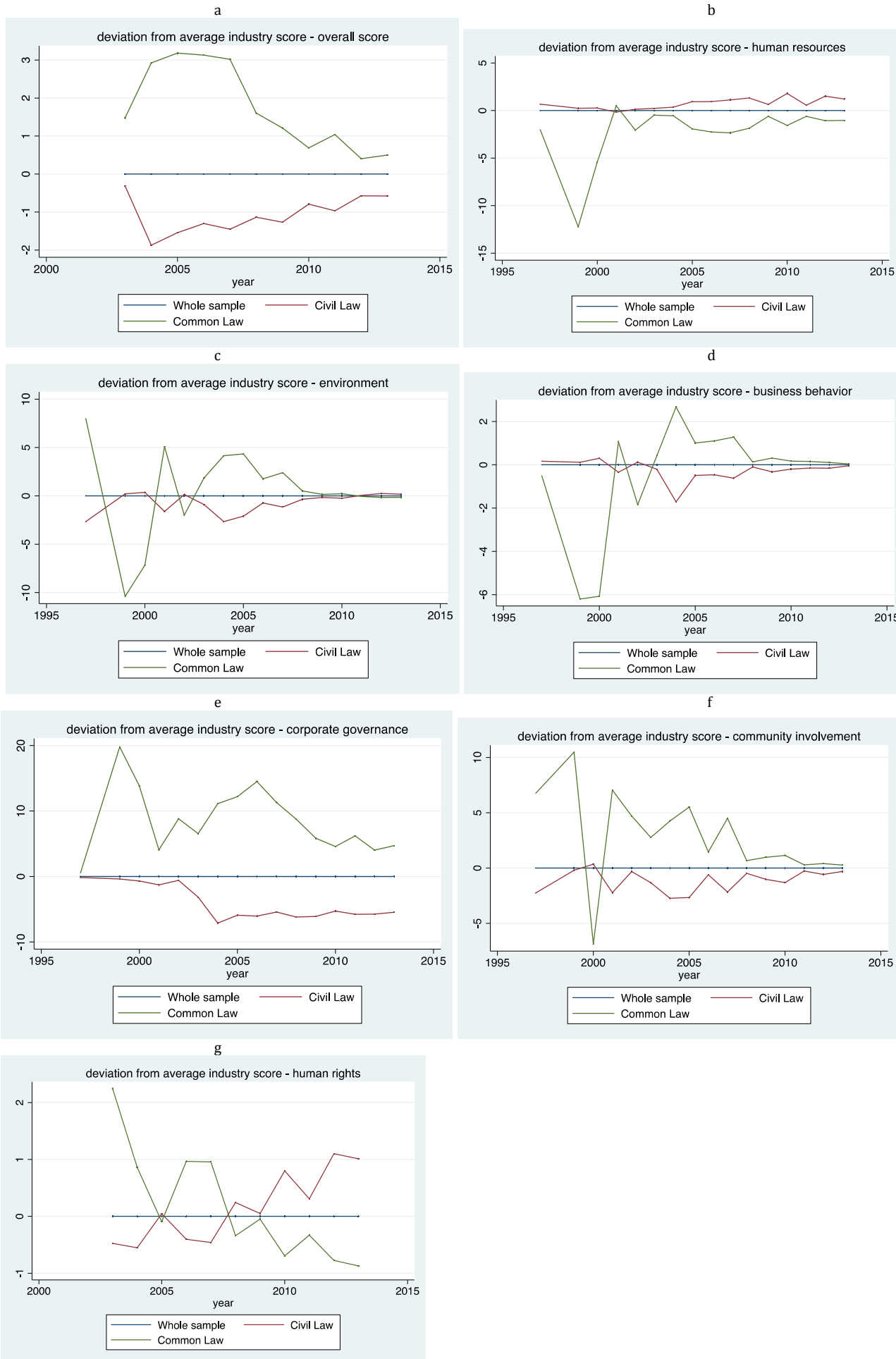
Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year); English Origins.

Table 10. Determinants of CSR: correction for attrition bias.

	(A)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
Model:	PROBIT	POOLED OLS	WLS	POOLED OLS	WLS	POOLED OLS	WLS	POOLED OLS	WLS	POOLED OLS	WLS	POOLED OLS	WLS	POOLED OLS	WLS	
Dep. Var:	<i>P(attrition)</i>	<i>Overall Score</i>		<i>Human Resources</i>		<i>Environment</i>		<i>Business Behavior</i>		<i>Corporate Governance</i>		<i>Community Involvement</i>		<i>Human Rights</i>		
PANEL A																
GDP	-0.129*** (0.0117)	French Or.	-3.692* (2.080)	-4.471* (2.252)	5.629** (2.448)	7.139*** (2.333)	-4.073 (3.092)	-2.953 (2.896)	-0.849 (1.898)	-0.103 (1.609)	-23.74*** (2.979)	-23.69*** (2.652)	-3.647 (2.454)	-2.488 (2.225)	0.210 (2.177)	1.058 (2.189)
N. proc. to start up a business	0.0869*** (0.0189)	Scandin. Or.	-9.044*** (2.674)	-8.275*** (2.669)	-2.918 (2.830)	-3.252 (2.858)	-7.251* (3.582)	-8.002** (3.767)	-3.535 (2.243)	-3.572 (2.224)	-24.03*** (3.559)	-24.46*** (3.179)	-13.80*** (2.676)	-14.76*** (2.667)	-2.354 (2.817)	-3.672 (3.115)
		German Or.	-5.879*** (1.408)	-6.136*** (1.546)	0.00686 (1.929)	1.020 (2.031)	-2.140 (1.861)	-1.907 (1.724)	-2.604** (1.235)	-2.604** (1.183)	-25.40*** (2.955)	-25.35*** (2.491)	-6.133*** (1.465)	-5.698*** (1.367)	-0.936 (1.267)	-0.504 (1.453)
Year d.	YES	Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry d.	YES	Year d.	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country d.	YES	Industry d.	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Obs.	18,673	Obs	5,888	5,908	5,908	5,888	5,908	5,888	5,908	5,888	5,908	5,888	5,908	5,888	5,908	5,888
PANEL B																
		Civil Law	-5.743*** (1.490)	-5.370*** (1.354)	1.665 (1.517)	2.782* (1.608)	-3.183 (2.167)	-2.711 (1.986)	-2.088* (1.190)	-1.827* (1.028)	-24.73*** (2.635)	-24.72*** (2.242)	-5.893*** (1.581)	-5.276*** (1.477)	-0.662 (1.257)	-0.207 (1.318)
		Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
		Year d.	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
		Industry d.	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
		Obs.	5,908	5,888	5,908	5,888	5,908	5,888	5,908	5,888	5,908	5,888	5,908	5,888	5,908	5,888

Notes: [1] model (A): robust standard errors clustered at firm level are reported in parentheses; [2] models (1-14): robust standard errors clustered at country level are reported in parentheses; the weights for the WLS models are calculated as $1/P(A)$, where $P(A)$ is the predicted attrition probability from the attrition prob. model in column (A); [4] *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. [5] Omitted categories: Aerospace (Industry); 2004 (Year); English Origins (Panel A). [6] Controls: Total Assets, GDP, G/GDP.

Figure 1 (a-g). Deviations from industry average CSR over time.



Appendix A.

Table A1. Determinants of deviations from average industry CSR over time: random effects.

Variables	(1) Overall score	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	0.0154 (0.123)	-0.157 (0.256)	-0.151 (0.281)	0.191 (0.257)	-0.0608 (0.260)	-0.00305 (0.341)	0.0819 (0.184)
Civil Law	-3.888*** (1.033)	-0.135 (1.542)	-2.994*** (1.154)	-1.496* (0.828)	-14.02*** (3.313)	-4.457*** (0.933)	-0.843 (1.060)
GDP	-0.116* (0.0602)	-0.00824 (0.0765)	-0.166** (0.0664)	-0.0453 (0.0549)	-0.354 (0.218)	-0.227*** (0.0586)	-0.00938 (0.0583)
G/GDP	0.0290 (0.0646)	0.0921 (0.108)	0.113 (0.0856)	0.0489 (0.0518)	-0.0739 (0.121)	-0.000151 (0.0789)	0.0956 (0.0750)
Industry dummies	NO	NO	NO	NO	NO	NO	NO
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	7,747	7,747	7,747	7,747	7,747	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,835	1,835	1,835	1,835	1,835	1,834

Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year)

Table A2. Determinants of deviations from average industry CSR over time: random effects.

Variables	(1) Overall score	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	0.0342 (0.133)	-0.122 (0.259)	-0.184 (0.258)	0.200 (0.259)	-0.00490 (0.226)	0.00246 (0.341)	0.0919 (0.183)
French Origins	-2.664 (1.743)	2.383 (2.341)	-4.220** (1.851)	-0.745 (1.182)	-12.50*** (4.061)	-2.814* (1.617)	-0.243 (1.547)
Scandinavian Origins	-4.222** (1.841)	-1.898 (2.244)	-4.933** (2.441)	-2.352 (1.657)	-10.05*** (3.832)	-8.758*** (1.502)	-0.949 (2.126)
German Origins	-4.372*** (1.075)	-0.864 (1.572)	-1.871 (1.355)	-1.626* (0.966)	-15.80*** (3.235)	-4.106*** (0.989)	-1.088 (1.346)
GDP	-0.115* (0.0620)	0.00731 (0.0745)	-0.141** (0.0635)	-0.0368 (0.0560)	-0.404* (0.218)	-0.178*** (0.0549)	-0.00922 (0.0603)
G/GDP	0.000640 (0.0633)	0.0469 (0.0954)	0.173** (0.0735)	0.0403 (0.0545)	-0.176 (0.135)	0.0181 (0.0609)	0.0799 (0.0658)
Industry dummies	NO	NO	NO	NO	NO	NO	NO
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	7,747	7,747	7,747	7,747	7,747	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,835	1,835	1,835	1,835	1,835	1,834

Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year); English Origins.

Table A3. Determinants of deviations from average industry CSR: random effects (Mundlak correction).

Variables	(1) Overall Score	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.312 (0.219)	0.0124 (0.367)	-1.681*** (0.392)	0.0204 (0.355)	-0.406* (0.215)	-1.528*** (0.338)	0.0174 (0.409)
Civil Law	-4.406*** (0.916)	-0.560 (1.569)	-3.013** (1.246)	-1.886** (0.868)	-14.72*** (2.880)	-4.702*** (0.920)	-1.211 (1.173)
GDP	0.215 (0.240)	0.173 (0.221)	-0.0317 (0.255)	0.254 (0.223)	0.295 (0.332)	0.104 (0.264)	0.298 (0.206)
G/GDP	0.0204 (0.0748)	-0.0172 (0.153)	0.210 (0.151)	0.0574 (0.0859)	0.0484 (0.176)	0.101 (0.124)	0.0917 (0.0782)
Total Assets	0.434 (0.351)	-0.201 (0.728)	1.950*** (0.518)	0.207 (0.699)	0.420 (0.455)	1.758*** (0.536)	0.0808 (0.677)
GDP	-0.357 (0.220)	-0.196 (0.196)	-0.144 (0.236)	-0.317* (0.190)	-0.686** (0.332)	-0.339 (0.235)	-0.321* (0.175)
G/GDP	-0.00368 (0.0913)	0.135 (0.178)	-0.145 (0.165)	-0.0294 (0.109)	-0.203 (0.207)	-0.148 (0.142)	-0.0121 (0.0861)
Industry dummies	NO	NO	NO	NO	NO	NO	NO
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year)

Table A4. Determinants of deviations from average industry CSR: random effects (Mundlak correction).

Variables	(1) Overall Score	(2) Human Resources	(3) Environment	(4) Business Behavior	(5) Corporate Governance	(6) Community Involvement	(7) Human Rights
Total Assets	-0.311 (0.219)	0.0154 (0.362)	-1.681*** (0.394)	0.0210 (0.355)	-0.408* (0.219)	-1.523*** (0.338)	0.0177 (0.409)
French Origins	-3.599** (1.498)	1.836 (2.091)	-4.538** (1.844)	-1.558 (1.123)	-13.90*** (3.718)	-3.290** (1.561)	-1.016 (1.386)
Scandinavian Origins	-4.527*** (1.695)	-2.341 (2.199)	-4.772** (2.341)	-2.529 (1.621)	-9.815*** (3.303)	-8.657*** (1.443)	-1.172 (2.192)
German Origins	-4.659*** (1.091)	-0.975 (1.604)	-2.034 (1.409)	-1.844* (1.033)	-16.24*** (2.834)	-4.230*** (1.044)	-1.291 (1.471)
GDP	0.191 (0.234)	0.0991 (0.195)	0.0264 (0.249)	0.246 (0.222)	0.238 (0.318)	0.0725 (0.257)	0.290 (0.195)
G/GDP	0.00999 (0.0740)	-0.0409 (0.158)	0.235 (0.146)	0.0559 (0.0858)	0.0162 (0.176)	0.101 (0.124)	0.0882 (0.0764)
Total Assets	0.448 (0.352)	-0.170 (0.726)	1.906*** (0.512)	0.208 (0.698)	0.477 (0.433)	1.752*** (0.542)	0.0846 (0.674)
GDP	-0.330 (0.215)	-0.0981 (0.165)	-0.184 (0.225)	-0.301 (0.189)	-0.684** (0.325)	-0.259 (0.239)	-0.314** (0.155)
G/GDP	-0.0131 (0.0887)	0.125 (0.153)	-0.0963 (0.163)	-0.0253 (0.109)	-0.282 (0.223)	-0.114 (0.123)	-0.0146 (0.0834)
Industry dummies	NO	NO	NO	NO	NO	NO	NO
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	23	23	23	23	23	23	23
Number of Firms	1,822	1,822	1,822	1,822	1,822	1,822	1,822

Robust standard errors clustered at country level are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year); English Origins.

Table A5. Legal Origins and CSR scores in all sustainability drivers

Panel A											
	<i>HR1</i>	<i>HR2</i>	<i>HR3</i>	<i>HR4</i>	<i>HR5</i>	<i>HR6</i>	<i>HR7</i>	<i>HR8</i>			
Civil law	9.539***	-6.650**	4.032	3.239*	2.186	2.414	-6.455***	2.822			
	<i>ENV1</i>	<i>ENV2</i>	<i>ENV3</i>	<i>ENV4</i>	<i>ENV5</i>	<i>ENV6</i>	<i>ENV7</i>	<i>ENV8</i>	<i>ENV9</i>	<i>ENV10</i>	<i>ENV11</i>
Civil law	-3.615	0.00377	1.432	-2.502	0.801	-3.43	7.212***	-4.08	0.339	-4.022*	-2.391
	<i>CS1</i>	<i>CS2</i>	<i>CS3</i>	<i>CS4</i>	<i>CS5</i>	<i>CS6</i>	<i>CS7</i>	<i>CS8</i>	<i>CS9</i>	<i>CS10</i>	
Civil law	5.071***	-4.084***	-7.268***	-1.001	-2.087	-0.957	-2.599	-3.356*	0.284	-0.408	
	<i>CG1</i>	<i>CG2</i>	<i>CG3</i>	<i>CG4</i>							
Civil law	-26.60***	-19.36***	-19.69***	-35.40***							
	<i>CIN1</i>	<i>CIN2</i>	<i>CIN3</i>								
Civil law	-4.425***	-6.021***	-12.51***								
	<i>HRT1</i>	<i>HRT2</i>	<i>HRT3</i>								
Civil law	1.091	2.963***	-3.930**								
Panel B											
	<i>HR1</i>	<i>HR2</i>	<i>HR3</i>	<i>HR4</i>	<i>HR5</i>	<i>HR6</i>	<i>HR7</i>	<i>HR8</i>			
French Origins	15.15***	-7.174	6.924**	8.149***	8.459**	-1.156	3.21	-1.703			
Scandinavian Origins	6.777*	-1.3	-7.764*	-0.387	-1.047	-5.369*	2.157	-6.544**	-3.112		
German Origins	6.608*	-6.016	0.0194	1.588	-0.728	-7.547***	1.591	-9.206***	4.165**		
	<i>ENV1</i>	<i>ENV2</i>	<i>ENV3</i>	<i>ENV4</i>	<i>ENV5</i>	<i>ENV6</i>	<i>ENV7</i>	<i>ENV8</i>	<i>ENV9</i>	<i>ENV10</i>	<i>ENV11</i>
French Origins	-4.701	5.47	2.198	-0.685	6.453	-3.562	10.65***	-3.961	7.083**	-6.713*	-3.794
Scandinavian Origins	-4.175	0.542	-3.906	-3.813	2.052	-5.787*	6.988**	-3.759	-4.084	-6.850*	-5.624*
German Origins	-2.793	-2.834*	2.132	-3.450*	-2.276	-2.859	5.630***	-4.239	-1.568	-1.925	-0.89
	<i>CS1</i>	<i>CS2</i>	<i>CS3</i>	<i>CS4</i>	<i>CS5</i>	<i>CS6</i>	<i>CS7</i>	<i>CS8</i>	<i>CS9</i>	<i>CS10</i>	
French Origins	6.306**	-2.983	-2.503	1.05	-1.894	1.894	-1.147	-1.21	-0.27	-0.163	
Scandinavian Origins	3.935	-3.384	-13.85***	-3.199	-1.309	0.648	-4.505*	-4.648	-1.026	-3.086**	
German Origins	4.645***	-4.815***	-8.447***	-2	-2.409	-2.871**	-3.07	-4.391**	0.782	-0.169	
	<i>CG1</i>	<i>CG2</i>	<i>CG3</i>	<i>CG4</i>							
French Origins	-25.68***	-10.42***	-22.45***	-35.20***							
Scandinavian Origins	-11.33**	-21.17***	-30.52***	-36.69***							
German Origins	-30.25***	-24.09***	-16.11***	-35.29***							
	<i>CIN1</i>	<i>CIN2</i>	<i>CIN3</i>								
French Origins	-0.469	-2.599	-11.85***								
Scandinavian Origins	-9.628***	-15.88***	-21.91***								
German Origins	-5.288***	-6.325***	-11.63***								
	<i>HRT1</i>	<i>HRT2</i>	<i>HRT3</i>								
French Origins	-0.517	6.059***	-2.028								
Scandinavian Origins	2.427	3.806**	-5.561								
German Origins	1.999	1.116	-4.760***								

Legend: HR1: Promotion of labor relations; HR2: Encouraging employee participation; HR3: Training and development; HR4: Responsible management and restructurings; HR5: Career management and promotion of employability; HR6: Quality of remuneration systems; HR7: Improvement of health and safety conditions; HR8: Respect and management of working hours; ENV1: Environmental strategy and eco-design; ENV2: Pollution prevention and control; ENV3: Development of green products and services; ENV4: Protection of biodiversity; ENV5: Protection of water resources; ENV6: Minimizing environmental impacts from energy use; ENV7: Management of atmospheric emissions; ENV8: Waste management; ENV9: Management of environmental nuisances: dust, odor, noise; ENV10: Management of environmental impact from transportation; ENV11: Management of environmental impact from the use and disposal of products/services; CS1: Product safety; CS2: Information customers; CS4: Responsible contractual agreement; CS3: Sustainable Relationship with supplies; CS4: Integration of Environmental factors in the supply chain; CS5: Integration of social factors in the supply chain; CS6: Prevention of Corruption; CS7: Prevention of anti-competitive practices; CS8: Transparency and integrity of influence strategies and practices; CG1: Board of Director; CG2: Audit and Internal Control; CG3: Shareholders Rights; CG4: Executive Remuneration; CIN1: Promotion of social and economic development; CIN2: Social impacts of company products and services; CIN3: Contribution to general interest causes; HRT1: Respect for human rights standards and prevention of violations; HRT2: Respect for freedom of association and their right to collective bargaining; HRT3: Non-discrimination.

Appendix B. VIGEO Rating Domains and Sustainability Drivers.

Human Resources. **Promotion of labor relations:** company's commitment to ensure the respect of independent worker's representatives through information, consultation, and notably collective bargaining, at the workplace. **Encouraging employee participation:** company's commitment to defend and promote employees' individual information and expression, and employees' participation in decision making on matters not related to collective bargaining. **Responsible management of restructurings:** capability to inform and consult employee representatives before / during restructuring process, to put in place practical measures, to prevent and limit redundancies (notably budgets, processes and reporting) and to take measures to mitigate the negative effects of redundancies on employees, notably reemployment measures. **Career management and promotion of employability:** company efforts to anticipate short and long-term employment needs and skill requirements, adapt employees' skill sets to their career paths, enable the progressive improvement in employees' qualification levels and put in place a concerted career management framework, which is transparent and individualized. **Quality of remuneration systems:** company's commitment to ensure the decency, transparency and objectivity of employees' remuneration systems. **Improvement of health and safety conditions:** company's commitment regarding the protection of employees' health and safety. **Respect and management of working hours:** initiatives taken by the company to promote the voluntary flexibility of working hours.

Environment. **Environmental strategy and eco-design:** company's commitment to define clear objectives and appropriate measures to ensure management of the environmental impacts of products and services. **Pollution retention and control:** extent to which the company is preventing and managing risks of accidental pollution or soil pollution. **Development of green products and services:** company's efforts to develop: i) Products and services with significantly decreased environmental impact, and ii) That may be considered as a fundamental diversification for the enterprise, either at the level of the production process (wind turbine for electricity producers), or at the product (hydrogen for oil producers or fuel cells for car makers) or at service level (green investment funds in banking sector). **Protection of biodiversity:** company's commitment to prevent risks of endangering biodiversity. Company's commitment to manage animal testing (when relevant for the sector). **Protection of water resources:** measures taken to reduce water consumption and to improve, reduce or treat wastewater emissions/water discharges. **Minimizing environmental impacts from energy use:** company's efforts to address and minimize energy-related issues (energy consumption and emissions related to energy consumption). **Management of atmospheric emissions:** steps taken by the company to control atmospheric emissions related to the production of products / projects / services. Atmospheric emissions resulting from the company's energy consumption are out of the scope of this criterion, see: 2.2- Minimizing environmental impacts from energy use and related atmospheric emissions. **Waste management:** Steps taken by companies to manage waste: i) Identification of the different sources of waste; ii) Reduction of waste production at source; iii) Management of industrial and commercial packaging and packaging waste; iv) Waste recycling, energy recovery from waste (waste to energy); v) Reduce the toxicity of hazardous waste. **Management of environmental nuisances: dust, odor, noise (Management of local pollution):** company management and reduction of local pollution (noise, dust and odors) resulting from the production processes and maintenance of installations, as well as local degradation of the environmental aesthetics. **Management of environmental impact from transportation:** company effort and results when taking into account environmental impact of its products' transportation and actions that are implemented to reduce these impacts.

Business Behavior. **Product safety:** corporate attention to product safety issues into account, and the related steps taken to prevent and repair emergency / crisis situation affecting product safety. **Information customers:** definition and implementation of principles of conduct and measures to prevent negative impact of marketing practices on financial, moral and ethical issues as well as on the health and safety of users and / or customers. **Responsible contractual agreement:** corporate commitment to include guarantees in its contractual relation which promote customers freedom of decision, satisfaction and right to recourse. **Sustainable relationship with suppliers:** corporate commitment to ensure balanced and sustainable relations with suppliers, focusing on: i) promoting mutually beneficial business relations; ii) optimizing mutual profits gained through contract in terms of quality, costs and technical/technological control. **Integration of environmental factors in the supply chain:** Evaluation of the extent to which the company integrates environmental factors in the supply chain. **Integration of social factors in the supply chain:** Evaluation of the extent to which the company is integrating social standards into supply chain.

Prevention of corruption: effectiveness of the company's anti-corruption management system. Corruption is studied in its broadest sense. Conflicts of interest are also taken into account as they can cast a doubt on the quality of the company decision-making process and on the integrity of people involved. **Prevention of anti-competitive practices:** corporate consideration for competition laws and the prevention of market distortion rules in its relations with customers, suppliers and competitors. **Transparency and integrity of influence strategies and practices:** corporate disclosure of the objectives of its lobbying practices and the resources dedicated to achieving them. Appointment of clear responsibilities and designation of specific procedures to monitor the correct implementation of the company's lobbying strategy.

Corporate Governance. Board of Director: corporate commitment to set up a board of directors that is capable of controlling and advising executives and that is held accountable to shareholders. **Audit and Internal Control:** corporate commitment to establish effective risk management systems, ensuring the quality of internal reporting and the extent to which this commitment is reflected in financial information provided to the public. The board of directors is responsible for the objectivity and relevance of the system. **Shareholders Rights:** corporate commitment to ensure the fair treatment of shareholders, allowing them to actively participate in strategic decision-making. Voting rights attached to shares and the right to participate in general meetings are of fundamental importance in this regard. **Executive Remuneration:** corporate commitment to use executive remuneration as a tool to align the interests of executives and shareholders.

Community Involvement. Promotion of social and economic development: corporate commitment to provide sustainable contributions to the economic and social development of local areas and to optimise the economic and social impact of activities: local investment, promotion of local employment, transfer of technologies and skills. **Social impacts of company products and services:** development of voluntary initiatives taking into account their product or services' impact on the community. **Contribution to general interest causes:** corporate commitments to promote voluntary community initiatives not directly related to the company's products or services: patronage, involvement in various causes of general interest, other forms of sponsorship, as well as contributions to studies or academic research on community interest issues.

Human Rights. Respect for human rights standards and prevention of violations: extent to which the company is complying with obligation to respect human rights in the community (community taken as a whole, i.e. within and outside of the workplace). This obligation includes: respect of effective exercise of fundamental human rights and personal rights ; prevention of human rights violations or complicity of violations. **Respect for freedom of association and their right to collective bargaining:** respect of trade union freedom, collective bargaining rights and promotion of collective bargaining rights. **Elimination of child and forced labor;** corporate contribution to the elimination of child labor and / or forced labor. **Non-discrimination:** corporate prevention of gender discrimination on workplace and other discrimination regarding work conditions, vocational training, promotion, fees, and other benefits. Positive measures and specific measures intended to protect and support women (pregnancy, maternity) or vulnerable people, constitute measures to promote equal opportunity and treatment.