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Hao LIANG
Singapore Management University, hliang@smu.edu.sg

Luc RENNEBOOG
Tilburg University

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On the Foundations of Corporate Social Responsibility

Hao Liang and Luc Renneboog *

ABSTRACT

Using CSR ratings for 23,000 companies from 114 countries, we find that a firm's corporate social responsibility (CSR) rating and its country's legal origin are strongly correlated. Legal origin is a stronger explanation than "doing good by doing well" factors or firm and country characteristics (ownership concentration, political institutions, and globalization): firms from common law countries have lower CSR than companies from civil law countries, with Scandinavian civil law firms having the highest CSR ratings. Evidence from quasi-natural experiments such as scandals and natural disasters suggests that civil law firms are more responsive to CSR shocks than common law firms.

Keywords: Corporate social responsibility, legal origins, stakeholder orientation.

JEL Code: G30, K22, M14, O10, O57

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The classical view in finance on modern corporations takes a shareholder value maximization perspective, which holds that corporations are accountable only to profit-maximizing shareholders, and apart from their contractually determined obligations, have no responsibility to serve other stakeholders' interests or to enhance society's welfare (Friedman (1970), Benabou and Tirole (2010)). In reality, however, corporations often focus on objectives beyond profit maximization and participate in activities that improve other stakeholders' welfare, such as providing employee benefits, investing in environment-friendly production processes, selecting suppliers that avoid the use of child labor, and organizing projects to help the poor in less-developed countries. Indeed, corporate social responsibility (CSR), a term frequently used to describe such stakeholder-oriented behaviors, has increasingly become a mainstream business activity (Kitzmueller and Shimshack (2012)). This raises the question of why do some firms want to be socially responsible rather than pure profit maximizers, and more importantly, why firms in some countries engage in CSR to a greater extent than firms in other countries.

The common explanation for why companies invest in CSR is that doing so enhances profitability and firm value,[1] a relationship often referred to as "doing well by doing good" (e.g., Dowell, Hart, and Yeung (2000), Orlitzky, Schmidt, and Rynes (2003), Renneboog, Ter Horst, and Zhang (2008, 2011), Guenster et al. (2011), Deng, Kang, and Low (2013), Flammer (2015), Krueger (2015), Dimson, Karakas, and Li (2015)). Other studies consider the inverse, that is, "doing good by doing well," by examining whether it is only well-performing firms that can afford to invest in CSR (e.g., Hong, Kubik, and Scheinkman (2012)). However, neither of these "doing good—doing well" arguments can explain the cross-firm or cross-country variation in CSR. For instance, if on average CSR enhances firm value, why do some companies adopt a CSR-oriented strategy whereas others do so to a lesser extent, and why do companies in some countries systematically invest more in CSR than companies in other countries? In addition, these "doing good—doing well" arguments mostly take CSR to be a voluntary initiative. Extant studies also usually take only one perspective on CSR, such as employee satisfaction (Edmans (2011, 2012), Edmans, Li, and Zhang (2014)), environmental protection (e.g., Dowell, Hart, and Yeung (2000), Konar and Cohen (2001)), corporate philanthropy (e.g., Seifert, Morris, and Bartkus (2004), Masulis and Reza (2015), Liang and Renneboog (2016)), or consumer satisfaction (e.g., Luo and Bhattacharya (2006), Servaes and Tamayo (2013)), and test CSR relations for only one country (typically the U.S.). However, CSR spans multiple dimensions of firm behavior and captures a

firm's effort to address various externalities that it generates in the process of pursuing profit maximization (Tirole (2001)) that are not internalized by shareholders (Magill, Quinzii, and Rochet (2015)). This multi-dimensional and externality-driven nature of CSR suggests that it should be fundamentally related to not only a firm's own choice but also regulations, institutional arrangements, and societal preferences. Moreover, beyond looking at CSR as a mechanism to address externalities, we consider CSR as a more fundamental tradeoff between a shareholder focus and an other-stakeholder focus (at the firm level) (Ferrell, Liang, and Renneboog (2017)), as well as between rules and discretion by institutions governing economic life. Such tradeoffs, as we argue, hinge crucially on a firm's explicit and implicit contractual environment, which is likely to be shaped by legal rules and enforcement mechanisms that differ across countries.

In this paper, we examine whether differences in CSR practices across countries can be explained by relating CSR to a country's legal origin, which has been shown to systematically shape various country-level institutions and the firm-level contracting environment (La Porta, Lopez-de-Silanes, and Shleifer (2008), Doidge, Karolyi, and Stulz (2007)). In the context of CSR, a country's legal regime determines how "public goods" should be provided by the private sector (corporations): through regulations and rules, firm discretion, or government involvement in business (Kitzmueller and Shimshack (2012)). A country's legal regime also shapes the explicit and (more often) implicit contracts between shareholders and other stakeholders through its effect on governance structures and the decision-making process.[2] A common law origin is a more discretion-oriented system that supports private market outcomes, places fewer ex ante restrictions on managerial behavior (but discourages inappropriate or unacceptable behavior by relying on ex post sanctions such as litigation or other judicial mechanisms), and favors shareholder protection. A civil law origin, in contrast, is associated with state intervention in economic life through rules and regulations (e.g. an ex ante delineation of acceptable behavior) and a "stakeholder view" (La Porta, Lopez-de-Silanes, and Shleifer (2008), Allen, Carletti, and Marquez (2015), Magill, Quinzii, and Rochet (2015)). The level of CSR in a country is therefore a result of both a governance tradeoff concerning the rights and preferences of shareholders and other stakeholders, and the form in which this tradeoff is made (i.e., by rules or discretion).

To empirically test the legal origin view of CSR, we employ several newly assembled international databases on firm-level CSR that together cover more than 25,000 large public companies around the globe. Our CSR data measure corporations' engagement in and compliance with environmental, social, and

traditional corporate governance ("ESG") issues, where engagement refers to a firm's voluntary investment in CSR projects while compliance refers to behavior that a firm is required or encouraged to follow.[3] Engagement and compliance activities across the different ESG dimensions capture various aspects of stakeholder issues.[4] As our main focus is on nonfinancial stakeholders (stakeholders other than shareholders, which are protected by corporate governance mechanisms), our CSR samples mostly rely on the "E" and "S" dimensions, giving little weight to the "G" dimension.

Using these comprehensive global CSR data, we find that legal origin appears to be the strongest predictor of CSR adoption and performance at the firm level, stronger than alternative factors such as political institutions, regulations, social preferences, and a firm's financial and operational performance. Firms with a common law origin score significantly lower on various CSR ratings than civil law firms, while firms from the Scandinavian legal regime obtain the highest scores on most of the CSR ratings. These results survive the inclusion of a large set of country- and firm-level control variables and the use of different estimation methods such as OLS, GLS, and random-effects ordered probit models. The results are further supported by several quasi-natural experiments of global disasters and scandals that shift societal demand for CSR that allows us to control for country fixed effects to rule out alternative explanations based on country-level channels. In these experiments, we find that firms in civil law countries are more responsive to large natural disasters and industry scandals such as food safety and oil spill pollution. Such responsiveness does not appear to be explained by changes in firms' market shares. When we investigate a number of economic mechanisms for the association between legal origin and CSR, we find that firms in civil law countries face less shareholder litigation risk but more regulations concerning stakeholder welfare, rely more on supermajority rules among shareholders, and have stronger state involvement in their businesses, all of which are strongly related to higher CSR scores. Overall, the results suggest that there is a strong link between firm-level CSR and country-level legal origin, which may help explain cross-country variation in CSR.

The paper proceeds as follows. Section I lays out the theoretical foundations on the relation between legal origin and CSR. Section II describes the data and empirical strategies. Section III presents empirical results from our baseline models. Section IV presents additional evidence from disasters and scandals. In Section V we present evidence on the economic mechanisms behind our main results. Section VI concludes.

I. The Legal Origins and Corporate Social Responsibility

Social arrangements between private citizens, corporations, and the government vary significantly across countries of different legal origin. La Porta, Lopez-de-Silanes, and Shleifer (2008) consider a country's legal origin as the style of social control behind its economic life. Common law countries rely more heavily on private market outcomes. The idea is that under perfect markets, maximizing profit in the interest of shareholders leads a firm to act in the best interest of all stakeholders such as consumers, workers, and shareholders (Magill, Quinzii, and Rochet (2015)). In contrast, in civil law countries, the state plays a stronger coordinating role in factor markets. These countries typically have stronger unions, which has led to, for example, stricter regulations regarding dismissal or a wider scope of collective bargaining agreements (at the industry level), as well as stricter consumer protection laws, which place more restrictions on prices and regulate product markets to address various stakeholders' interests (Djankov et al. (2008), Botero et al. (2004), La Porta, Lopez-de-Silanes, and Shleifer (2008)).

In addition, countries under different legal regimes manage conflicts between firms, their suppliers, and their customers differently. Countries with a common law origin rely to a greater degree on ex post settling up through judicial mechanisms, whereas civil law countries rely more heavily on rules-based mechanisms that restrict behavior ex ante (Enriques (2004), Cheffins and Black (2006), La Porta, Lopez-de-Silanes, and Shleifer (2008), Issacharoff and Miller (2009), Cox and Thomas (2009), Gelter (2012)). The different balance between rules and discretion in corporate decision-making in civil versus common law countries is likely driven by supply- and demand-side considerations, which lead to predictions about differences in CSR activity across legal regimes. On the supply side, CSR may arise as an alternative response to market failures due to inefficient regulations (e.g., de Bettignies and Robinson (2015)). The fact that a wide variety of stakeholders can more easily make claims, and benefit from stronger protection, in civil law than in common law countries implies that there may be less need for firms in civil law countries to behave in a socially responsible way over and above meeting regulatory requirements, in which case CSR strategies would be largely redundant in light of the constraints and requirements already in place under the civil law regime. On the demand side, the level of CSR in a country may reflect consumers' and other citizens' preferences for corporations to be altruistic and pro-social (Benabou and Tirole (2006, 2010)). Based on this demand-side view, the fact that civil law countries have stricter regulatory protection of stakeholders may reflect stronger social preferences, in

which case we would expect stronger CSR behavior in civil law countries because more is expected of firms in this environment. In sum, CSR is likely to be an equilibrium outcome reflecting the demand for voluntary "good behavior" and the availability, as well as efficacy, of substitutes for this behavior. In this context, the relation between CSR and legal origin depends on which set of forces (supply- versus demand-side considerations) dominates.

The above tradeoff leads to empirical predictions on the underlying mechanisms that connect legal origin and CSR. In common law countries, CSR adoption is determined largely by corporate discretion, whereas in civil law countries, CSR adoption is determined by rules, which can be either explicit (such as laws and regulations) or implicit (such as societal preferences). For example, in civil law countries where the risk of shareholder litigation against management or directors is lower, firms have more freedom to engage in CSR activities (which are often beyond regulation) (Enriques (2004), Cheffins and Black (2006), La Porta, Lopez-de-Silanes, and Shleifer (2008), Issacharoff and Miller (2009), Cox and Thomas (2009), Gelter (2012)). Similarly, when a firm's decision-making process is ex ante insulated from the short-term pressures of shareholders (for example, through the presence of a supermajority vote requirement in the corporate charter or bylaws), the firm will be more willing to engage in CSR activities, which are often more long-term-orientated in nature (Cremers and Sepe (2016)). Furthermore, CSR is expected to be more prevalent under stronger regulations and government interventions on stakeholder issues, as CSR could potentially "safeguard" a firm's fiduciary duty as mandated by law, with this function under different legal regimes again depending on the relative supply- versus demand-side forces.

II. Data and Empirical Strategy

Detailed definitions and data sources for all of our variables are summarized in Table I (for various CSR variables and sustainable country ratings) and Appendix A (for explanatory variables).

A. CSR Data and Descriptive Statistics

In recent years, a variety of ESG indices measuring firm-level CSR performance have been constructed using different rating methodologies (e.g., some are based on a box-ticking approach—"compliance," while others are based on interpretative analysis—"engagement"). We have extensively discussed the reliability of these different ratings with practitioners, policymakers, and data providers. Because of the concern that the "G"

component of ESG measures overlaps with traditional corporate governance issues, which are materially different from the other stakeholder issues (Krueger (2015)), in this paper we deliberately employ databases that minimize the weight on corporate governance issues while putting more emphasis on environmental and social issues.

Our main data on CSR performance come from MSCI's Intangible Value Assessment (IVA) database.[5] The IVA indices measure a corporation's environmental and social risks and opportunities, that is, large environmental and social externalities, the costs of which the firm may be forced to internalize in the future. The ratings also take into account the extent to which a company has developed CSR strategies designed to manage its specific risks and opportunities. Such rating methods capture both the legally mandated aspects (unanticipated costs associated with regulatory penalties and lawsuits) and voluntary aspects (risk management strategies and strategies to capture potential opportunities) of CSR. Importantly, companies are rated in comparison to their *industry peers* across international markets, and therefore a firm's rating does not depend on the local environment and rules. Companies with the best CSR "performance" (CSR score) *within its industry on a global scale* are rated AAA (the top rating), while companies with the worst CSR performance are rated CCC (the lowest rating); the remaining firms are rated AA, A, BBB, BB, and B. We convert these alpha ratings to numeric scores from 6 to 0. Information needed to complete the IVA ratings comes from several sources, including corporate documents (environmental and social reports, annual reports, securities filings such as 10Ks and 10Qs, websites, etc.), environmental groups and other NGOs, trade groups and other industry associations, government databases,[6] periodical searches (e.g., Factiva and Nexis), and financial analysts' reports. Following a review of various corporate documents, the MSCI analysts usually interview senior executives at the companies, most often in the environmental area. When comparing companies, the data are normalized by the most relevant, available factor, such as domestic sales or production. The ratings are available from 1999 to 2014,[7] and cover over 23,000 large public companies (past and current) in major equity indices worldwide, including all companies of the MSCI World Index, the MSCI Emerging Markets Index, the MSCI US, Canada, UK, Australia, and South Africa indexes, the FTSE 100 and FTSE 250 (excluding investment trusts) indexes, the ASX 200 Index, and the Barclays Global Aggregate – Corporate Index. For this large sample with global coverage, MSCI constructs 29 ESG categories,[8] among which a few categories such as *Labor Relations*, *Industry-Specific Carbon Risk*, and *Environmental*

Opportunity receive the highest weights in the global rating, while the weight on traditional corporate governance is below 2%. The detailed composition of the IVA ratings is shown in Table I. We triangulate our analysis based on the IVA rating (the overall CSR rating) using the RiskMetrics EcoValue21 Rating and the RiskMetrics Social Rating (hereafter *EcoValue Rating* and *Social Rating*), which capture the environmental and social aspects of CSR, respectively.

Our main sample comprises 403,633 firm-time observations from 114 countries that span 123 industries (based on MSCI's industry classification). We employ other CSR indices provided by various ESG rating agencies with a global scope to cross-validate our results. These indices include Vigeo's corporate ESG ratings and Thomson Reuters' ASSET4 ratings. The country coverage and number of observations are shown in Appendices B to D. In contrast to the MSCI IVA data which focus on engagement (developing strategies to manage risks and opportunities), the Vigeo ESG data are more CSR compliance-oriented as they apply a check-the-box approach to rate firm- and country-level compliance with the conventions, guidelines, and declarations of international organizations such as the United Nations, International Labor Organization, and Organization for Economic Co-operation and Development (OECD).

[Insert Table I about here]

B. Methodology

As the IVA ratings measuring a company's ESG performance are integers ranging from 0 to 6 and are not normally distributed, we first use the nonparametric Wilcoxon rank-sum (Mann-Whitney) test in a univariate analysis that compares median ESG values across different legal origins and between capitalist and socialist countries. We then apply reduced-form regressions to analyze the association between a company's CSR and its country's legal origin, political institutions, social preferences, and corporate characteristics (including financial performance). Given that some of our key explanatory variables (e.g., legal origin) are time-invariant and we would like to draw inferences on the population, we use random-effects models in this panel setting. We conduct our estimations using OLS, random-effects generalized least squares (GLS), and random-effects ordered probit models. The latter are estimated by means of maximum likelihood and consider the discrete, ordinal nature of the ratings and rating changes in a panel data setting (the same method has been used in, for example, Alsakka and Gwilym (2010)). The general specification can be expressed as

$$y_{it}^{*} = \alpha_t + \beta' Legal_c + \delta' X_{it} + \gamma' Z_{ct} + \varepsilon_{it}, \quad (1)$$

where, *Legal* is a vector of different types of civil law origin, X_{it} is a vector of firm-level financial and governance variables, and Z_{ct} is a vector of country-level control variables. Except for legal origin, all of the variables are time-variant in nature. *i*, *t*, and *c* denote firm, time, and country, respectively. The dependent variable, y_{it}^{*}, is the firm-level CSR rating. In the case of ordered probit models, y_{it}^{*} is an unobserved latent variable linked to the observed ordinal response categories y_{it}:

$$y_{it} = \begin{bmatrix} 0 & if\ y_{it}^{*} \le \mu_1 \\ 1 & if\ \mu_1 < y_{it}^{*} \le \mu_2 \\ 2 & if\ \mu_2 < y_{it}^{*} \le \mu_3 \\ 3 & if\ \mu_3 < y_{it}^{*} \le \mu_4 \\ 4 & if\ \mu_4 < y_{it}^{*} \le \mu_5 \\ 5 & if\ \mu_5 < y_{it}^{*} \le \mu_6 \\ 6 & if\ \mu_6 < y_{it}^{*} \end{bmatrix}, \quad (2)$$

The $\mu's$ represent thresholds to be estimated (along with the coefficients β and γ) using maximum likelihood estimation, subject to the constraint that $\mu_1 < \mu_2 < \mu_3 < \mu_4 < \mu_5 < \mu_6$.

We also run a few quasi-natural experiments on some (largely) exogenous shocks to CSR demand and examine the differences in response by legal regime using OLS estimation while controlling for country, industry, and year fixed effects. Controlling for country fixed effects in the quasi-natural experiments enables us to rule out alternative explanations based on other country-level factors such as ideologies, cultures, and social norms. In these quasi-natural experimental settings, we also investigate changes in market share to disentangle them from possible consequences induced by legal origin. Furthermore, we explicitly include several institutional and governance variables to explore potential mechanisms linking a firm's CSR and its country's legal origin in a two-stage setup.

C. Variables

In our main analysis, the dependent variable in equation (1) is the overall IVA rating, which aggregates all environmental and social dimensions of CSR after converting them to ordered integer scores ranging from 0 to 6. In robustness tests, we use individual dimensions of the IVA rating as alternative dependent variables, as well as the CSR ratings from two alternative CSR samples—Vigeo and ASSET4—which are normalized ratings ranging from 0 to 100. Explanatory variables in the main analysis are as follows.

Legal Origin

Our main explanatory variable is legal origin, which captures the legal tradition of the country in which the firm is headquartered. Following La Porta et al. (LLSV, 1998), La Porta, Lopez-de-Silanes, and Shleifer (2008), Djankov et al. (2008), and Spamann (2010), we classify legal traditions into five categories, as denoted by the following dummy variables: *English common law*, *French civil law*, *German civil law*, *Scandinavian civil law*, and *socialist law* (both current and former socialist countries). In robustness tests, we reclassify current and former socialist law countries into their pre-socialist legal origin (either French civil law or German civil law).

Political Institutions

We use several country-level variables to capture the effects of political institutions, which may both shape and reflect social preferences for CSR. First, we include *Political Executive Constraints*, developed by Polity IV, to proxy for the constraints on expropriation by the political elites. As Glaeser et al. (2004) explain, "[Political executive constraints] is the only measure that is clearly not a consequence of dictatorial choices, and […] can at least loosely be thought of as relating to constraints to government" (p. 282).

Second, we include *Corruption Control*, which measures the extent to which politicians are constrained from pursuing their self-interest (through corruption). While other political variables capture democracy and aggregate social (stakeholder) preferences, but focus on limits to corruption because they are most closely connected to North's (1981) conception of institutions as "constraints."

Third, we include a country's *Regulatory Quality* from the World Bank to proxy for the government's effectiveness in addressing social responsibility and market externalities in implementing policies and regulations that promote private sector development. CSR investment may be supported or limited by a country's regulatory environment.

In robustness tests, we also control for a country's capitalist model using the Heritage Index of Economic Freedom, which consists of a broad series of sub-indexes measuring different aspects of government interference in business activities, such as government spending, fiscal freedom, business freedom, labor freedom, and monetary freedom. Not surprisingly, these sub-indexes are highly correlated with one another, and thus we only include the overall score as a control, rather than the individual sub-indices. In unreported regressions, we also include the sub-indexes in the regression one at a time; the results for our key explanatory

variables do not change.

Blockholder Ownership

Including different types of blockholder ownership in our model is important as different ownership types reflect different investor preferences. In particular, different types of blockholders may favor different CSR policies and can use their voting power to implement those policies. Blockholders are defined as investors who hold more than 5% of the company's total shares. We classify their ownership stakes into *Government Held Shares*, *Corporation Held Shares*, *Pension Fund Held Shares*, *Investment Company Held Shares*, *Employee Held Shares*, *Other Holdings*, and *Foreign Held Shares*. The sum of all blockholder ownership stakes equals a company's *Total Strategic Holdings*. The remaining holdings comprise *Free Float Shares*.

Firm-Level Financial Variables

A standard control variable is firm size, measured by the (logarithm of) total assets of the company. To capture the "doing good by doing well" effect, we also control for firm performance as proxied by the return on assets (ROA). In robustness tests we add the market valuation of the firm, which we capture using Tobin's Q (the market-to-book ratio).

Other Country-Level Controls

In equation (1), we further control for a country's level of economic development using the (logarithm of) GDP per capita and a globalization index. GDP per capita captures income and wealth effects, as people in richer countries are more likely to care about sustainability, whereas those in poor countries are more worried about daily economic survival. The globalization index captures the spillover of CSR standards across countries, as corporations in more globalized countries are under greater pressure to comply with international conventions and principles that prescribe acceptable corporate social conduct.

From Vigeo, we also obtain country-level sustainability ratings that comprise the ESG scores of more than 170 sovereign countries. These ratings are based on the analysis of more than 130 CSR risk and performance indicators in three domains: (1) environmental protection, (2) social protection and solidarity, and (3) rule of law and governance. By supplementing our firm-level CSR ratings, these country-level ESG ratings give a more comprehensive picture of social responsibility and stakeholder orientation around the world.

III. Results

A. Descriptive Results

We first plot in Figure 1, Panel A the distribution of country-level sustainability ratings on a world map using the adjusted Vigeo sustainability ratings. Ratings are rescaled to eight categories representing the degree of a country's sustainable development in terms of environmental responsibility, social responsibility, and institutional responsibility (rule of law and governance), with darker shading indicating a higher rating. In Figure 1, Panel B we plot the distribution of legal origins around the world. As can be seen comparing the two panels, countries with a higher social responsibility (sustainability) rating are more likely to be civil law countries than common law countries, with Scandinavian countries having the highest scores.

[Insert Figures 1, Panels A & B about here]

We turn the above color maps into numbers in Table II, but here we use firm-level CSR data and compare the mean CSR ratings for countries belonging to different legal origins. In addition to the overall CSR rating (*IVA Rating*) and two general ratings on environmental and social policies (*EcoValue Rating* and *Social Rating*), we also report results for the various components of the CSR subcategories, which represent benefits for different types of stakeholders.[9] Again, darker shading indicates a higher CSR rating, and the variance of the ratings are shown in parentheses. Comparisons of the means of the CSR indices across legal origins show that firms under the English common law system have lower CSR scores along most ESG dimensions than those under civil law systems. Firms from the Scandinavian and German legal origins have higher CSR scores than those from the English common law system, especially in terms of environmental issues, as indicated by *EcoValue Rating* and the subcategories *Environment*, *Environmental Management Capacity*, *Environmental Opportunity*, *Industry-Specific Carbon Risk*, *Environmental Strategy*, *Environmental Management Systems*, *Environmental Accounting Reporting*, *Certification* (e.g., ISO14000), etc. Among social- and labor-related issues, firms with a French legal origin assume more CSR than those with an English or German legal origin, as can be seen from the scores on *Social Rating* and the subcategories *Human Capital*, *Stakeholder Capital*, *Employee Motivation and Development*, *Labor Relations*, *Health Safety*, *Customer Stakeholder Partnerships*, *Human Rights Child and Forced Labor*, etc. The English common law system has higher scores than civil law systems in the domain of the firm's interactions with local communities and traditional corporate governance

concerns. Companies with a socialist legal origin have the lowest levels of CSR across the board.

We further compare differences across legal origins for various aspects of CSR using a nonparametric test (Wilcoxon rank-sum (Mann-Whitney) test). Table III shows that the differences in ESG performance (overall and by component) are highly statistically significant across legal families, and that civil law countries consistently score higher than common law countries along all ESG subfields. Among the civil law countries, we find that firms in countries with a German legal origin have higher CSR scores than their counterparts with a French legal origin in terms of environmental policy (*EcoValue Rating*, *Industry-Specific Carbon Risk*, and *Environmental Opportunity*), but the French legal origin firms have higher CSR scores in terms of social issues and labor relations than German legal origin companies. Finally, firms from capitalist economies attach more attention to ESG issues than those from current and former socialist countries (Russia, China, and some Eastern European countries). Overall, the descriptive results suggest that there are systematic differences in various ESG ratings across different legal origins.

[Insert Tables II and III about here]

B. Main Results

We now turn to regression analysis to formally test the relation between CSR and legal origin as well as other country- and firm-level characteristics. In Table IV, we present results using different estimation methods. Column (1) reports OLS results using the baseline set of control variables. Column (2) uses the same variables as in column (1) but the model is estimated by GLS. Columns (3) to (5) extend the GLS model by including additional control variables. Columns (6) and (7) report results obtained using random-effects ordered probit models (with some control variables missing due to convergence in maximum likelihood estimations). The dependent variable in all regressions is the overall IVA rating at the firm level, which is a proxy for a company's engagement in and compliance with various environmental and social issues. Following LLSV (1998), La Porta, Lopez-de-Silanes, and Shleifer (2008), Djankov et al. (2008) and Spamann (2010), we take the English common law origin as our benchmark and therefore omit it from the models, and we exclude former and current socialist countries, which, as Aghion et al. (2010) argue, are in transition and not in equilibrium.[10] Only in a robustness test do we include the socialist countries and recategorize them according to their pre-socialist legal origin (either German civil law or French civil law) (see, for example,

column (7)). We include industry and year fixed effects, and cluster standard errors at the country level in all estimations.

Several important observations can be made. First, the coefficients on the French, German, and Scandinavian civil law origins are positive and statistically significant across all specifications, regardless of the estimation method used. The results further imply that on average firms under a civil law system have a higher CSR score than those under the English common law system. The economic effects are substantial: on average firms in civil law countries have a 7% higher CSR score (or a half-grade on a 0 to 6 scale) than firms in common law countries (columns (1) and (2)). The difference is even larger—at more than 14%, or 0.85 to 1 of a grade—when we add more control variables such as a firm's investment opportunities (market-to-book ratio), the firm's degree of shareholder orientation (Anti-Director Rights Index), and the economic freedom index capturing the degree to which the country follows a capitalist model (column (5)). Taken together, the results support that civil law firms score significantly higher than common law firms on the overall IVA index. The legal origin theory in the law and finance literature argues that common law (French civil law) countries generally have the strongest (weakest) investor protection, financial development, and economic efficiency (LLSV (1998), La Porta, Lopez-de-Silanes, and Shleifer (2008)). Our findings echo this theory and are consistent with the prediction under the demand-side story that higher CSR reflects stronger social preferences for stakeholder claims in civil law countries.

The second main observation from Table IV is that political institutions—*Corruption Control*, *Political Executive Constraints*, *Regulatory Quality*, and *Economic Freedom* (the type of capitalist model)—are not strongly associated with firm-level CSR. GDP per capita is not a predictor of CSR, whereas a country's degree of globalization (whose correlation with the legal origins dummies is low (below 20%)) is a strong predictor of firm-level CSR: companies in more open and globalized economies have higher CSR scores.[11]

Looking at the firm-level variables, Table IV shows that firm size is strongly related to CSR performance: on average larger firms invest more in CSR. The coefficients on ROA are positive and significant in most specifications, in line with the "doing good by doing well" hypothesis. Market valuation (Tobin's Q) is not strongly related with CSR, except in specification (7). We also find that on average a firm that has stronger investor protection (a high Anti-Director Rights Index) invests more in CSR.

[Insert Table IV about here]

C. Robustness Tests

C.1 Alternative Theories

As LLSV (1998, 1999) state that legal origin may shape the ownership structure of a company, we examine whether the relation between CSR and legal origin captures the effect of a firm's ownership structure. To do so, we add to the benchmark GLS model (model (2) of Table IV) total ownership concentration and the ownership share held by different types of shareholders. The results are reported in Panel A of Table V. We find that both the statistical and economic effects of legal origin hold after including the various ownership variables. Furthermore, the coefficients on the ownership variables themselves are mostly insignificant. Therefore, the percentage stakes in the hands of different blockholders are not likely to be proxies for legal origin.

One criticism of the legal origin theory is that legal origin dummies are proxies for national culture and values, which have been shown to be strongly related to economic outcomes (Stulz and Williamson (2003), Guiso, Sapienza, and Zingales (2006), Tabellini (2010)). To address this concern, we follow La Porta, Lopez-de-Silanes, and Shleifer (2008) and control for religion as well as the Hofstede cultural dimensions, which are widely used cultural indices that capture social attitudes and norms (Hofstede and Hofstede (2005)). The six cultural indices comprise *Power Distance*, *Individualism*, *Masculinity*, *Uncertainty Avoidance*, *Pragmatism*, and *Indulgence* (for definitions see Appendix A). In addition, in line with the Weber thesis that differences between Protestantism and Catholicism in terms of work and social ethics have affected capitalist development and corporate growth (see Iannacone (1998) for an overview of the economics of religion), we include the binary variable *Protestant*, which captures whether a country has a Protestant majority. The results are reported in Panel B of Table V. Again, the cultural and religion variables do not make much of a dent in the explanatory power of legal origin, and the explanatory power of the cultural variables themselves is statistically insignificant, weak, or not persistent. We therefore conclude that the cultural explanation does not hold.

[Insert Table V about here]

C.2 Alternative Dependent Variables

As mentioned above, we obtained the IVA data in two waves: the first wave spans the period 1999 to 2011, and the second wave spans 2011 to 2014. The overall IVA rating that we use in the above tests combines the IVA ratings from the two waves, but we also have ratings for different dimensions of CSR for the first wave. Thus, in additional robustness checks, we repeat the baseline tests but replace the dependent variable in Tables IV and V—the overall IVA rating—with (i) the general IVA scores for each of the two waves (models (1) and (4) of Table VI) to shed light on whether possible changes in CSR measurement methodology affect the results, (ii) environmental scores capturing a CSR focus on various ecological targets and efficiency (*Environmental Score* for the 2011 to 2014 wave in model (2), *RiskMetrics EcoValue Rating* for the 1999 to 2011 wave in model (5), *Opportunity in Cleantech* in model (8), *Environmental Opportunity Factors* in model (11), *Sustainability Risk* in Model (12), *Industry-Specific Carbon Risk* in model (13), *Environmental Strategy* in model (14), *Environmental Management Systems* in model (15), *Environmental Accounting Reporting* in model (16), *Environmental Training & Development* in model (17), *Environmental Strategic Competence* in model (19), and *Environmental Performance* in model (20)), and (iii) social scores capturing a CSR focus on employees, customers, suppliers, and the community at large (*Social score* for the 2011 to 2014 wave in model (3), *RiskMetrics Social Rating* for the 1999 to 2011 wave in model (6), Labor Relations in model (9), and *Product Development*, *Safety*, and *Materials* in models (7) , (10), and (18)). The results in Table VI reveal that the wave-specific IVA scores and the various environmental and social indices are strongly and consistently correlated to legal origin. Moreover, we confirm that, relative to firms with English legal origin, firms from civil law countries have higher CSR scores. In 18 of the 20 models (the exceptions being Models (2) and (9)), firms with a Scandinavian legal origin have the highest CSR scores.

[Insert Table VI about here]

C.3 Alternative CSR Samples

Another concern with our main analysis could be that our finding that civil law firms have higher CSR ratings than their common law counterparts is driven by our CSR data. Although we have shown that the results hold across specifications with different dependent variables, such similarity could be due to the fact that the different dependent variables are based on similar rating methodologies (developed by MSCI). To address this concern, we repeat our main tests using two alternative CSR samples with global coverage: (i)

Vigeo's corporate ESG (panel) data, which cover the environment, human rights, human resources, business behavior (customers and suppliers), community involvement, and corporate governance, and (ii) Thomson Reuters' ASSET4 (panel) data, which comprise a company's engagement in and compliance with environmental and social aspects.[12] Table VII shows that that our previous results largely survive: firms with a civil law origin continue to have higher CSR scores than those with a common law origin. The only exception is in model (6), where *Corporate Governance* is the dependent variable: the three civil law dummies have a negative sign, indicating that firms with an English legal origin have higher corporate governance scores than firms with a French or German legal origin. This finding is not unexpected in light of extant empirical evidence, as this Vigeo sub-index measures traditional governance concerns that focus on shareholder protection (rather than stakeholder protection). The fact that firms with a common law origin have a stronger shareholder orientation (i.e., stronger corporate governance) is indeed consistent with the traditional law and finance view. In sum, the results across our various robustness tests support the demand-side prediction that firms in civil law countries invest more in CSR.

[Insert Table VII about here]

IV. Evidence from Scandals and Disasters

The results so far show that there is a strong and consistent correlation between a firm's level of CSR investment and its country's legal origin, with civil law firms investing more in CSR than common law firms. This is an *average effect*. Based on the demand-side arguments, a potential reason why, on average, firms in civil law countries have higher levels of CSR investment than firms in common law countries may be that they are more responsive to the change in the demand for CSR. This argument describes a *marginal effect*. To examine the role of a "responsiveness" channel, we conduct several quasi-natural experiments of "shocks" to CSR demand. Doing so also allows us to control for country fixed effects (to take into account the influence of time-invariant country-level factors) while still examining the effects of legal origin by means of interaction terms. We estimate these tests using a differences-in-difference (DiD) approach. In general, a DiD estimation can be specified as

$$CSR_{ict} = A_c + B_t + C_s + \beta X_{ict} + \gamma I_{lt} + \epsilon_{ict}, \quad (3)$$

where A_c, B_t, and C_s are country, year, and sector (industry) fixed effects, respectively, X_{ict} are the

relevant firm- and country-level controls, I_{lt} is the interaction between legal origin (civil law) and the year dummy such that the estimated impact of legal origin (civil law in year *t*) is captured by the OLS estimate $\hat{\gamma}$, and ϵ_{ict} is an error term. Standard errors are clustered across firms and over time to account for serial and cross-sectional correlations.

We conduct three quasi-experiments related to unexpected corporate scandals or natural disasters, which, as we argue, move firms in the relevant industries "out of equilibrium" and magnify the costs and benefits of different legal regimes. We deliberately choose shocks that had a huge global impact so that we can make comparisons across legal regimes. These shocks include the Chinese milk scandal in November 2008, the Deepwater Horizon oil spill in March/April 2010, and the Asian earthquake and tsunami in December 2004. We distinguish two responsiveness channels of CSR. One is a consumer channel, whereby the unexpected shocks trigger shifts in consumer demand and changes in firms' market share that force companies to adjust their CSR. The other is a legal channel, whereby firms in a more CSR-friendly legal environment (stronger stakeholder orientation in the spirit of the law) tend to be more responsive to shocks and supply more social goods. In our analyses below, we try to disentangle these two channels. We use the ASSET4 sample for these analyses because it has detailed sub-CSR scores for items such as cash donations and spill and pollution controls, which directly correspond to each of the shocks considered.

The Chinese Milk Scandal and Product Responsibility

The 2008 Chinese milk scandal was a food safety incident in China involving milk and infant formulae as well as other food materials and components that had been adulterated with melamine. Twenty-two Chinese diary companies, including market leaders such as Mengniu, were reported to have contaminated products. By November 2008, China reported an estimated 300,000 victims, with six infants dying from kidney stones and other kidney damage, and an estimated 54,000 babies hospitalized. The World Health Organization referred to the incident as one of the largest food safety events it had faced in recent years. The incident raised severe concerns about food safety, not only in China but all over the world, as many food manufacturing and processing companies import food materials and components from China or have foreign operations in China. The European Union, European Commission, and the U.S. Food and Drug Administration all tightened food safety checks and regulations in the wake of this incident.

The Chinese milk scandal also raised food-related companies' awareness about their responsibility to

ensure their product safety. We therefore use the "product responsibility" rating of ASSET4 to compare companies' reactions—across legal regimes—in terms of improving their own product safety as measured by their product responsibility scores. We exclude Chinese firms from the sample to avoid the (expectedly strong) local impact on our international results. Column (1) of Table VIII presents the results. The DiD estimator is the coefficient on "Civil Law × Post-2009." The coefficient is positive and statistically significant with a nontrivial economic magnitude, indicating that on average food-related companies in civil law countries improved their product responsibility performance by more than 5% (a coefficient of 5.344 on a scale of 100) in relation to firms in common law countries. As a robustness check, we run the same regression on the product safety rating from the IVA sample. As can be seen in column (2) of Table VIII, the coefficient on "Civil Law × Post-2009" is still positive and significant. Given that the IVA rating is on a scale of 0 to 10, the economic magnitudes are similar across the two regressions (5% to 7%). Taken together, the results point to a higher responsiveness of firms in civil law countries following this food product safety scandal.

The Indian Ocean Earthquake and Corporate Donations

The 2004 Indian Ocean earthquake and tsunami was one of the deadliest natural disasters in recorded history. On December 26, 2004, an undersea megathrust earthquake triggered a series of devastating tsunamis along the coasts of most landmasses bordering the Indian Ocean, killing over 230,000 people in 14 countries and inundating many coastal communities. The plight of the people affected prompted a worldwide humanitarian response. In all, the worldwide community donated more than $14 billion in humanitarian aid; while some funds came from national governments, most were corporate cash donations.

While corporations regularly donate money in normal times, the earthquake and tsunami led to a surge in corporate donations as part of the relief effort. Godfrey (2005) and Patten (2008) argue that philanthropic giving (as a response to disasters) is perceived as a genuine manifestation of a firm's underlying social responsiveness. We therefore compare cash donations (including both direct cash giving and cash giving via a corporate foundation) made in 2005, right after the disaster, by corporations in our sample. We calculate corporate cash donations following the standard approach as in Masulis and Reza (2015), and focus on cash donations as a proportion of total cash: $\text{Ln}(1 + \text{cash donations} / \text{total cash}) \times 10^3$. Column (3) of Table VIII reports the results from this experiment with the same control variables as before. Here, the coefficient on

"*Civil Law × Year 2005*" is the DiD estimator. The reason for interacting the civil law dummy with a year dummy rather than with a post-disaster dummy (e.g., Post-2005) is that, unlike the food scandal, which likely shifted CSR demand and had lasting effects on corporate CSR policies, donations are disaster-specific and are made only in the year of or following a disaster, rather than in all subsequent years. (Below, in a placebo test, we examine the role of donation timing). Again, the interaction coefficient is positive and statistically significant, indicating that firms in civil law countries donated on average more money than those in common law countries right after the Asian earthquake disaster. This finding suggests that a firm's underlying social responsiveness (as manifested by philanthropic giving after natural disasters) is stronger in civil law countries than in common law countries.

The Deepwater Horizon Oil Spill and Corporate Environmental Concerns

The Deepwater Horizon oil spill, also known as the BP oil disaster, began on April 20, 2010 in the Gulf of Mexico on the BP-operated Macondo Prospect, as a result of the Deepwater Horizon oil rig exploding and sinking. This incident is considered the largest accidental marine oil spill in the history of the petroleum industry. The spill had a severe environmental impact. The U.S. government estimated the total discharge at 4.9 million barrels (210 million U.S. gallons, or 780,000 cubic meters), which directly polluted 68,000 square miles (180,000 square kilometers) of ocean and had a devastating effect on marine life in the Gulf.

The Deepwater Horizon oil spill was an environmental shock to all energy-related industries in terms of the environmental consequences of their production and operations. We therefore compare, across legal regimes, corporations' environmental CSR activities after the oil spill. Using the detailed CSR indices of ASSET4, we measure a company's environmental CSR investment with three variables most closely related to oil spills and pollution controls under the ASSET4 environment classification, all of which are on a scale of 100: (a) "Spill and Pollution Control," which captures a company's direct risk management policies related to oil spills and pollution, (b) "Environmental R&D Spending," which captures a company's efforts in developing new technologies that are more environmentally friendly, and (c) "Clean Energy Products," which captures whether a company substitutes its energy-intensive products with products using new technologies and clean energies. Columns (4) to (6) of Table VIII report the results using similar tests as in columns (1) and (2), except that the DiD estimator is now the coefficient on "Civil Law × Post-2010." The coefficients on the

three environmental performance variables are all positive and statistically significant, indicating that on average energy-related firms in civil law countries upgraded various aspects of their environmental performance—by strengthening their spill and pollution controls, investing more in environmental R&D, and developing more clean-energy products—by 7% (7-grade increase on a 100-point scale) relative to energy-related firms in common law countries. In a robustness check we interact the civil law dummy with the year 2010 dummy (columns (7) to (10)), and find similar results, both statistically and economically. Taken together, these results suggest that companies from different legal regimes respond differently to the oil spill shock, with such differences in responses both immediate and persistent over time.

[Insert Table VIII about here]

A. Placebo Tests

We conduct several placebo tests on alternative industries and event years for the scandals and disasters analyzed above to rule out potential industry- and year-specific confounding effects. For the food scandal, we estimate identical models for several nonfood industries (including the oil and gas industry). Similarly, for the oil spill disaster, we estimate identical models for several non-oil-and-gas industries (including the food industry). The alternative industries other than the food and the oil and gas industries include software and IT services, professional and commercial services, and financials. For the Indian Ocean earthquake and tsunami disaster, which triggered corporate donations from firms across all industries, we rerun the model for alternative years during our sample period. The results for these placebo tests are reported in Table IX, with Panels A and B presenting results for product responsibility and environmental performance ratings in alternative industries after the food scandal and the oil spill disaster, respectively, and Panel C presenting results on corporate donations for alternative years. We find that the milk scandal had no impact on nonfood industries for firms in civil law countries, as the coefficients on interaction "Civil law × Post-2009" are not statistically significant. This finding supports the results presented in Table VIII and suggests that firms' CSR reactions in the area of food safety are specific to the food industry. Likewise, we note that the oil spill disaster did not affect other industries in terms of corporate environmental actions after the disaster. The placebo tests on alternative years for the Indian Ocean earthquake and tsunami also support our previous results: the interactions between the civil law dummy and years not affected by a global disaster are not

statistically significant, in contrast to the interaction between the civil law dummy and the post-disaster year (*Year 2005*), which is positive and significant. This implies that the difference in cash donations between common law firms and civil law firms is likely to be driven by year-specific disaster events.

[Insert Table IX about here]

B. Changing Market Shares following Scandals

As mentioned above, differences in CSR responsiveness across legal regimes may be driven by changes in firms' market share, that is, consumers in some countries may react more to these shocks, with their demand for CSR shifting more, which would force companies to react more strongly in terms of improving their CSR performance (de Bettignies and Robinson (2015)). Differences in such consumer demand shifts may coincide with differences across legal regimes. An alternative explanation is that firms in more CSR-friendly legal regimes (i.e., civil law countries) respond more per unit of shock, which is a direct legal channel.

To disentangle these two channels, we investigate whether the above shocks are associated with changes in firms' market share, whether market share changes, if any, are further related to changes in CSR practices, and whether these relations differ across legal regimes. The Chinese milk scandal and the Deepwater Horizon oil spill disaster provide distinct settings in terms of industry composition, and thus are ideal for investigating the impact of the consumer channel. In particular, the oil and gas industry is dominated by large *international* firms originating from different legal regimes (such as Total S.A. in France, BP in the U.K., ExxonMobil in the U.S., Royal Dutch Shell in the Netherlands, and Statoil in Norway), whereas the food industry comprises many smaller *local* firms. The food scandal may shift consumer demand away from the larger food companies (which are tracked by CSR data providers) towards small, local producers (which are largely untracked), whereas domestic consumer demand for oil and gas is relatively inelastic due to the oligopolistic nature of the local industry (though consumers may shift their demand across large international firms following an energy scandal). If our findings above regarding differences in CSR responsiveness across legal regimes are driven mainly by changes in market share (i.e., companies change their CSR practices in response to a decline in market share as consumers shift to other companies), we would expect variation in the effect of the shock on market shares for food/energy, as well as in the effect of market share changes on firms' CSR practices across

legal regimes.

We test this consumer channel by using the change in a company's market share of sales revenue in its industry following the shock as a proxy for consumer demand shifts. For the food scandal, we define an "industry" as the *domestic* industry of *all companies* in a certain year, while for the oil spill disaster, we define an "industry" as the *global* industry of companies *within our sample*[13] in a certain year. Panel A of Table X reports results on changes in the *domestic* market shares of our sample companies, which are mostly large firms, in response to the Chinese milk scandal and the correlation between these market share changes and the product responsibility score (ASSET4) of companies in food-related industries after the scandal. We find that the domestic market share of our sample firms (mostly large firms with CSR ratings) declines following the scandal, likely towards smaller, local food producers (which do not have CSR ratings), and that this effect arises not in the year of the scandal but over the five-year period subsequent to the scandal. We next test whether the shifts in our sample firms' market share following the food scandal are related to the product responsibility scores of food sector firms in civil and common law countries in the post-scandal period. We find that the changing market shares after the scandal are not significantly correlated with changes in CSR in either civil law or common law countries, which works against the argument that differences in CSR responsiveness between common law and civil law countries are driven by a decline in market shares. Panel B of Table X reports results on changes in *international* market shares in response to the oil spill and their correlation with oil and gas companies' spill and pollution control scores after the shock. Subsequent to the oil spill shock, we observe a small though significant change in market share in firms operating in the traditional energy sector (which could result from a consumer demand shift away from the legacy energy firms towards firms active in alternative energy). A large shift in market share is unexpected given that alternative energy production, while growing, is still a small part of the market relative to traditional carbon-based energy production. Panel B also shows that the market share shift does not differ between firms with civil or common law origin: we do not find a significant correlation between changes in oil and gas companies' market shares after the spill and changes in the spill and pollution control index. Taken together, these results support the legal channel for the differences in CSR responsiveness across legal regimes that we document.

[Insert Table X about here]

V. Economic Mechanisms

The results above show that systematic differences in CSR across legal regimes are not likely to be driven by changing market shares. In addition, in our benchmark models in Table IV, we find that institutional variables such as *Regulatory Quality*, *Political Executive Constraints*, and *Anti-Director Rights Index* are not statistically significant and that their inclusion does not affect the significance of the legal origin dummies, which suggests that they are not likely to be the channels through which legal origin operates. In this section, we directly test additional possible mechanisms at both the country level and the firm level as outlined in Section I. These tests are based on the idea that CSR in civil law countries is more rule-driven whereas CSR in common law countries relies more on ex ante discretion and ex post settlement.

We first use the shareholder litigation risk index developed by LLSV (1998) and Djankov et al. (2008) to test for the ex post settling up mechanism in common law countries (as opposed to the rule-based mechanism in civil law regimes). When the risk of shareholder litigation is low, firms are more willing to engage in CSR activities that often go beyond what is required by law, and common law countries tend to utilize ex post shareholder litigation mechanisms to a greater extent to empower shareholders to sue corporate directors (LLSV (1998), Issacharoff and Miller (2009), Cox and Thomas (2009), Gelter (2012)). Similarly, we investigate whether the level of CSR is higher when a firm's decision-making process is ex ante insulated from the pressures of its (different types of) shareholders through the presence of a supermajority vote requirement in its corporate charter or bylaws, which is more prevalent under civil law systems (Hopt (1997), Cheffins and Black (2006)).

Another mechanism of interest relates to regulations and the direct involvement of the government in business. As argued by La Porta et al. (1999) and Botero et al. (2004), legal origin proxies for the state's tendency to intervene in economic life: civil law countries tend to rely more on regulation and state intervention, whereas common law countries tend to rely more on markets and contracts. To test for this mechanism, we use several country-level indices including an employment laws index, a collective bargaining laws index, and the prevalence of state involvement in the economy.

We conduct our tests on these economic mechanisms in two stages: in the first stage we regress each of the channel variables on the civil law dummy, and in the second stage we regress the overall CSR rating on the channel variable "predicted" from the first stage, that is, on the variation in the channel variables that is

explained by legal origin. Control variables are included in both stages. This approach is akin to an IV approach except that the civil law dummy is not treated as the IV for the channel variable, was it is possible that civil law can operate on CSR through channels other than those that we consider here.

Table XI presents the results. We find that, in the first stage, civil law origin is negatively correlated with shareholder litigation risk (model (1)), and positively correlated with the presence of supermajority rules (model (3)), labor and union laws (models (5) and (7)), and the degree of state involvement in the economy (model (9)). In the second stage, we find that shareholder litigation risk is negatively correlated with the level of CSR (model (2)), whereas the other channel variables are all positively correlated with CSR (models (4), (6), (8), and (10)). These results are consistent with the notion that civil law countries rely more heavily on rules-based mechanisms that restrict behavior ex ante and reflect a stronger focus on (or demand for) stakeholder orientation in these societies, which implies that rule-based mechanisms are related to higher levels of CSR. We again point out that this analysis is not conclusive as other channels could potentially explain the link between legal origin and CSR, and civil law may function through other mechanisms that are positively related to firms' CSR. Nevertheless, the significance in both stages is indicative of greater reliance on ex ante constraints and less ex post settling up in civil law countries driving the link between civil law regimes and CSR.

[Insert Table XI about here]

VI. Conclusion

La Porta, Lopez-de-Silanes, and Shleifer (2008: 326) claim that "Legal origins—broadly interpreted as highly persistent systems of social control of economic life—have significant consequences for the legal and regulatory framework of the society, as well as for economic outcomes." Motivated by this insight, in this paper we examine whether legal origin helps explain cross-country variation in an increasingly important business activity, namely, CSR. We assess a firm's CSR by using proxies for corporate stakeholder concerns, such as environmental and social policies, and by analyzing large-scale public and proprietary databases covering over 25,000 securities of large corporations around the world. We find strong support for the legal origin explanation of CSR scores, much more so than for alternative explanations, such as CSR's relation with social preferences, regulatory quality, political institutions, and culture at the country level, and ownership

structure, corporate governance, and financial performance at the firm level. CSR scores are higher in civil law countries than in common law countries, and on average companies with a Scandinavian legal origin have the highest CSR scores. This is consistent with demand-side arguments that CSR reflects social preferences for good corporate behavior and a stakeholder orientation, and that such social preferences are more embedded in rule-based mechanisms that restrict firm behavior ex ante, mechanisms that are more prevalent in civil law countries. Such rule-based managerial constraints are less common in common law countries where ex post settling up mechanisms (i.e., judicial resolutions) are more important. In additional evidence we find that the positive link between civil law origin and CSR can be explained by, among other potential channels: lower shareholder litigation risk, the presence of supermajority rule in a firm, stronger labor regulations, and a high degree of state involvement in business. Evidence from exogenous scandals and disasters further suggests that companies in civil law countries are more responsive than those in common law countries in terms of improving their CSR practices when these shocks occur, and that this responsiveness is not likely to be driven by shifts in market share.

The relevance of our findings is two-fold. At the macro level, our results shed light on the role of legal origin in driving financial and other economic outcomes, a question subject to debate since LLSV (1998) first introduces this thesis (e.g., Rajan and Zingales (2003), Roe (2006), Spamann (2010), La Porta, Lopez-de-Silanes, and Shleifer (2008)). Still, while the debate in the law and finance literature focuses mostly on the protection of investor rights as well as economic freedom and efficiency based on contracting and institutional arrangements as governed by legal rules (areas in which the common law origin appears to be "superior"), little is known about how similar mechanisms relate to the welfare of other stakeholders. We show that the common law system supports CSR to less extent than civil law regimes. This is consistent with LLSV's premise: the common law tradition emphasizes shareholder primacy and a private market-oriented strategy of social control, and perhaps *because of this emphasis*, it is also less stakeholder-oriented. Stakeholder rights are usually protected by rules and a state-desired approach to social control. Of course, CSR may be a result of both rules and discretion, as we find that the level of CSR is highest under the Scandinavian legal regime, which lies somewhere between heavily rule-based and discretion-oriented systems.

At the micro level, our findings contribute to our understanding of what drives CSR, which has recently

attracted much interest in finance. While existing studies focus mostly on the financial and strategic motives for CSR in specific countries and in specific economic settings, we extend the scope of CSR research to a global scale by using several large CSR samples with international coverage to analyze the determinants of CSR at the country level, a question that has received little attention to date. In addition, we show that our results hold for both CSR engagement and CSR compliance, which suggests that CSR does not merely focus on corporate strategic actions to boost financial performance (engagement), or compliance with the rules. Rather, both engagement and compliance are systematically related to differences in legal regimes across countries. This focus on the legal contexts underlying CSR also contributes to the broader theme of corporate governance, especially to the shareholder-stakeholder tradeoff in modern corporations.

We caution that none of our arguments or findings are meant to suggest that the equilibrium level of "total" social responsibility is higher in civil countries. Rather, the results simply show that on average common law societies invest less in CSR. Indeed, some recent studies consider the extent to which CSR crowds out the provision of public goods provided by other actors (Graff Zivin and Small (2005), Baron (2007)). In this sense, the higher levels of CSR in civil law countries may reflect constraints to a larger degree than managerial objectives. Therefore, firms in different countries may have different value-maximizing levels of CSR, and it is possible that the legal regimes in some countries can constrain their firms from achieving such value-maximizing levels, either due to regulations or by shaping a firm's attitude towards stakeholders via governance devices. Overall, the level of CSR in a country reflects the intersection of the supply of socially responsible behavior by firms and the demand for CSR practices by society, and our findings suggest that a country's legal origin may be a primary force behind the equilibrium result. This result underscores profound role that the legal regime plays in economic life and suggests that CSR—an increasingly important business activity—is fundamentally related to the legal origin of a country.

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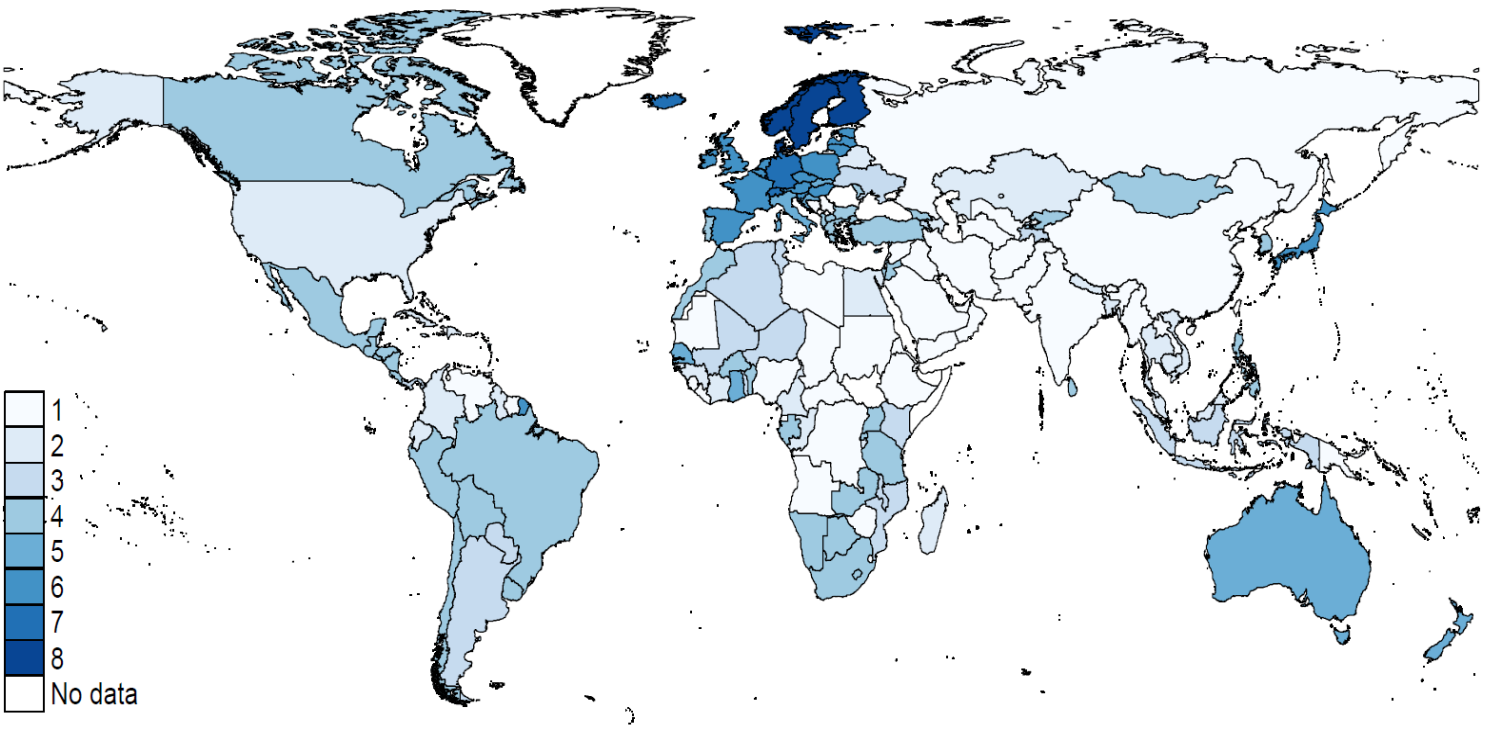
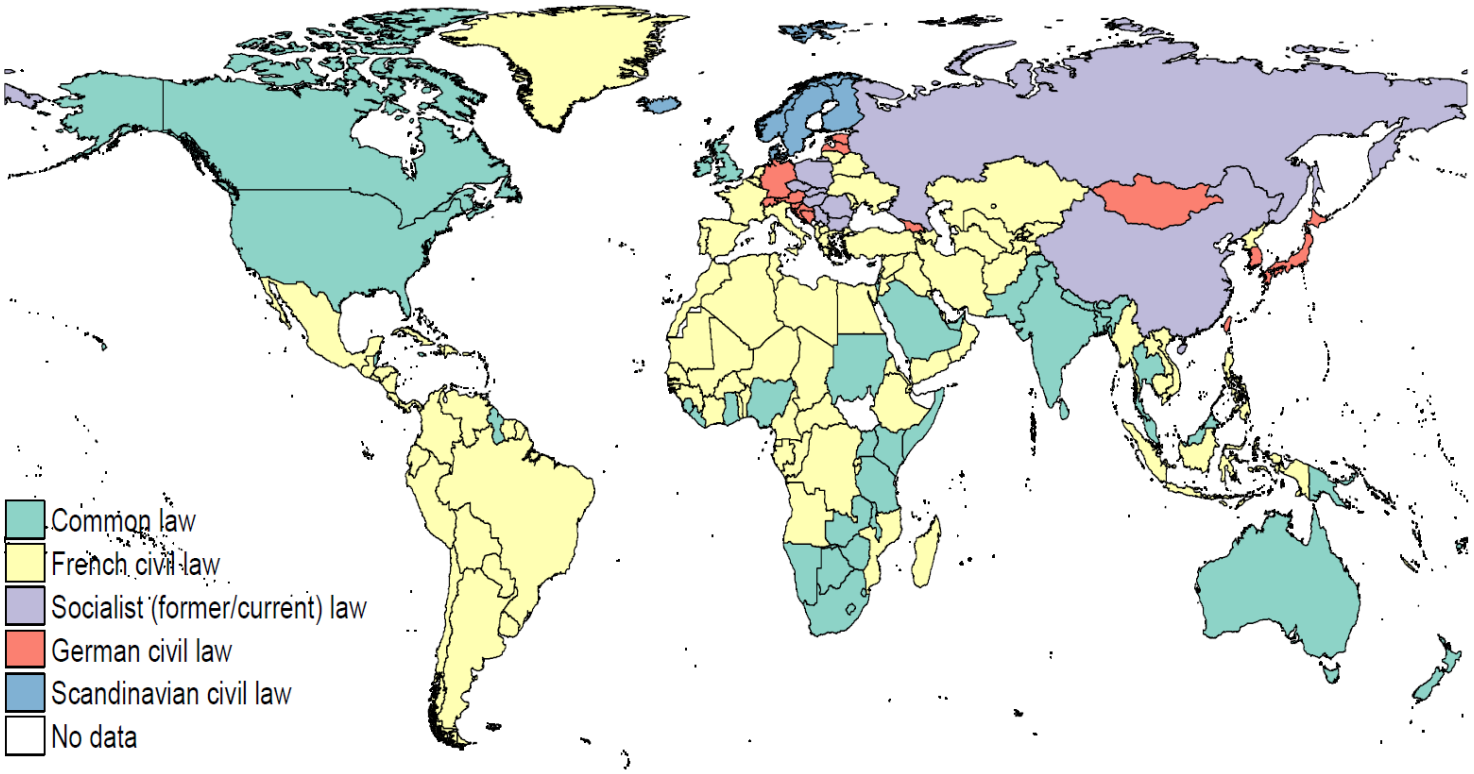


Panel A. Adjusted country-level sustainability ratings around the world (Source: Vigeo Sustainable Country Ratings)



Panel B. Legal origins around the world (Source: La Porta, Lopez-de-Silanes, and Shleifer (2008))
Figure 1. Corporate social responsibility and legal origin by country

Table I
Description of the CSR Indices

	Panel A. Descriptions of CSR Ratings Used as Dependent Variables and the Sustainable Country Rating
Overall IVA rating	The IVA rating identifies key environmental, social, and governance issues that hold the greatest potential risk or opportunity for each industry sector. Themes on "environment" include climate change, natural resources, pollution and waste, and environmental opportunities. Themes on "social" include human capital, product liability, stakeholder opposition, and social opportunities. More detailed decompositions of key issues under each theme are listed below in Environmental score and Social score. IVA analyzes each company's risk exposure, measuring the extent to which a company's core business is at risk of incurring unanticipated losses. When comparing companies, the data are normalized by the most relevant, available factor, such as sales or production levels. The data are then converted to a relative rating by giving the company with the best performance in its industry sector in a given category a AAA rating, the top rating, while giving the company with the worst performance a CCC rating, the lowest rating. And then converting these ratings to scores between 6 to 0. The IVA ratings are in two waves (as in our sample): 1999 to 2011 and 2011 to 2014. Source: MSCI Intangible Value Assessment.
Environmental score	The environmental score is the environmental pillar of IVA and applies the same rating metrics based on potential risk or opportunity in each industry. The score rates the following issues: carbon emissions, product carbon footprint, energy efficiency, insurance against climate change risk, water stress, biodiversity and land use, raw material sourcing, financing environmental impact, toxic emissions and waste, packaging material and waste, electronic waste, opportunities in clean tech, opportunities in green building, opportunities in renewable energy, etc. The data are converted to a relative score by giving the company with the best performance in its industry sector in a given category a 10, the top score, and giving the company with the worst performance a 0, the lowest score. Source: MSCI Intangible Value Assessment (2011 to 2014 wave).
Social score	The social score is the social pillar of IVA and applies the same rating metrics based on potential risk or opportunity in each industry. The score rates the following issues: labor management, human capital development, health and safety, supply-chain labor standards, controversial sourcing, product safety and quality, chemical safety, privacy and data security, responsible investing, insuring health and demographic risk, opportunities in health and nutrition, access to communications, access to healthcare, etc. Similar to the environmental score, the social score is industry-adjusted (compared within the same industry sector on a global scale) and ranges from 0 to 10. Source: MSCI Intangible Value Assessment (2011 to 2014 wave).
EcoValue rating	The EcoValue ratings measure a company's environmental performance in three major areas: (1) environmental strategy and management, (2) environmental risks, and (3) environmental strategic profit opportunities. The rating methods are similar to those of the overall IVA ratings, and also range from AAA to CCC (which are then converted to 6 to 0). Source: RiskMetrics (provided by the MSCI Intangible Value Assessment: the 1999-2011 wave).
Social rating	The Social ratings measure a company's social performance on aspects similar to those in the Social score. The rating methods are similar to that of the overall IVA ratings, and also range from AAA to CCC (which are then converted to 6 to 0). Source: RiskMetrics (provided by the MSCI Intangible Value Assessment: 1999 to 2011 wave).
Product responsibility	The customer/product responsibility category measures a company's management commitment and effectiveness in creating value-added products and services upholding customers' security. It reflects a company's capacity to maintain its license to operate by producing quality goods and services preserving the customer's health, safety, integrity, and privacy. Includes accurate product information and labelling. Source: ASSET4 ESG data.
Product safety	A score measuring a company's product quality, health and safety initiatives, and controversies related to the quality or safety of the company's products, including legal cases, recalls, and criticism. The score is normalized on a scale of 0-10, with a higher score indicating greater product safety. Source: MSCI Intangible Value Assessment.
Cash donations to cash	The amount of cash donations to charitable (i.e., tax-exempt) organizations scaled by total cash. Cash donations include direct cash giving and cash giving via a corporate foundation. The variable is calculated as: Ln (1 + cash donations / cash) × 103, then winsorized at the 1% level. Source: ASSET4 ESG data.
Spill and pollution control	A score measuring the extent to which the company's directly or indirectly (through a supplier) under the spotlight of the media because of a controversy linked to the spill of chemicals, oils and fuels, gases (flaring), or the overall impact of the company on the environment. The score is normalized on a scale of 0-100. Source: ASSET4 ESG data.
Environmental R&D	A score measuring the extent to which the company invests in R&D on new environmentally friendly products or services that limit the amount of emissions and resources needed during product use. The score is normalized on a scale of 0-100. Source: ASSET4 ESG data.
Clean energy products	A score measuring the extent to which the company develops products or technologies for use in clean, renewable energy (such as wind, solar, hydro, geo-thermal, and biomass power). The score is normalized on a scale of 0-100. Source: ASSET4 ESG data.
Sustainable country rating	Country-level sovereign ESG scores and benchmarks based on 120 ESG risk and performance indicators in three areas: (1) environmental protection, (2) social protection and solidarity, (3) rule of law and governance. Countries are graded on a scale of 0-100 on their commitment and performance in the measured areas (e.g., ratification of the Kyoto convention, the Vienna convention, the Stockholm convention, CO2 emissions per head, Gini index, etc.). Source: Vigeo.

Table I (Continued**)**
Description of the CSR Indices

Panel B. Decomposition of the Intangible Value Assessment (IVA) Rating (Based on the 1999 to 2011 Wave)

IVA Factor	IVA Subscore	weight	Key Metrics
Strategic governance	SG1) Strategy	<2%	Overall governance; rating composed of total scores of non-key issues.
	SG2) Strategic Capability / Adaptability	<2%	Management of CSR issues, partnership in multi-stakeholder initiatives.
	SG3) Traditional Governance Concerns	<2%	Board independence, management of CSR issues, board diversity, compensation practices, controversies involving executive compensation and governance.
Human capital	HC1) Workplace Practices	<2%	Workforce diversity, policies and programs to promote diversity, work/life benefits, discrimination-related controversies.
	HC2) Labor Relations	20%	*KEY ISSUE: Labor Relations* Benefits, strikes, union relations, controversies, risk of work stoppages, etc.
	HC3) Health & Safety	<2%	H&S policies and systems, implementation and monitoring of those systems, performance (injury rate, etc.), safety-related incidents and controversies.
Stakeholder capital	SC1) Stakeholder Partnerships	<2%	Customer initiatives, customer-related controversies, firm's support for public policies with noteworthy benefits for stakeholders.
	SC2) Local Communities	<2%	Policies, systems, and initiatives involving local communities (esp. indigenous peoples), controversies related to firm's interactions with communities.
	SC3) Supply Chain	<2%	Policies and systems to protect supply-chain workers' and contractors' rights, initiatives for improving labor conditions, supply-chain-related controversies.
Products and services	PS1) Intellectual Capital/ Product Development	<2%	Beneficial products and services, including efforts that benefit the disadvantaged, reduce consumption of energy and resources, and production of hazardous chemicals; average of two scores.
	PS2) Product Safety	<2%	Product quality, health and safety initiatives, controversies related to the quality or safety of a firm's products, including legal cases, recalls, criticism.
Emerging markets	EM1) EM Strategy	<2%	Default = 5, unless there is company-specific exposure that is highly significant.
	EM2) Human Rights/ Child and Forced Labor	<2%	Policies, support for values in Universal Declaration of Human Rights, initiatives to promote human rights, human rights controversies.
	EM3) Oppressive regimes	<2%	Controversies, substantive involvement in countries with poor HR records.
Environmental risk factors	ER1) Historic Liabilities	<2%	Controversies including natural resource-related cases, widespread or egregious environmental impacts.
	ER2) Operating Risk	<2%	Emissions to air, discharges to water, emission of toxic chemicals, nuclear energy, controversies involving non-GHG emissions.
	ER3) Leading/ Sustainability Risk Indicators	<2%	Water management and use, use of recycled materials, sourcing, sustainable resource management, climate change policy and transparency, climate change initiatives, absolute and normalized emissions output, controversies.
	ER4) Industry Carbon Specific Risk	25%	*KEY ISSUE: Carbon* Targets, emissions intensity relative to peers, estimated cost of compliance.
Environmental management capacity	EMC1) Environmental Strategy	<2%	Policies to integrate environmental considerations into all operations, environmental management systems, regulatory compliance, controversies.
	EMC2) Corporate Governance	<2%	Board independence, management of CSR issues, board diversity, compensation practices, controversies involving executive compensation and governance.
	EMC3) Environmental Management Systems	<2%	Establishment and monitoring of environmental performance targets, presence of environmental training, stakeholder engagement.
	EMC4) Audit	<2%	External independent audits of environmental performance.
	EMC5) Environmental Accounting/Reporting	<2%	Reporting frequency, reporting quality.
	EMC6) Environmental Training & Development	<2%	Presence of environmental training and communications programs for employees.
	EMC7) Certification	<2%	Certifications by ISO or other industry- and country-specific third-party auditors.
	EMC8) Products/ Materials	<2%	Positive and negative impact of products and services, end-of-life product management, controversies related to environmental impact of P&S.
Environmental opportunity factors	EO1) Strategic Competence	<2%	Policies to integrate environmental considerations into all operations and reduce environmental impact of operations, products and services, environmental management systems, regulatory compliance.
	EO2) Environmental Opportunity	35%	*KEY ISSUE: Opportunities in clean technology* Product development in clean technology, R&D relative to sales and trend, innovation capacity.
	EO3) Performance	<2%	Percent of revenue represented by identified beneficial products and services.

Table II
Average CSR Score across Different Legal Origins

Overall IVA Rating is the weighted average score for different subcategories. EcoValue Rating and Social Rating are from RiskMetrics. A higher score indicates that the company put more effort in the area, and is marked by darker shading. Standard deviations are in brackets.

	English Origin	*French Origin*	*Socialist Origin*	*German Origin*	*Scandinavian Origin*
Overall IVA Rating (full sample)	2.65 (1.58)	3.15 (1.59)	1.77 (1.53)	2.98 (1.61)	3.83 (1.50)
Overall IVA Rating (1999 to 2011 wave)	2.72 (1.74)	3.10 (1.73)	1.26 (1.21)	2.83 (1.72)	3.93 (1.74)
EcoValue Rating (1999 to 2011 wave)	2.65 (1.77)	2.92 (1.78)	1.20 (1.21)	3.59 (1.85)	3.88 (1.70)
Social Rating (1999 to 2011 wave)	2.75 (1.73)	2.99 (1.75)	1.40 (1.36)	2.84 (1.63)	3.85 (1.66)
Overall IVA Rating (2011 to 2014 wave)	2.64 (1.50)	3.16 (1.57)	1.81 (1.53)	3.02 (1.58)	3.79 (1.41)
Environmental Score (2011 to 2014 wave)	4.68 (2.25)	5.48 (2.27)	4.07 (2.28)	5.17 (2.17)	5.63 (1.82)
Social Score (2011 to 2014 wave)	4.55 (1.83)	5.22 (1.75)	3.67 (2.10)	4.83 (1.71)	5.45 (1.72)
Strategic Governance	5.42 (1.85)	5.58 (1.85)	3.89 (1.57)	5.49 (1.82)	6.66 (1.73)
Strategic Governance Strategy	5.47 (2.23)	5.91 (2.23)	4.01 (2.09)	6.01 (2.05)	6.76 (2.02)
Strategic Capability Adaptability	5.28 (2.30)	5.63 (2.15)	3.83 (2.17)	5.76 (2.16)	6.38 (2.17)
Traditional Governance Concerns	5.57 (1.97)	5.31 (2.00)	4.56 (2.21)	4.93 (2.07)	6.60 (1.84)
Human Capital	5.56 (1.69)	5.88 (1.74)	4.06 (1.67)	5.44 (1.73)	6.39 (1.72)
Employee Motivation Development	5.93 (2.00)	6.30 (2.01)	4.85 (2.12)	5.71 (1.92)	6.61 (2.10)
Labor Relations	5.26 (1.85)	5.62 (2.03)	4.25 (2.25)	5.51 (1.76)	6.13 (2.01)
Health Safety	5.45 (2.14)	5.51 (2.01)	3.75 (1.97)	5.27 (2.09)	6.07 (2.11)
Stakeholder Capital	5.33 (1.87)	5.44 (1.86)	3.97 (1.25)	5.23 (1.78)	5.78 (1.91)
Customer Stakeholder Partnerships	5.21 (2.14)	5.46 (2.14)	4.01 (2.03)	5.42 (2.00)	6.09 (2.10)
Local Communities	5.86 (2.21)	5.63 (2.10)	4.84 (1.88)	5.51 (2.01)	5.28 (1.96)
Supply Chain	5.12 (2.31)	5.09 (2.20)	3.65 (2.32)	5.21 (2.15)	5.75 (2.38)
Intellectual Capital Product Develop.	5.42 (2.34)	5.78 (2.25)	3.98 (1.96)	6.18 (2.29)	6.34 (1.95)
Product Safety	5.17 (2.02)	5.37 (2.25)	3.84 (2.34)	5.39 (2.11)	5.88 (2.07)
Emerging Market Strategy	5.37 (1.90)	5.61 (1.87)	4.54 (1.85)	5.27 (1.80)	5.85 (1.97)
Human Rights Child and Forced Labor	5.10 (2.12)	5.16 (2.05)	4.60 (2.08)	5.11 (1.94)	5.98 (2.13)
Oppressive Regimes	5.11 (2.13)	5.00 (1.98)	4.78 (2.08)	4.97 (1.97)	5.34 (2.05)
Environment (Overall)	4.66 (1.64)	4.87 (1.76)	3.06 (1.29)	5.49 (1.70)	5.70 (1.56)
Environmental Risk Factors	5.13 (1.92)	5.09 (1.75)	3.57 (1.38)	5.47 (1.57)	6.03 (1.40)
Historic Liabilities	5.22 (2.59)	4.92 (2.35)	3.21 (1.64)	5.25 (2.14)	6.02 (2.03)
Operating Risk	4.96 (2.40)	4.52 (2.46)	3.01 (2.08)	5.14 (2.22)	5.59 (2.48)
Leading Sustainability Risk Indicator	4.80 (2.02)	5.01 (1.99)	3.41 (1.65)	5.63 (1.94)	5.83 (1.90)
Industry Specific Carbon Risk	4.35 (2.59)	4.39 (2.75)	3.66 (2.35)	4.84 (2.54)	5.33 (2.38)
Environmental Mgmt. Capacity	4.07 (2.19)	4.55 (2.13)	3.21 (1.76)	5.46 (2.13)	5.59 (2.17)
Environmental Strategy	4.93 (2.41)	5.34 (2.38)	4.06 (2.13)	6.15 (2.28)	6.54 (2.24)
Corporate Governance	4.00 (2.45)	4.06 (2.30)	3.38 (2.18)	5.09 (2.31)	4.90 (2.31)
Environmental Management Systems	3.93 (2.57)	4.68 (2.66)	2.98 (2.20)	5.83 (2.64)	5.77 (2.62)
Audit	4.03 (2.77)	4.26 (2.79)	3.36 (2.66)	5.35 (2.84)	5.20 (2.94)
Environmental Accounting/ Reporting	3.54 (2.54)	4.26 (2.47)	2.72 (2.18)	5.57 (2.90)	5.39 (2.71)
Environmental Training Development	4.18 (2.77)	4.71 (2.64)	3.52 (2.62)	5.67 (2.60)	5.69 (2.84)
Certification	2.75 (2.54)	3.07 (2.52)	2.13 (2.11)	3.46 (2.55)	3.57 (2.85)
Products Materials	3.51 (2.53)	4.11 (2.43)	2.28 (1.81)	4.94 (2.68)	5.36 (2.61)
Environmental Opportunity Factors	5.14 (1.89)	5.17 (2.09)	4.17 (1.62)	5.59 (1.90)	6.09 (1.83)
Strategic Competence	4.38 (2.54)	4.92 (2.48)	3.52 (1.93)	6.06 (2.43)	5.98 (2.51)
Environmental Opportunity	4.47 (2.25)	4.93 (2.21)	3.49 (1.83)	5.75 (2.21)	5.87 (2.08)
Performance	4.20 (2.71)	4.63 (2.64)	3.30 (2.15)	5.57 (2.68)	5.65 (2.45)

Table III
Non-parametric Tests on the Means of CSR indices by Legal Origin

The Wilcoxon rank-sum (Mann-Whitney) test compares legal origins to assess whether their population firm-year mean ranks differ. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Overall IVA Rating	*IVA Rating (2011-2014)*	*Environm. Score (2011-2014)*	*Social Score (2011-2014)*	*IVA Rating (1999-2011)*	*EcoValue Rating (1999-2011)*	*Social Rating (1999-2011)*
Civil vs. common legal origin	85.010***	82.855***	80.125***	76.784***	20.492***	57.952***	18.915***
French vs. English origin	66.356***	64.520***	69.198***	74.000***	16.631***	15.241***	12.046***
German vs. English origin	44.281***	45.354***	44.484***	32.746***	5.932***	58.977***	5.906***
Scandinavian vs. English origin	68.193***	59.590***	37.251***	40.801***	30.167***	40.474***	32.592***
French vs. German origin	16.692***	13.235***	20.393***	34.411***	10.060***	-30.546***	6.623***
French vs. Scandinavian origin	-36.843***	-30.505***	-3.232***	-9.323***	-19.514***	-28.764***	-23.121***
German vs. Scandinavian origin	-45.155***	-36.963***	-15.533***	-27.377***	-26.137***	-8.600***	-29.329***
Capitalist vs. Socialist origin	61.978***	58.472***	33.561***	46.198***	16.994***	27.184***	22.259***

Table IV
Main Results on CSR and Legal Origin

The dependent variable (DV) is the ordinal (ranging from 0 to 6) CSR rating from MSCI IVA. Model (1) is estimated using a pooled OLS regression, models (2) to (5) are estimated using random-effects GLS, and models (6) and (7) are estimated using random effects ordered probit. All models control for year and industry fixed effects. Definitions of the dependent variables are in Table I and of the independent variable in Appendix A. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively. Standard errors are clustered at the country level and reported in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
DV = IVA Rating	Pooled OLS	GLS	GLS	GLS	GLS	RE ordered probit	RE ordered probit (socialist relabelled)
French Civil Origin	0.468**	0.521**	0.555***	0.581***	0.905***	0.234***	1.801***
	(0.213)	(0.212)	(0.215)	(0.216)	(0.249)	(0.0168)	(0.0176)
German Civil Origin	0.355***	0.524***	0.541***	0.556***	0.845***	0.124***	0.0848***
	(0.131)	(0.179)	(0.176)	(0.171)	(0.188)	(0.0125)	(0.0138)
Scandinavian Civil Origin	0.502***	0.757***	0.801***	0.800***	1.027***	1.881***	1.862***
	(0.177)	(0.188)	(0.171)	(0.177)	(0.198)	(0.025)	(0.0238)
Ln(GDP per capita)	-0.454**	-0.0808	-0.0912	-0.0688	-0.062	0.0112	-0.00774
	(0.175)	(0.101)	(0.0941)	(0.0973)	(0.101)	(0.0148)	(0.0101)
Ln(Total assets)	0.0757***	0.0341***	0.0337***	0.0323***	0.0328***		
	(0.025)	(0.010)	(0.0098)	(0.0100)	(0.010)		
ROA (winsorized .05)	-0.0357	0.0282*	0.0279*	0.027	0.0263*	0.0157*	0.0224***
	(0.024)	(0.0156)	(0.0161)	(0.0178)	(0.018)	(0.008)	(0.00343)
Globalization Index	0.0351***	0.0275**	0.0271**	0.0274**	0.0337***		
	(0.0124)	(0.0111)	(0.0113)	(0.0111)	(0.0123)		
Regulatory Quality	-0.121	0.104	0.0787	0.0753	0.0868	0.141***	0.221***
	(0.354)	(0.155)	(0.162)	(0.162)	(0.161)	(0.032)	(0.028)
Corruption Control	0.608***	0.083	0.0748	0.0698	0.0338	-0.052***	-0.0675***
	(0.195)	(0.126)	(0.125)	(0.124)	(0.126)	(0.019)	(0.022)
Political Exec. Constraints	0.0222	-0.0029	-0.00284	-0.00486	-0.005	-0.012***	0.00954***
	(0.0227)	(0.0020)	(0.0021)	(0.0035)	(0.003)	(0.004)	(0.003)
Economic Freedom Index			0.00554	0.00556	0.004		
			(0.0095)	(0.0096)	(0.010)		
MTB Assets (winsorized .05)				0.0188	0.020	0.00696	0.015***
				(0.0298)	(0.030)	(0.00472)	(0.004)
Anti-Director Rights Index					0.138**		
					(0.066)		
Observations	201,420	201,420	201,324	195,378	193,982	195,474	201,836
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table V
Robustness Tests: Alternative Theories

This table repeats the GLS estimations of model (2) of Table IV but adds control variables on ownership concentration and ownership by type of shareholder (Panel A) and cultural dimensions (Panel B).Variable definitions are given in Table I and Appendix A.

Panel A. Blockholder Ownership

DV = IVA Rating	(1) GLS	(2) GLS	(3) GLS	(4) GLS	(5) GLS	(6) GLS	(7) GLS	(8) GLS	(9) GLS	(10) GLS
French Civil Origin	0.572***	0.591***	0.575***	0.596***	0.592***	0.596***	0.582***	0.579***	0.584***	0.584***
	(0.216)	(0.216)	(0.221)	(0.218)	(0.220)	(0.212)	(0.217)	(0.216)	(0.212)	(0.212)
German Civil Origin	0.540***	0.550***	0.538***	0.556***	0.551***	0.552***	0.549***	0.542***	0.549***	0.549***
	(0.165)	(0.169)	(0.169)	(0.165)	(0.171)	(0.168)	(0.170)	(0.171)	(0.170)	(0.170)
Scandinavian Civil Origin	0.811***	0.802***	0.792***	0.826***	0.804***	0.804***	0.800***	0.800***	0.799***	0.798***
	(0.169)	(0.175)	(0.180)	(0.170)	(0.179)	(0.177)	(0.180)	(0.176)	(0.178)	(0.178)
Government Held Shares %	0.0296	0.0301								
	(0.263)	(0.244)								
Corporation Held Shares %	0.0451		0.104							
	(0.133)		(0.0973)							
Pension Fund Held Shares %	-1.205*			-1.321*						
	(0.687)			(0.777)						
Investment Companies Held Shares %	-0.0227				0.00840					
	(0.138)				(0.143)					
Employees Held Shares %	-0.146					-0.181				
	(0.389)					(0.379)				
Other Holdings %	0.207						0.269			
	(0.210)						(0.264)			
Foreign Held Shares %	0.227							0.262		
	(0.219)							(0.216)		
Total Strategic Holdings %									0.0420	
									(0.111)	
Total Free-float Shares %										-0.0435
										(0.114)
Observations	196,232	196,232	196,232	196,232	196,232	196,232	196,232	196,232	196,232	196,232
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table V (Continued)
Robustness Tests: Alternative Theories

Panel B. Cultures

DV = IVA Rating	(1) GLS	(2) GLS	(3) GLS	(4) GLS	(5) GLS	(6) GLS	(7) GLS
French Civil Origin	0.774***	0.667***	0.633***	0.667***	0.465*	0.507**	0.579***
	(0.282)	(0.226)	(0.243)	(0.229)	(0.268)	(0.213)	(0.201)
German Civil Origin	0.873***	0.600***	0.635***	0.445**	0.421*	0.101	0.471**
	(0.185)	(0.179)	(0.233)	(0.179)	(0.241)	(0.428)	(0.202)
Scandinavian Civil Origin	0.660***	0.749***	0.822***	1.116***	0.796***	0.762***	0.803***
	(0.179)	(0.175)	(0.206)	(0.236)	(0.183)	(0.173)	(0.175)
Protestant	0.201						
	(0.155)						
Hofstede Power Distance		-0.00498					
		(0.00767)					
Hofstede Individualism			0.00178				
			(0.00497)				
Hofstede Masculinity				0.00739*			
				(0.00407)			
Hofstede Uncertainty Avoidance					0.00405		
					(0.00626)		
Hofstede Long-Term Orientation						0.00926	
						(0.00670)	
Hofstede Indulgence							-0.00679
							(0.00522)
Observations	185,705	199,938	199,938	199,938	199,938	197,295	196,628
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table VI

Robustness Tests: Alternative Dependent Variables

This table shows 20 different models estimated using the same methodology and the same control variables as model (2) of Table IV, but with different CSR indices from the MSCI IVA ratings as dependent variables. The definitions are given in Table I. All regressions control for year and industry fixed effects. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively. Standard errors are clustered at the country level and reported in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dependent Variable =	*IVA Score (2011-2014)*	*Environm. Score (2011-2014)*	*Social Score (2011-2014)*	*IVA Rating (1999-2011)*	*EcoValue Rating (1999-2011)*	*Social Rating (1999-2011)*	*Product Development*	*Opportunity in Cleantech*	*Labor Relations*	*Product Safety*
French Civil Origin	0.699***	1.108***	0.566***	0.514*	1.087**	0.566***	0.611**	0.709*	0.592**	0.597***
	(0.219)	(0.244)	(0.198)	(0.311)	(0.442)	(0.198)	(0.306)	(0.379)	(0.279)	(0.225)
German Civil Origin	0.490***	0.743***	0.445*	0.536**	0.780***	0.445*	0.648***	0.743**	0.305	0.607**
	(0.189)	(0.213)	(0.261)	(0.232)	(0.301)	(0.261)	(0.163)	(0.305)	(0.250)	(0.283)
Scandinavian Civil Origin	0.748***	0.591*	0.931***	0.727***	1.117***	0.931***	0.815***	1.260***	0.374*	0.929***
	(0.275)	(0.315)	(0.258)	(0.273)	(0.349)	(0.258)	(0.173)	(0.194)	(0.201)	(0.143)
Observations	167,076	156,621	167,075	39,769	75,303	51,193	51,224	75,047	51,462	50,521
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Dependent Variable =	*Environm. Opportunity Factors*	*Leading Sustainability Risk Indicator*	*Industry-Specific Carbon Risk*	*Environm. Strategy*	*Environm. Management Systems*	*Environm. Accounting Reporting*	*Environm. Training Development*	*Products Materials*	*Environm. Strategic Competence*	*Environm. Performance*
French Civil Origin	0.695*	0.389	0.0975	0.621	0.720	1.042*	0.822*	0.942**	0.661	0.542
	(0.382)	(0.332)	(0.241)	(0.490)	(0.518)	(0.611)	(0.433)	(0.453)	(0.490)	(0.355)
German Civil Origin	0.774***	0.678**	0.451*	0.975***	1.266***	1.385***	0.908***	1.048***	1.179***	0.789***
	(0.295)	(0.273)	(0.273)	(0.330)	(0.417)	(0.416)	(0.351)	(0.312)	(0.385)	(0.286)
Scandinavian Civil Origin	1.258***	0.854**	0.634*	1.292***	1.691***	1.745***	1.300***	1.788***	1.380***	1.247***
	(0.192)	(0.332)	(0.370)	(0.407)	(0.513)	(0.475)	(0.340)	(0.417)	(0.305)	(0.206)
Observations	75,632	75,054	64,862	75,638	75,689	75,436	75,252	75,373	75,518	75,236
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table VII
Robustness Tests: Alternative CSR Samples

This table repeats the GLS estimations of model (2) of Table IV but uses alternative samples (Vigeo Corporate ESG sample and ASSET4 ESG sample) with different ESG sub-indices as dependent variables (human resources, environment, customer and supplier, community involvement, human rights, corporate governance from Vigeo Corporate ESG; and the environment and social scores from ASSET4 ESG) as defined in Appendix A. All regressions control for year and industry fixed effects. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively. Standard errors are clustered at the country level and reported in parentheses.

	Vigeo Corporate ESG Sample						ASSET4 ESG Sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable =	*Human Resources*	*Environment*	*Customer & Supplier*	*Community Involvement*	*Human Rights*	*Corporate Governance*	*Environment Score*	*Social Score*
French Civil Origin	16.74***	18.58***	7.663***	3.205**	6.516***	-16.12***	8.330*	12.83***
	(5.056)	(6.882)	(2.614)	(1.379)	(2.163)	(3.750)	(4.646)	(4.815)
German Civil Origin	12.69***	9.227**	5.787***	1.374	3.410**	-17.86***	12.80***	3.598
	(4.680)	(4.027)	(1.937)	(0.889)	(1.326)	(3.454)	(3.414)	(3.170)
Scandinavian Civil Origin	18.90***	12.92**	7.379***	3.191**	10.37***	-2.223	16.34***	14.27***
	(3.507)	(6.202)	(2.544)	(1.308)	(1.520)	(4.218)	(3.975)	(5.244)
Observations	7,765	8,341	4,163	5,786	7,707	8,341	20,692	20,692
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table VIII
Evidence from Scandals and Disasters: Direct Effects on CSR

The dependent variables are product responsibility (from ASSET4) and product safety (from MSCI IVA) ratings in Panel A, the amount of corporate donations (from Datastream) in Panel B, and the spill and pollution control index, the environmental R&D investment score, and the clean energy product score (from ASSET4) in Panel C. The differences-in-differences (DiD) estimator is the coefficient on "Civil Law × Post-2009" in Panel A, the coefficient on "Civil Law × Year 2005" in Panel B, and the coefficients on "Civil Law × Year 2010" and "Civil Law × Post-2010" in Panel C. The control variables are the same as in Table VII. All regressions control for country, year, and industry fixed effects. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively. Standard errors are clustered at the country level and reported in parentheses.

	Panel A. Chinese Milk Scandal		Panel B. Indian Ocean Tsunami	Panel C. Deepwater Horizon Oil Spill					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dependent Variable =	*Product Responsibility (ASSET4)*	*Product Safety (IVA)*	*Cash Donation/ Cash*	*Spill and Pollution Control*	*Environm. R&D*	*Clean Energy Products*	*Spill and Pollution Control*	*Environm. R&D*	*Clean Energy Products*
Civil Law × Post-2009	5.344**	0.667***							
	(2.693)	(0.196)							
Civil Law × Year-2005			16.87*						
			(9.563)						
Civil Law × Year-2010				6.393**	7.578**	6.587**			
				(2.801)	(2.944)	(2.691)			
Civil Law × Post-2010							7.679***	7.393*	6.208*
							(2.533)	(4.081)	(3.387)
Observations	1,212	2,380	10,353	1,522	1,509	1,522	1,522	1,509	1,522
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table IX
Evidence from Scandals and Disasters: Placebo Tests

This table reports placebo tests related to the results of Table VIII. In Panel A, the dependent variable is the product responsibility score (from ASSET4) for which differences-in-differences (DiD) estimation is conducted for industries not expected to be affected by the Chinese milk scandal. In Panel B, a DiD estimation is performed for the spill and pollution control index, the environmental R&D investment score, and the clean energy product score (from ASSET4) on industries not expected to be affected by the oil spill disaster. In Panel C, a DiD estimation is performed for cash donations on years not expected to be affected by the tsunami disaster. The control variables are the same as in Table VIII. All regressions control for country, year, and industry fixed effects. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively. Standard errors are clustered at the country level and reported in parentheses.

Panel A. Chinese Milk Scandal: Alternative Industries

	Oil & Gas	Software & IT Services	Professional & Commercial Services	Financials
DV = Product Responsibility	(1)	(2)	(3)	(4)
Civil Law × Post-2009	4.159	0.291	-4.583	15.87
	(3.846)	(4.723)	(4.669)	(13.53)
Observations	1,517	665	780	1,754
Control Variables	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes

Panel B. Deepwater Horizon Oil Spill: Alternative Industries

	Consumer Goods			Software & IT Services			Professional & Commercial Services			Financials		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Dependent Variable =	*Spill and pollution control*	*Environ. R&D*	*Clean energy products*	*Spill and pollution control*	*Environ. R&D*	*Clean energy products*	*Spill and pollution control*	*Environ. R&D*	*Clean energy products*	*Spill and pollution control*	*Environ. R&D*	*Clean energy products*
Civil Law × Post-2010	0.746	4.667	2.508	1.114	4.001	5.968	2.535	9.553	-5.261	0.812	-2.383	-8.779***
	(0.950)	(3.747)	(1.981)	(0.807)	(4.970)	(4.140)	(1.580)	(9.962)	(4.543)	(0.942)	(6.074)	(2.367)
Observations	2,381	1,296	2,382	663	652	667	773	264	780	216	101	1,759
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table IX (Continued)
Evidence from Scandals and Disasters: Placebo Tests

Panel C. Indian Ocean Tsunami: Alternative Years

DV = Cash Donation/Cash	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Civil Law × Year-2004	11.82									
	(18.03)									
Civil Law × Year-2005		16.87*								
		(9.563)								
Civil Law × Year-2006			-15.90							
			(9.813)							
Civil Law × Year-2007				2.971						
				(6.119)						
Civil Law × Year-2008					10.79					
					(9.493)					
Civil Law × Year-2009						5.840				
						(7.049)				
Civil Law × Year-2010							-24.80			
							(19.77)			
Civil Law × Year-2011								-0.233		
								(6.389)		
Civil Law × Year-2012									4.664	
									(11.88)	
Civil Law × Year-2013										-0.888
										(7.778)
Observations	10,353	10,353	10,353	10,353	10,353	10,353	10,353	10,353	10,353	10,353
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table X

Evidence from Scandals and Disasters: The Role of Consumer Demand

This table reports results on changes in market shares in the food industry and the oil and gas industry following the Chinese milk scandal (Panel A) and the oil spill disaster (Panel B), respectively. Each panel also reports results of the relation between changes in firm CSR indices such as product responsibility and spill and pollution control scores and changes in consumer demand (proxied by changes in market share) across different legal regimes following these two shocks. Each model includes country, industry, and year fixed effects. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively. Standard errors are clustered at the country level and reported in parentheses.

Panel A. Chinese Milk Scandal and Domestic Market Shares

	DV = Domestic Market Shares				*DV = Product Responsibility (ASSET4)*	
					Civil Law Countries	Common Law Countries
	(1)	(2)	(3)	(4)	(5)	(6)
Post-2009	-20.18***					
	(2.318)					
Post-2009 × Civil Law		-6.387***				
		(2.379)				
Year 2009			-1.433			
			(1.022)			
Year 2009 × Civil Law				1.265		
				(1.194)		
Market Shares					0.127	-0.0350
					(0.236)	(0.0304)
Post-2009 × Market Shares					-0.139	-0.0282
					(0.126)	(0.0224)
Observations	3,216	3,216	3,216	3,216	1,184	1,193
Year FE	No	Yes	No	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes

Table X (Continued)
Evidence from Scandals and Disasters: The Roles of Consumer Demands

Panel B. Deepwater Horizon Oil Spill Scandal and International Market Shares

	DV = international market shares				*DV = spill and pollution control*	
					Civil law	Common law
	(1)	(2)	(3)	(4)	(5)	(6)
Post-2010	-0.0012***					
	(0.0004)					
Post-2010 × Civil law		-0.0028				
		(0.0019)				
Year-2010			-0.0017***			
			(0.0004)			
Year-2010 × Civil law				-0.003		
				(0.002)		
Market shares					28.10	-5.790
					(23.01)	(32.82)
Post-2010 × Market shares					-20.99	23.09
					(14.42)	(25.81)
Observations	2,186	2,186	2186	2,186	359	1,154
Year FE	No	Yes	No	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes

Table XI
Economic Mechanisms

This table reports results on potential mechanisms ("channels") behind the link between legal origin and CSR. The channel variables include the shareholder litigation index, supermajority rule, the employment laws index, the collective bargaining laws index, and state involvement in the economy. Variable definitions are provided in Appendix A. Each set of tests contains two-stages of regressions (but not an IV regression). In the first stage, a channel variable is regressed on the civil law origin dummy; and in the second stage, the overall IVA rating is regressed on the channel variable "predicted" from the first-stage regression. The same control variables as in model (2) of Table IV are included in both stages. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively. Standard errors are clustered at the country level and reported in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	DV= Shareholder Litigation	*DV= IVA Rating*	*DV= Super-majority*	*DV= IVA Rating*	*DV= Employment Laws*	*DV= IVA Rating*	*DV= Collective Relations Laws*	*DV= IVA Rating*	*DV= State Involvement*	*DV= IVA Rating*
Civil Law Origin	-0.490***		0.2895***		0.2405***		0.2745***		0.0336***	
	(0.0013)		(0.0068)		(0.0006)		(0.0004)		(0.0003)	
Shareholder Litigation		-1.174***								
		(0.059)								
Supermajority				1.702***						
				(0.0983)						
Employment Laws						2.362***				
						(0.119)				
Collective Bargaining Laws								2.069***		
								(0.104)		
State Involvement										15.55***
										(1.353)
Observations	199,769	199,769	69,799	69,799	200,492	200,492	200,492	200,492	134,424	134,424
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Appendix A
Definitions of Independent Variables

Variable	Definition
	Laws and Regulation
Legal Origins	The legal origin of the company law or commercial code of each country in which the focal firm is headquartered. We distinguish five major legal origins: English common law, French commercial code (civil law), German commercial code (civil law), Scandinavian civil law, and socialist (former or current) law. In alternative specifications, socialist law is classified as either French civil law (e.g., Russian Federation) or German civil law (e.g., China). Source: LLSV (1998), Djankov et al. (2008), La Porta et al. (2008), Spamann (2010).
Anti-Director Rights Index (ADRI)	The Anti-Director Rights Index (ADRI) was first developed by LLSV (1998) as a measure of investor protection against corporate management, and later revised by La Porta et al. (2008) and Spamann (2010). All three ADRIs consist of the same six key components: (1) proxy by mail allowed; (2) shares not blocked before shareholder meeting; (3) cumulative voting/ proportional representation; (4) oppressed minority protection; (5) preemptive rights to new share issues; and (6) percentage of share capital to call an extraordinary shareholder meeting. Each component is a dummy variable and the ADRI is formed by aggregating the value of all six components. The index ranges from 0 to 6, whereby a higher value of the index indicates stronger shareholder protection. Source: LLSV (1998), La Porta et al. (2008), Spamann (2010).
Shareholder Litigation	The shareholder litigation index is from the "judicial remedies" component of the ADRI and measures whether shareholders can challenge resolutions of the board and/or management if they are "unfair, prejudicial, oppressive, or abusive." It equals one if the company law or commercial code grants shareholders either a judicial venue to challenge the decisions of management or of the assembly or the right to step out of the company by requiring the company to purchase their shares when they object to certain fundamental changes, such as mergers, asset dispositions, and changes in the articles of incorporation, and zero otherwise. Minority shareholders are defined as those shareholders who own 10% of share capital or less. Source: LLSV (1998), La Porta et al. (2008), Spamann (2010).
Employment Laws Index	This index measures the protection of labor and employment laws, calculated as the average of alternative employment contracts, the cost of increasing hours worked, the cost of firing workers, and dismissal procedures. Source: Botero et al. (2004).
Collective Bargaining Laws Index	This index measures the protection of collective bargaining laws as the average of labor union power and collective disputes. Source: Botero et al. (2004).
	Political Institutions
Political Executive Constraints	Political Executive Constraints (Decision Rules): (1) Unlimited Authority: There are no regular limitations on the political executive's actions (as distinct from irregular limitations such as the threat or actuality of coups and assassinations); (2) Intermediate Category; (3) Slight to Moderate Limitation on Political Executive Authority: There are some real but limited restraints on the executive; (4) Intermediate Category; (5) Substantial Limitations on Political Executive Authority: The executive has more effective authority than any group to which is it is accountable but the executive is subject to substantial constraints that group imposes on it; (6) Intermediate Category; (7) Executive Parity or Subordination: Accountability groups have effective authority equal to or greater than the executive in most areas of activity. Source: Polity IV.
Corruption Control	The extent to which public power is exercised for private gain, including petty and grand forms of corruption, as well as the "capture" of the state by elites and private interests. Coded from -2.5 to 2.5, with higher values corresponding to better governance outcomes. Source: World Governance Indicator – World Bank.
Regulatory Quality	The ability of the government to implement sound policies and regulations that promote private sector development. Coded from -2.5 to 2.5, with higher values corresponding to better governance outcomes. Higher value of the index implies a higher level of regulatory quality. Source: World Governance Indicator – World Bank.

Economic Freedom index	The Heritage Index of Economic Freedom focuses on four key aspects of the economic environment over which governments typically exercise policy control: rule of law (including property rights and freedom from corruption), government size (including fiscal freedom and government spending), regulatory efficiency (including business freedom – the efficiency of government regulation of business, labor freedom, and monetary freedom), and market openness (including trade freedom, investment freedom, and financial freedom). The index ranges from 0 to 100, with a higher score indicating the country has a higher degree of freedom (e.g. 0 indicating "repressive" and 100 indicating "negligible government interference"). More detailed definitions of each individual category of freedom can be found at: www.heritage.org. Source: Heritage Index of Economic Freedom.
	Economic Development
GDP per Capita	GDP per capita is gross domestic product divided by midyear population. GDP is the sum of the gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for the depreciation of fabricated assets or for the depletion and degradation of natural resources. Data are in current U.S. dollars. Source: World Bank.
Globalization Index	The KOF Index of Globalization measures three main dimensions of globalization: (1) economic, (2) social, and (3) political. In addition to the three indices measuring these dimensions, an overall index of globalization and sub-indices are also calculated, which capture (1) actual economic flows, (2) economic restrictions, (3) data on information flows, (4) data on personal contact, and (5) data on cultural proximity. Data are available on a yearly basis over the period 1970 to 2010. A higher score indicates a higher degree of globalization. Source: Swiss Federal Institute of Technology Zurich (ETH).
State Involvement	Fraction of non-agricultural GDP due to state-owned enterprises (SOEs). Source: World Bank.
	Culture
Power Distance	"Power distance" is defined as the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally. A higher score indicates a large power distance between individuals. Source: Hofstede and Hofstede (2005).
Individualism	"Individualism" refers to the degree of interdependence among members of a group and defines people's self-image in terms of "I" or "We." In individualist societies, people focus on themselves and their immediate family whereas in collectivist societies people belong to "in-groups" that take care of them in exchange for loyalty. A higher score indicates more individualism. Source: Ibid.
Masculinity / Femininity	A high score on the "Masculinity/femininity" dimension indicates that a masculine society is driven by competition, achievement, and success, with success being defined by the "winner" or "best-in-field." A low score means that the dominant values in the feminine society consist of caring for others and quality of life. A feminine society is one where quality of life is the sign of success and standing out from the crowd is not admirable. Source: Ibid.
Uncertainty Avoidance	"Uncertainty avoidance" captures how a society deals with the fact that the future is uncertain and the extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid uncertainty. A higher score implies a higher level of uncertainty avoidance. Source: Ibid.
Pragmatism	"Pragmatism" describes how society reconcile some links with its past while responding to the challenges of the present and future. Normative societies who score low, prefer to maintain time-honored traditions while viewing societal change with suspicion. Societies with a high score encourage thrift and efforts in modern education as a way to prepare for the future. Source: Ibid.
Indulgence / Restraint	This dimension captures the extent to which people try to control their desires and impulses, based on the way they were raised. Relatively weak control scores high on "Indulgence" and relatively strong control scores high on "Restraint." Source: Ibid.

Protestant	A binary variable that indicates if the country has a Protestant majority or not. Source: Chen (2012).
	Ownership and Board Structure
Government Held Shares %	The percentage of total shares held by a government or government institution if these holdings amount to 5% or more of the company's total shares. Source: Datastream.
Corporation Held Shares %	The percentage of total shares held by one company in another if these holdings amount to 5% or more of the company's total shares. Source: Datastream.
Pension Fund Held Shares %	The percentage of total shares held by pension funds or endowment funds if these holdings amount to 5% or more of the company's total shares. Source: Datastream.
Investment Company Held Shares %	The percentage of total shares held as long-term strategic holdings by investment banks or institutions seeking a long-term return if these holdings amount to 5% or more of the company's total shares. Holdings by hedge funds are not included. Source: Datastream.
Employees Held Shares %	The percentage of total shares held by employees, or by those with a substantial position in a company that provides significant voting power at an annual general meeting (typically family members) if these holdings amount to 5% or more of the company's total shares. Source: Datastream.
Other Holdings %	The percentage of total shares held strategically, and outside one of the above categories (government, corporations, pension funds, investment companies, employees), if these holdings amount to 5% or more of the company's total shares. Source: Datastream.
Foreign Held Shares %	The percentage of total shares held by a shareholder domiciled in a country other than that of the issuer if these holdings amount to 5% or more of the company's total shares. Source: Datastream.
Total Strategic Holdings %	The percentage of total shares held strategically and not available to ordinary investors if these holdings amount to 5% or more of the company's total shares. Holdings of 5% or more held by the hedge fund owner type or the investment advisor/hedge fund owner type are regarded as active, and not counted as strategic. Total strategic holdings represent the sum of all the above categories (government, corporations, pension fund, investment company, employees, other holdings, foreign held, etc.). Source: Datastream.
Total Free Floats %	The percentage of total shares available to ordinary investors or the total number of shares less the strategic holdings as defined above. Source: Datastream.
Supermajority Rule	Dummy variable equal to one if the company has a supermajority vote requirement (75%) or qualified majority for amendments of charters and bylaws or lock-in provisions. Source: ASSET4 (Thomson Reuters), BoardEx, and Orbis.
	Financial Variables
ROA	Return on assets: net income divided by total assets. Source: Compustat Global and Compustat North America, cross-validated and supplemented with Datastream.
Tobin's Q	The sum of the market value of equity and the book value of debt, divided by the sum of the book value of equity and the book value of debt (MTB assets). Source: Datastream.
Firm Size	The logarithm of total assets. Total assets reported in local currencies are converted to US dollars using the corresponding year-end exchange rates. Source: Compustat Global and Compustat North America, cross-validated and supplemented by means of Datastream.
Market Shares	The market share, calculated as the company's sales revenue as a proportion of the total sales revenues of its industry.

Appendix B. MSCI IVA Sample Country (Region) Distribution

Country	IVA	Legal origin	obs.	Country	IVA	Legal origin	obs.
United Arab Emirates	2.390	English	372	Korea, Republic of	2.652	German	6,948
Netherlands Antilles	2.437	French	135	Kuwait	3.056	French	18
Argentina	3.606	French	648	Cayman Islands	2.689	English	4,668
Austria	3.231	German	1,431	Kazakhstan	0.870	French	92
Australia	3.117	English	18,237	Lebanon	5.000	French	27
Aruba	2.407	French	108	Sri Lanka	3.362	English	94
Azerbaijan	2.000	French	4	Lithuania	4.577	French	26
Barbados	1.691	English	81	Luxembourg	3.031	French	2,657
Bangladesh	3.380	English	50	Latvia	3.941	German	17
Belgium	3.159	French	1,720	Morocco	3.272	French	305
Burkina Faso	3.111	French	27	Monaco	4.000	French	11
Bulgaria	3.000	Socialist	44	Macao	1.543	French	140
Bermuda	2.102	English	1,866	Malta	2.494	French	87
Brazil	2.757	French	5,233	Mauritius	2.400	French	35
Bahamas	2.088	English	147	Malawi	5.815	English	27
Botswana	4.467	English	107	Mexico	2.376	French	2,644
Belarus	2.000	French	24	Malaysia	2.039	English	3,615
Canada	2.906	English	17,851	Namibia	5.173	English	81
Switzerland	3.396	German	6,326	Nigeria	4.809	English	89
Côte d'Ivoire	3.115	French	139	Netherlands	3.520	French	6,758
Chile	2.769	French	1,317	Norway	3.685	Scandinavian	1,736
China	1.126	Socialist	5,165	New Zealand	3.669	English	1,515
Colombia	2.848	French	961	Oman	2.089	French	45
Costa Rica	3.861	French	101	Panama	3.225	French	111
Curaçao	1.971	French	314	Peru	3.285	French	855
Cyprus	2.205	English	44	Papua New Guinea	2.588	English	80
Czech Republic	3.142	Socialist	607	Philippines	2.001	French	867
Germany	3.559	German	7,557	Pakistan	3.311	English	209
Denmark	3.689	Scandinavian	2,013	Poland	2.752	Socialist	1,168
Dominican Republic	2.000	French	17	Puerto Rico	2.339	French	401
Egypt	2.433	French	356	Palestine, State of	3.056	English	18
Spain	3.673	French	4,528	Portugal	3.339	French	1,077
Finland	3.817	Scandinavian	2,166	Paraguay	4.519	French	54
Faroe Islands	2.000	French	5	Qatar	2.794	French	136
France	3.882	French	9,954	Romania	3.236	Socialist	187
Gabon	3.000	French	27	Serbia	0.000	Socialist	24
United Kingdom	3.450	English	35,437	Russian Federation	1.908	Socialist	2,296
Georgia	5.000	German	8	Saudi Arabia	3.690	English	29
Guernsey	2.209	English	521	Sweden	3.969	Scandinavian	4,500
Ghana	4.278	English	54	Singapore	2.894	English	3,665
Gibraltar	4.105	English	76	Slovakia	3.411	Socialist	248
Greece	2.438	French	995	El Salvador	3.118	French	17
Hong Kong	1.786	English	7,304	Togo	5.000	French	1
Croatia	2.974	German	78	Thailand	2.647	English	1,302
Hungary	3.130	Socialist	442	Tunisia	4.000	French	9
Indonesia	2.607	French	2,104	Turkey	2.205	French	1,473
Ireland	2.748	English	2,897	Trinidad and Tobago	4.368	English	19
Israel	2.459	English	1,008	Taiwan	1.792	German	4,233
Isle of Man	1.057	English	106	Ukraine	2.822	French	309
India	1.990	English	5,475	Uganda	5.725	English	51
Iceland	1.600	Scandinavian	40	U.S.A.	2.460	English	157,085
Italy	3.142	French	5,992	Uruguay	6.000	French	10
Jersey	2.264	English	1,452	Venezuela	3.119	French	84
Jamaica	3.982	English	56	Virgin Islands, British	1.534	English	1,831
Jordan	4.000	French	26	Virgin Islands, US	1.364	English	22
Japan	3.040	German	30,779	South Africa	3.131	English	4,776
Kenya	4.642	English	159	Zambia	4.380	English	158

Appendix C. Vigeo Corporate ESG Sample Country (Region) Distribution

Country	Human resources	Environmt.	Customer & supplier	Corporate governance	Community involve.	Human rights	Legal origin	Obs.
Austria	39.85	22.11	40.04	40.87	38.81	33.63	German	103
Australia	18.48	27.81	36.18	68.1	38.3	29.54	English	259
Belgium	42.54	50.55	42.77	40.29	40.33	39.28	French	179
Bermuda	14		22.5	24	35	35.5	English	4
Brazil	39.64	46	28.25	37.25	40.76	31.53	French	72
Canada	19.66	41.05	34.15	60.17	42.38	29.83	English	272
Cayman Islands	4	30	44.5	19		26	English	3
Chile	9.33	49.83	23.11	26.86	30.16	27.64	French	22
China	20.87	15.59	25.81	37.39	35.08	25.94	Socialist	54
Colombia		19.33	49.4	35.15	37.92	34.92	French	13
Czech Republic	50.67	51.33		49.67	19	22	Socialist	3
Denmark	30.25	39.14	42.35	48.01	39.07	38.09	Scandinavian	119
Egypt				28	28.5	24	French	2
Finland	40.44	55.93	43.64	66.37	39.68	39.69	Scandinavian	168
France	52.58	62.27	50.95	40.25	46.65	46.75	French	1,423
Germany	50.99	47.24	43.79	34.7	41.89	43.13	German	898
Greece	27.66	27	34.33	30.33	41.25	34.38	French	47
Hong Kong	10.12	12.29	30.97	37.75	35.99	25.45	English	208
Hungary	44.5	42		27.14	27.33	56.43	Socialist	7
Iceland	7.5			47.5		25	Scandinavian	4
India	30.22	23.56	32.23	35.94	36.31	29.81	English	52
Indonesia	18	15	33.33	33.96	41.24	28.76	French	25
Ireland	15.55	8.15	27.5	42.14	36.18	24.31	English	90
Italy	44.32	49.8	39.99	41.87	41.97	40.45	French	395
Japan	18.59	33.41	41.19	21.47	35.6	29.5	German	1,114
Korea, Republic of	20.41	38.79	29.84	26.46	36.62	26.44	German	96
Luxembourg	28.83	14	36.33	32.57	30.95	25.46	French	32
Malaysia	7	33.44	26	48.29	37.23	25.69	English	35
Mexico	34.42	14.56	34.45	28.49	40.45	30.86	French	35
Morocco	25.14	24.47	38.67	6.56	46	31.72	French	98
Namibia	25.42	27.16	41.06	48.4	42.2	30.87	English	262
Netherlands	38.7	40.87	46.74	61.98	40.75	40.26	French	403
New Zealand	7.42		36.11	71.54	29.56	25	English	13
Norway	39.93	43.33	35.19	61.38	47.77	44.52	Scandinavian	94
Peru	50	30		32	39	28	French	1
Philippines		38.67	28	32.67	39.27	23.92	French	12
Poland	23	33	27.75	39.08	32.67	24.67	Socialist	12
Portugal	39.08	45.8	48.2	36.83	42.91	39.88	French	84
Russian Federation	27.83	42	27.33	39.55	28.88	28.78	Socialist	20
Singapore	11.71	18.75	33	49.84	39.14	27.24	English	92
South Africa	32.79	14.67	27.79	54.63	41.37	31.67	English	48
Spain	41.61	43.1	40.32	33.49	40.81	41.77	French	427
Sweden	42.63	45.39	48.58	58.88	41.79	45.2	Scandinavian	237
Switzerland	28.78	47.41	39.09	53.38	35.47	36.02	German	427
Taiwan	14.25	15.47	26.08	19.99	34.79	25.46	German	74
Thailand	18	19.5	32.57	36.64	31.37	25.5	English	22
Turkey			27.5	25.19	34.5	24.81	French	16
U.S.A.	12.4	26.49	32.22	48.85	37.78	27.91	English	2,201
United Arab Emirates	9	0	27	27.25	31.5	24.75	English	4
United Kingdom	25.06	47.51	41.37	69.33	37.19	34.97	English	1,482

Appendix D. ASSET4 ESG Country (Region) Coverage

Country	Overall CSR rating	Environmental rating	Social rating	Legal origin	Firm-year obs.	Country	Overall CSR rating	Environmental rating	Social rating	Legal origin	Firm-year obs.
Abu Dhabi (UAE)	19.65	38.32	25.68	French	12	Kuwait	18.92	24.30	36.60	French	48
Austria	43.29	38.13	38.77	German	4,020	Luxembourg	55.00	58.48	52.83	French	60
Australia	44.46	51.84	50.40	English	252	Malaysia	42.32	41.12	50.21	English	540
Belgium	53.16	54.88	49.63	French	336	Mexico	38.96	46.03	49.47	French	324
Brazil	55.02	55.19	67.72	French	1,008	Morocco	21.57	20.13	53.42	French	36
Canada	47.59	37.64	38.65	English	3,864	Netherlands	75.30	68.86	75.36	French	540
Channel Islands	52.05	49,82	53.02	French	24	New Zealand	49.47	45.42	42.40	English	144
Chile	33.41	43.66	45.61	French	252	Nigeria	7.18	10.89	19.71	English	12
China	25.59	33.38	32.78	Socialist	984	Norway	56.90	55.26	58.87	Scandinavia	300
Colombia	34.40	34.52	40.94	French	108	Oman	27.00	27.42	33.00	French	12
Cyprus	39.18	30.20	36.71	English	12	Peru	41.33	31.05	34.41	French	12
Czech Republic	48.56	48.72	60.01	Socialist	48	Philippines	39.59	36.07	40.79	French	252
Denmark	48.45	56.43	52.69	Scandinavian	324	Poland	33.22	33.62	42.06	Socialist	312
Dubai (UAE)	37.39	44.24	33.76	French	12	Portugal	67.52	66.20	73.95	French	144
Egypt	14.55	19.29	27.22	French	132	Qatar	10.77	12.87	24.64	French	24
Finland	72.26	73.25	66.86	Scandinavian	324	Russian Federation	37.52	39.92	50.64	Socialist	408
France	71.45	75.70	76.36	French	1,212	Saudi Arabia	19.22	32.12	25.65	English	72
Germany	58.25	67.07	67.16	German	1,068	Singapore	34.66	33.58	35.60	English	648
Greece	35.42	47.10	49.62	French	300	South Africa	66.17	56.74	73.06	English	1,092
Hong Kong	30.27	33.72	35.51	English	1,800	South Korea	47.12	62.00	56.77	German	1,212
Hungary	73.29	76.18	80.80	Socialist	48	Spain	66.26	68.54	73.82	French	696
Iceland	29.02	20.45	36.06	Scandinavian	36	Sri Lanka	51.25	51.09	66.59	English	12
India	47.16	51.60	57.93	English	960	Sweden	62.79	66.58	63.91	Scandinavian	660
Indonesia	45.46	41.95	60.83	French	300	Switzerland	57.88	58.71	56.98	German	852
Ireland	43.04	42.65	39.33	English	216	Taiwan	29.02	44.74	36.30	German	1,536
Israel	38.44	42.65	39.33	English	168	Thailand	55.76	47.93	56.73	English	264
Italy	52.92	53.05	62.93	French	708	Turkey	44.33	48.36	52.90	French	288
Japan	38.18	61.62	45.47	German	5,196	United Kingdom	64.32	59.63	63.16	English	4,776
Jordan	52.16	60.71	62.99	French	12	United States	51.91	40.22	44.17	English	14,436
Kazakhstan	34.92	15.74	27.17	French	12	Zimbabwe	11.75	38.42	35.57	English	12

REFERENCES

Algan, Yann, Pierre Cahuc, and Andrei Shleifer, 2010, Regulation and distrust, *Quarterly Journal of Economics* 125, 1015-1049.

Allen, Franklin, Elena Carletti, and Robert Marquez, 2015, Stakeholder governance, competition, and firm value, *Review of Finance* 19, 1315-1346.

Alsakka, Rasha, and Owain Ap Gwilym, 2010, A random effects ordered probit model for rating migrations, *Financial Research Letters* 7, 140-147.

Baron, David P., 2008, Managerial contracting and corporate social responsibility, *Journal of Public Economics* 92, 268-288.

Bénabou, Roland, and Jean Tirole, 2006, Incentives and prosocial behavior, *American Economic Review* 96, 1652-1678.

Bénabou, Roland, and Jean Tirole, 2010, Individual and corporate social responsibility, *Economica* 77, 1-19.

Botero, Juan C., Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer, 2004, The Regulation of Labor, *Quarterly Journal of Economics* 119, 1339-1382.

Cheffins, Brian R., and Bernard S. Black, 2006, Outside director liability across countries, *Texas Law Review* 84, 1385-1424.

Chen, Keith M., 2013, The effect of language on economic behavior: Evidence from savings rates, health behaviors, and retirement assets, *American Economic Review* 103, 690-731.

Cox, James D., and Randall S. Thomas, Common challenges facing shareholder suits in Europe and the United States, *European Company and Financial Law Review* 6, 348-357.

Cremers, Martijn, and Simone M. Sepe, 2016, The Shareholder Value of Empowered Boards, *Stanford Law Review* 68, 1-87.

De Bettignies, Jean-Etienne, and David T. Robinson, 2015, When is social responsibility socially desirable? NBER Working Paper No. 21364.

Deng, Xin, Jun-koo Kang, and Buen Sin Low, 2013, Corporate social responsibility and stakeholder value maximization: evidence from mergers, *Journal of Financial Economics* 110, 87-109.

Dimson, Elroy, Oğuzhan Karakaş, and Xi Li, 2015, Active ownership, *Review of Financial Studies* 28, 3225-3268.

Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, 2008, The law and economics of self-dealing, *Journal of Financial Economics* 88, 430-465.

Doidge, Craig, G. Andrew Karolyi, and René M. Stulz, 2007, Why do countries matter so much for corporate governance? *Journal of Financial Economics* 86, 1-39.

Donaldson, Thomas, and Lee E. Preston, 1995, The stakeholder theory of the corporation: concepts, evidence, and implications, *Academy of Management Review* 20, 65-91.

Dowell, Glen, Stuart Hart, and Bernard Yeung, 2000, Do corporate global environmental standards create or destroy market value? *Management Science* 46, 1059-1074.

Edmans, Alex, 2011, Does the stock market fully value intangibles? Employee satisfaction and equity prices, *Journal of Financial Economics* 101, 621-640.

Edmans, Alex, 2012. The link between job satisfaction and firm value, with implications for corporate social responsibility. *Academy of Management Perspectives* 26, 1-19.

Edmans, Alex, Lucius Li, and Chendi Zhang, 2014, Employee satisfaction, labor market flexibility, and stock returns around the world, NBER Working Paper No. 20300.

Enriques, Luca, 2004, The comparative anatomy of corporate law, *American Journal of Comparative Law* 52, 1011-1024.

Ferrell, Allen, Hao Liang, and Luc Renneboog, 2017, Socially Responsible Firms, *Journal of Financial Economics*, forthcoming.

Flammer Caroline, 2015, Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach, *Management Science*, 61, 2549-2568.

Friedman, Milton, 1970, The social responsibility of business is to increase its profits, *New York Times Magazine*, September 13.

Gelter, Martin, 2012, Why do shareholder derivative suits remain rare in Continental Europe? *Brooklyn Journal of International Law* 37, 843-892.

Glaeser, Edward L., Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, 2004, Do institutions cause growth? *Journal of Economic Growth* 9, 271-303.

Godfrey, Paul C, 2005, The relationship between corporate philanthropy and shareholder wealth: A risk management perspective, *Academy of Management Review*, 30, 777-798.
Graff Zivin, Joshua, and Arthur Small, 2005, A Modigliani-Miller theory on altruistic corporate social responsibility, *Topics on Economic Analysis and Policy* 5, 1-19.
Guenster, Nadja, Rob Bauer, Jeroen Derwall, and Kees Koedijk, 2011, The economic value of corporate eco-efficiency, *European Financial Management* 17, 679-704.
Guiso, Luigi, Paola Sapienza, and Luigi Zingales, 2006, Does culture affect economic outcomes? *Journal of Economic Perspectives* 20, 23-48.
Hofstede, Geert, and Geert J. Hofstede, 2005, *Cultures and Organizations: Software of the Mind* (McGraw-Hill, New York, NY).
Hong, Harrison, Jeffrey D. Kubik, and Jose A. Scheinkman, 2012, Financial constraints and corporate goodness, NBER Working Paper No. 18476.
Hopt, Klaus J., 1997. Shareholder rights and remedies: A view from Germany and the Continent, *Company Financial and Insolvency Law Review* 1, 211-268.
Iannaccone, Laurence R., 1998, Introduction to the economics of religion, *Journal of Economic Literature* 36, 1465–1495.
Issacharoff, Samuel, and Geoffrey P. Miller, 2009, Will aggregate litigation come to Europe? *Vanderbilt Law Review* 62, 181-208.
Kitzmueller, Markus, and Jay Shimshack, 2012, Economic perspectives on corporate social responsibility, *Journal of Economic Literature* 50, 51-84.
Konar, Shameek, and Mark A. Cohen, 2001. Does the market value environmental performance? *Review of Economics and Statistics* 83, 281-289.
Krueger, Philipp, 2015, Corporate goodness and shareholder wealth, *Journal of Financial Economics* 115, 304-329.
La Porta, Rafael, Florencio López-de-Silanes, and Andrei Shleifer, 2008, The economic consequence of legal origins, *Journal of Economic Literature* 46, 285-332.
La Porta, Rafael, Florencio López-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 1998, Law and finance, *Journal of Political Economy* 106, 1134-1155.
La Porta, Rafael, Florencio López-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 1999, The quality of government, *Journal of Law, Economics, and Organization* 15, 222-279.
Liang, Hao, and Luc Renneboog, 2016, Corporate donations and shareholder value, Working paper Tilburg University.
Luo, Xueming, and Chitra B. Bhattacharya, 2006, Corporate social responsibility, customer satisfaction, and market value, *Journal of Marketing* 70, 1-18.
Magill, Michael, Martine Quinzii, and Jean-Charles Rochet, 2015, A theory of the stakeholder corporation, *Econometrica* 83, 1685-1725.
Masulis, Ronald W., and Syed W. Reza, 2015, Agency problems of corporate philanthropy, *Review of Financial Studies* 28, 592-636.
North, Douglass C., 1981, *Structure and Change in Economic History* (Norton, New York, NY).
Orlitzky, Marc, Frank L. Schmidt, and Sara L. Rynes, 2003, Corporate social and financial performance: a meta-analysis, *Organization Studies* 24, 403-441.
Patten, Dennis M, 2008, Does the Market Value Corporate Philanthropy? Evidence from the response to the 2004 tsunami relief effort, *Journal of Business Ethics* 81, 599-607.
Rajan, Raghuram G., and Luigi Zingales, 2003, The great reversals: the politics of financial development in the twentieth century, *Journal of Financial Economics* 69, 5-50.
Renneboog, Luc, Jenke Ter Horst, and Chendi Zhang, 2008, The price of ethics and stakeholder governance: the performance of socially responsible mutual funds, *Journal of Corporate Finance* 14, 302-322.
Renneboog, Luc, Jenke Ter Horst, and Chendi Zhang, 2011, Is ethical money financially smart? Nonfinancial attributes and money flows of socially responsible investment funds, *Journal of Financial Intermediation* 20, 562-588.
Roe, Mark J., 2006, Legal origins, politics, and modern stock markets, *Harvard Law Review* 120, 462-527.
Seifert, Bruce, Sara A. Morris, and Barbara R. Bartkus, 2004, Having, giving, and getting: slack resources, corporate philanthropy, and firm financial performance, *Business and Society* 43, 135-161.
Servaes, Henri, and Ane Tamayo, 2013, The impact of corporate social responsibility on firm value: the role of customer awareness, *Management Science* 59, 1045-1061.

Spamann, Holger, 2010, The "antidirector rights index" revisited, Review of Financial Studies 23, 467-486.
Stulz, Rene M., and Rohan Williamson, 2003, Culture, openness, and finance, *Journal of Financial Economics* 70, 313-349.
Tabellini, Guido, 2010, Culture and institutions: economic development in the regions of Europe, *Journal of European Economic Association* 8, 677-716.
Tirole, Jean, 2001, Corporate governance, *Econometrica* 69, 1-35.

[1] Benabou and Tirole (2010: 2) define CSR as "sacrificing profits in the social interest." Following many other studies, here we adopt a broader definition of CSR that focuses on firm activities that improve social welfare but not necessarily at the expense of profits (or shareholder value).

[2] For example, in Germany, corporations are legally required to take into account the interests of employees through the system of *co-determination*, which requires that employees and shareholders have an equal number of seats on the supervisory board (Allen, Carletti, and Marquez (2015)). Moreover, the harmonization laws of the European Community include provisions permitting corporations to take into account the interests of creditors, customers, potential investors, and employees, the corporate laws in Japan presume that Japanese corporations exist within a tightly connected and interrelated set of stakeholders, including suppliers, customers, lending institutions, and friendly corporations (Donaldson and Preston (1995)).

[3] For example, engagement in ESG may include a company's voluntary R&D investment in an environmentally friendly project (the "E" dimension), an employee training program designed to increase employee welfare or productivity (the "S" dimension), or a voluntary increase in gender and racial diversity of the board of directors (the "G" dimension). Compliance with ESG may include following environmental regulations on CO_2 emissions (the "E" dimension), guaranteeing working conditions above the minimum requirements in factories located in developing countries (the "S" dimension), or consulting investors on management compensation (say on pay) (the "G" dimension).

[4] Similarly, the European Federation of Financial Analysts Societies (EFFAS) interprets ESG as the need to focus on: (1) energy efficiency, (2) greenhouse gas emissions, (3) staff turnover, (4) training and qualification, (5) maturity of workforce, (6) absenteeism rate, (7) litigation risks, (8) corruption, and (9) revenues from new products.

[5] In contrast to credit rating agencies, which are paid by the firms (whose products) they rate, CSR rating agencies are financially independent from the rated firms and thus conflicts of interest are largely avoided.

[6] Government databases include, for example, central bank data, U.S. Toxic Release Inventory, Comprehensive Environmental Response and Liability Information System (CERCLIS), and RCRA Hazardous Waste Data Management System. For European companies, many other information sources are available.

[7] There are two waves of IVA data: the first wave is from 1999 to 2011, and the second wave is from 2011 to 2015. To match our financial data, we truncate the IVA ratings to 2014. The method for calculating the overall IVA ratings is the same across the two waves. The first-wave data have more detailed information on the ratings of the 29 sub-ESG-categories.

[8] A key ESG issue is defined as an environmental and/or social externality that has the potential to become internalized by the industry or the company through one or more of the following triggers: (a) pending or proposed regulation; (b) a potential supply constraint; (c) a notable shift in demand; (d) a major strategic response by an established competitor; or (e) growing public awareness or concern. Once up to five key issues have been selected, analysts work with sector team leaders to make any necessary adjustments to the weights in the model. Each key issue typically comprises 10% to 30% of the total IVA rating. The weights take into account the impact of companies, their supply chains, their products, and the financial implications of these impacts. For each key issue, a wide range of data are collected to address the question: "To what extent is risk management commensurate with risk exposure?"

[9] For example, the CSR benefits for shareholders and creditors can be inferred from *Strategic Governance*, *Strategic Capability & Adaptability*, *Traditional Governance Concerns*, etc. CSR benefits for employees—the recognition of human capital—are captured by *Employee Motivation Development, Labor Relations, Health & Safety*, etc. The benefits for customers are summarized by the categories *Customer Stakeholder Partnerships, Intellectual Capital & Product Development, Product Safety*, etc. Environmental issues are crucial to all types of stakeholders.

[10] This is confirmed by consistent CSR underperformance of firms in (current or former) socialist countries, which are still under an autocratic or dictatorial regime. We exclude these countries from the sample used in our main specification, focusing on differences between common law systems and civil law systems (and their subsystems).

[11] Before we conducted the regression analysis, we checked the correlations between different explanatory variables to determine whether multicollinearity is a concern, but this is not the case. For example, the correlations between Ln(GDP per capita) and the legal origin dummies *French Civil Origin*, *German Civil Origin*, and *Scandinavian Civil Origin* are 30.2%, 8.7% and 9.2%, respectively, and the correlations between *Political Executive Constraints* and the regulatory constraint and corruption control measures are 35.6% and 32.1%, respectively.

[12] ESG information is available for more than 4,300 global companies based on more than 250 key performance indicators and more than 750 individual data points covering every aspect of sustainability reporting. The sample includes MSCI World, MSCI Europe, STOXX 600, NASDAQ 100, Russell 1000, S&P 500, FTSE 100, ASX 300, and

MSCI Emerging Market. On average, 10 years (from 2002) of history is available for most companies.

[13] Market shares for oil and gas companies are calculated on an "in-sample" basis: all firms in the ASSET4 database with a CSR score are considered. When we calculate the market shares on all listed firms (on a global scale), irrespective of the availability of a CSR score, the results do not change.