

The Moderating Effect of Cultural Values on the Relationship between Corporate Social Performance and Corporate Financial Performance

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ABSTRACT

Using Hofstede's six cultural value dimensions to proxy for national culture, we show a strong interaction effect between culture and firms' corporate social performance (CSP), which significantly influences corporate financial performance. Specifically, Tobin's Q is higher in those firms where CSR initiatives are congruent with the cultural environment. CSP has a negative impact on firm valuation for those firms domiciled in countries which are individualistic and indulgent, and a positive impact on valuation in those countries which are characterized by long-term orientation and high power distance. Using a data set covering 3,591 firms from 36 different countries, our results show that cultural values and CSR initiatives have a powerful interaction effect in determining firm valuation, suggesting that CSP's impact is dependent upon the culture of the country where the firm resides.

JEL Classification: A13, D22, D63, M14.

Keywords: Cultural value, corporate social performance, corporate financial performance.

I. INTRODUCTION

The relationship between corporate social performance (CSP) and corporate financial performance (CFP) has attracted great attention from scholars of different disciplines (Brammer and Millington 2008; Dowell, Hart and Yeung 2000; Eccles, Ioannou and Serafeim 2014; Flammer 2014; King and Lenox 2002; Luo et al. 2015; Margolis, Elfenbein and Walsh 2009; Margolis and Walsh 2003; Orlitzky, Schmidt and Rynes 2003). To understand such a relationship becomes even more important as managers face increasing pressures from activist groups and the media to enhance CSP on the one hand and from investors to deliver desirable CFP on the other. Empirical studies have generated conflicting findings regarding the CSP-CFP relationship (Margolis et al. 2009; Orlitzky et al. 2003). Such conflicting findings may be attributable to complicated relationships between CSP and CFP, but could also imply that the CSP-CFP relationship depends on different institutional and organizational contingencies.

This study examines the moderating effect of cultural values on the CSP-CFP relationship. The overarching thesis of this study is that stakeholders' cultural values influence their social perceptions about CSP, which in turn affects the magnitude of the CSP-CFP relationship. We examine contingency effects of cultural values because cultural values shape people's beliefs and attitudes and regulate their behaviors (Chen, Leung and Chen 2009; Guiso, Sapienza and Zingales 2006; Stulz and Williamson 2003).

Specifically, we focus on Hofstede's six cultural value dimensions – individualism/collectivism, indulgence, long-term/short-term orientation, power distance, masculinity/femininity, and uncertainty avoidance.

We propose a *cultural value conformity hypothesis* regarding how these cultural values affect the magnitude of the CSP-CFP relationship. This hypothesis contends that the interactions

between CSP and individualism/indulgence/masculinity should have a negative effect on CFP whereas the interaction between CSP and long-term orientation/power distance/uncertainty avoidance should have a positive effect on CFP because high CSP is more aligned with social norms and expectations of stakeholders in collective, long-term oriented, power distant, feminine, and uncertainty avoidant countries which also practice restraint. Consequently, firms with high CSP tend to have high levels of organizational legitimacy in such countries and are more likely to be endorsed by stakeholders (Aldrich and Fiol 1994; Dowling and Pfeffer 1975; Suchman 1995).

To test this hypothesis, we use a sample of 3,591 firms from 36 countries and regions covered by the Thomson Reuters' ASSET4 dataset. We use Tobin's q to measure CFP as our theoretical interest is to show how social perceptions shaped by cultural values influence market valuation of firms' corporate social investments. We measure CSP using each firm's environmental performance score, social performance score, and an equal-weighted index of environmental and social performance scores from the ASSET4 dataset. Consistent with the cultural value conformity hypothesis, we find that the interactions between CSP and individualism/indulgence have a negative effect on CFP while the interaction between CSP and long-term orientation/power distance have a positive effect on CFP. Such findings highlight the importance of cultural values in influencing the valuation of a firm's CSP by the market. In countries which prioritize individualism and indulgence, shareholders are more likely to perceive that corporate social investments are a form of wasted resources and attach lower premiums to high CSP firms. In contrast, in countries which prioritize long-term orientation and power distance, shareholders are more likely to perceive that socially responsible behavior is critical to

a firm's long-run competitiveness and therefore grant higher premiums to firms with high CSP. We do not find significant interactions between CSP and masculinity/uncertainty avoidance.

This study makes two main contributions. First, this study contributes to the existing CSP-CFP research paradigm by demonstrating the important contingency effect of cultural values. Cultural values in a society are “the most central feature of culture” and express “shared conceptions of what is good and desirable in the culture” (Schwartz, 2006, p. 139). Our findings not only illustrate that the CSP-CFP relationship hinges on stakeholders' cultural values but also show that the magnitude of the interaction effects between cultural values and CSP is economically meaningful, suggesting the importance of exploring contingency factors that influence the CSP-CFP relationship.

Second, this paper contributes to a growing line of research examining the influence of cultural values on economic outcomes. The role of culture in affecting economic exchanges has received attention in both experimental research designs (Chen et al. 2009) and in large scale empirical analyses (Chui, Lloyd and Kwok 2002; Guiso, Sapienza and Zingales 2003, 2009; Li et al. 2011, 2013). Our findings suggest that when firms undertake strategic investments consistent with stakeholders' embedded cultural values, shareholders are more likely to value such investments, leading to positive CFP. In contrast, when firms make investments that conflict with stakeholders' cultural values, these firms tend to have lower organizational legitimacy and such investments are less likely to be valued by shareholders, translating into lower CFP.

The rest of this paper is organized as follows. We first describe existing research on the CSP-CFP relationship as well as on cultural values. We then develop our empirical hypothesis – the cultural value conformity hypotheses. Following that, we describe the data and present

empirical tests of the moderating effects of cultural values on the CSP-CFP relationship. We then present results from supplementary analyses. The paper concludes with a brief discussion of our findings.

II. BACKGROUND AND HYPOTHESES

2.1 Corporate Social Performance and Corporate Financial Performance

The debate on the relationship between CSP and CFP has been contentious. Friedman (1970) and other neoclassical economists argue that adopting environmental and social policies (high CSP) can be detrimental to shareholders' wealth and value. The underlying logic is that corporate social investments can be a form of agency cost - managers may make investments in corporate social responsibility to improve stakeholder relationships and to achieve their own objectives (Friedman 1970; Jensen 2002; Kock et al. 2012). The agency costs associated with high CSP may exceed the benefits that stem from corporate social investments, leading to a competitive disadvantage and adversely affecting financial performance. The costs of CSP are immediate (Brammer and Millington 2008) with unknown payback periods (Slawinski and Bansal 2015). In contrast, scholars adopting a stakeholder theory perspective argue that high CSP can translate into high CFP because managing relationships with stakeholders, in addition to shareholders, are conducive to hiring talented personnel, garnering employee and customer loyalty, and creating reputational capital, which are all critical to a company's competitive advantage and financial performance (Donaldson and Preston 1995; Freeman 1984; Eccles et al. 2014).

Empirical evidence regarding the CSP-CFP relationship is mixed. Two meta-analyses studies (Margolis et al. 2009; Orlitzky et al. 2003) find a positive relationship between CSP and CFP. Nevertheless, some studies observe a negative or inconclusive relationship between CSP

and CFP (Fogler and Nutt 1975; Frooman 1997; Griffin and Mahon 1997; Vance 1975). Such mixed findings may be suggestive of either: (1) an unstable relationship between CSP and CFP, or (2) organizational and institutional factors that moderate the CSP-CFP relationship. Goll and Rasheed (2004), for example, find that CSP exerts a stronger effect on CFP when the external environment is highly dynamic and munificent.

2.2 Cultural Values

Culture is a foundational institution of societies and represents systems of values and beliefs that support specific formal and informal institutions (North 1990; Williamson 2000). Cultural values represent shared conceptions of what is desirable and good in a society. Because cultural values can have a direct impact on people's expectations and preferences, which in turn guide their behaviors and decisions, cultural values can exert an indirect influence on economic outcomes (Guiso et al. 2006). In fact, existing research has already examined the direct influence of cultural values on corporate decisions in a number of instances. For example, national cultural value similarity increases cross-border merger volume and synergy gains (Ahern, Daminelli and Fracassi forthcoming), bilateral trust increases trade and direct investment between two countries (Guiso et al. 2009), individualism is positively associated with firms' risk taking behaviors (Li et al. 2013; Shao, Kwok and Zhang 2013) and cultural value differences affect capital structures that firms choose (Li et al. 2011). A recent study (Adams, Licht and Sagiv 2011) also shows the influence of cultural values on how board of directors make decisions regarding shareholders and other stakeholders. Specifically, findings from this study suggest directors are more pro-shareholder, instead of pro-stakeholder, when they have higher achievement, power, and self-direction values and lower universalism values.

Scholars have developed different theories of cultural values (Hofstede 1980; House et al. 2002; Inglehart and Welzel 2005). This study focuses on cultural value orientations developed by Hofstede (Hofstede 1980; Hofstede 2001; Hofstede et al. 2010). Specifically, we examine Hofstede's six cultural dimensions – individualism/collectivism, indulgence, long-term/short-term orientation, power distance, masculinity/femininity, and uncertainty avoidance. Hofstede developed his original model using factor analysis to examine the results of a world-wide survey of employee values at IBM (International Business Machines) in the 1960s and 1970s. The theory was one of the first which could be used to quantify and explain the observed differences between cultures. It has inspired a number of other cross-cultural studies of values (i.e. Schwartz, World Values Survey).

Hofstede's measures are widely used as a proxy for culture and have stood the test of time. Recently, Karolyi (2015) conducted an empirical analysis of the role of cultural distance for explaining the foreign bias in international portfolio holdings, and affirmed the statistical explanatory power of culture for these investment biases. In his study, Karolyi used both Hofstede and the World Values Survey (WVS) as proxies for culture and found that Hofstede's measures consistently outperformed WVS.

Departing from the cited studies examining the direct influence of cultural values, this paper conceptualizes six Hofstede cultural value dimensions as contingency factors that interact with CSP to affect CFP. Building on organizational legitimacy and salience in social judgment research, we propose the following hypothesis to explain the moderating effects of these six cultural value dimensions on the CSP-CFP relationship.

The Cultural Value Conformity Hypothesis

The cultural value conformity hypothesis contends that the interactions between CSP and individualism/indulgence/masculinity should have a negative effect on CFP while the interaction between CSP and long-term orientation/power distance/uncertainty avoidance should have a positive effect on CFP. These proposed effects stem from the assertion that firms with high CSP tend to have lower levels of organizational legitimacy in individualistic, indulgent, and masculine cultures but higher levels of organizational legitimacy in long-term oriented, power distant, and uncertainty avoidant cultures. Organizational legitimacy stems from congruence between the organization and its cultural environment (Suchman 1995; Aguilera and Jackson 2003). When firms' behaviors conform to socially constructed systems of norms, values, and beliefs, such firms tend to have higher levels of organizational legitimacy. Firms with high organizational legitimacy not only tend to be reputable but also may find it easier to obtain needed resources (Dowling and Pfeffer 1975; Suchman 1995). The level of organizational legitimacy is largely determined by the alignment between corporate actions and dominant social values and beliefs. When firm actions are in alignment with cultural values and social beliefs, such actions will be espoused by stakeholders. In contrast, when firm actions violate commonly held cultural values and social beliefs, stakeholders tend to develop negative social perceptions and censor such firms.

The *individualism* cultural dimension has been argued to be the most important dimension of Hofstede's cultural framework (Triandis 2001). *Individualism* emphasizes a loosely knit social framework in which individuals are expected to pursue their own interests whereas *collectivism*, the polar opposite of individualism, emphasizes the importance of working for group interests and achieving harmony. Corporate social investments are, in many cases,

designed for a fair distribution of economic gains among various stakeholders and to attain societal sustainability. As such, stakeholders in highly individualistic cultures are less likely to espouse socially responsible firms because high CSP is incompatible with stakeholders' social values. Stakeholders, especially investors, are more likely to perceive that corporate social investments are a waste of shareholders' resources and discount the value of such investments in highly individualistic cultures. In contrast, the promotion of the welfare of others and harmony is espoused in collectivistic societies. Firms with high CSP are more likely to receive high levels of organizational legitimacy in such cultures because stakeholders believe corporate social investments help facilitate social welfare and harmony. Thus, the market is likely to attach greater value to firms' corporate social investments in such collectivistic cultures.

Hypothesis 1: The interaction between CSP and the individualism (collectivism) cultural value is negatively (positively) associated with firm value.

The indulgence-restraint dimension is a cultural dimension recently added to the Hofstede cultural framework (Hofstede et al. 2010) (Hofstede, Hofstede and Minkov 2010). *Indulgent* societies tend to allow relatively free gratification of natural human desires with respect to enjoying life and having fun whereas *restraint* societies are more prone to believe that such gratification should be curbed and regulated by strict norms. In this regard, indulgent societies are less likely to give up pleasures for the sake of saving the environment. As a strong commitment to CSP suggests that individuals may need to withhold from pursuing their own happiness, high CSP is incommensurate with the indulgence cultural value. On the contrary, in restraint cultures, individuals do not attach much importance to the pursuit of hedonic pleasures and instead expect their behaviors to be strictly regulated by social norms. Given that high CSP reflects a firm's willingness to forego short-run financial returns and associated hedonic

pleasures, firms with high CSP should receive a higher level of organizational legitimacy and thereby be valued higher in restraint cultures.

Hypothesis 2: The interaction between CSP and the indulgence (restraint) cultural value is negatively (positively) associated with firm value.

The *long-term orientation* cultural dimension suggests that a society attaches much importance on the future whereas the *short-term orientation* cultural dimension implies that a society pays more attention to the past and the present. As long-term oriented cultures are willing to conserve for the future and corporate social investments may contribute to a firm's sustainable and long-run competitiveness and prosperity, stakeholders in such cultures are less likely to consider corporate social investments as an agency cost and a waste of shareholders' resources (Cheng et al. 2014). On the contrary, in short-term oriented cultures, it may be hard to justify the value of corporate social investments given that the payoffs from such investments take a long time to materialize (Weigelt and Camerer 1988; Fombrun and Shanley 1990; Porter and Kramer 2011; Eccles et al. 2014). Therefore, high levels of investment in corporate social responsibility may be detrimental to a firm's organizational legitimacy because stakeholders in short-term orientation cultures expect firms to focus on generating quick returns. Thus, all else being equal, firms with high CSP are likely to be valued higher in long-term orientation cultures.

Hypothesis 3: The interaction between CSP and the long-term (short-term) orientation cultural value is positively (negatively) associated with firm value.

The *power distance* dimension deals with the need for dependence versus independence in society. Inequality in a lower power distance society is seen as a necessary evil that should be minimized whereas in a high power distance society, inequality is seen as the basis of societal order. In other words, hierarchies are seen as an arrangement of convenience in low power

distance countries but as existential (superiors are seen as superior persons) in high power distance countries (Hofstede 2001). Over the past two generations, dependence on the power of others in a large part of the world has been reduced, commensurate with the improvement in educational opportunities and related economic gains. Those cultures emphasizing power distance and its emphasis on dependence within an organization's hierarchy may spend more resources on CSP in order to keep employees and more generally, the broader stakeholder community "happy" and minimize the threat of revolt. On the other hand, firms in low power distance countries need not spend as many resources on CSP since the employment environment is already characterized by independence where subordinates are encouraged to freely interact with their superiors. Thus, the market is likely to attach a higher value to firms' corporate social investments in high power distant cultures.

Hypothesis 4: The interaction between CSP and the power distance cultural value is positively associated with firm value.

The discussion of gender differences in values has been popularized by Tannen (1992), who has shown that the key difference in discourse between males and females in the United States (likely generalizable to all human societies) is that men are more focused on transferring information (report talk) whereas women are more interested in exchanging feelings and establishing relationships (rapport talk). Gender differentiation in child socialization is strong in the *masculine* culture and weak in the *feminine* culture (Van Rossum 1998). In short, masculinity emphasizes the importance of the "ego" side i.e. up-to-dateness, advancement, training, earnings with little emphasis on the "social" side espoused by femininity i.e. manager, cooperation, friendly atmosphere, physical conditions. Corporate social investments, by definition, are focused on factors that are related to the "social" side, such as maintaining the

company's reputation within the general community, being a good corporate citizen, promoting an effective life-work balance, and focusing on long-term stability by promoting from within, avoiding lay-offs and maintaining relations with trade unions. As a result, stakeholders in highly masculine cultures are less likely to support socially responsible firms. Shareholders are more likely to perceive that corporate social investments are an inefficient use of shareholders' resources and discount the value of such investments. However, the promotion of the welfare of others is very important in feminine societies. Firms with high CSP are more likely to receive high levels of legitimacy because stakeholders believe corporate social investments improve social welfare. Thus, the market is likely to attach greater value to firms' corporate social investments in such feminine cultures.

Hypothesis 5: The interaction between CSP and the masculinity (femininity) cultural value is negatively (positively) associated with firm value.

Uncertainty avoidance refers to the extent to which members of a culture feel threatened by uncertain or unknown situations (Hofstede 2001). The term derives from U.S. organization theorists Richard M. Cyert and James G. March. Organizations, they argue, avoid uncertainty in their environment in two major ways: (1) they avoid the requirement that they correctly anticipate events in the distant future by using decision rules emphasizing short-run reaction to short-run feedback rather than anticipation of long-run uncertain events; and (2) they arrange a negotiated environment by imposing plans, standard operating procedures, and industry tradition which do not depend upon prediction of uncertain future events (Cyert and March 1963). As a result, firms in cultures characterized by high uncertainty avoidance may face difficulties in making profitable, strategic long-term investments and may allocate more of their investment dollars to corporate social activities in an effort to keep the broader stakeholder community

satisfied when the dollars allocated to traditional investments in capital assets and research and development underperform. In cultures that are low on the uncertainty avoidance scale, managers are better able to anticipate long-run uncertain events and as such, do not need to allocate as many resources to corporate social investments to hedge their risk. Thus, all else being equal, firms with high CSP are likely to be valued higher in those cultures which are high on the uncertainty avoidance dimension.

Hypothesis 6: The interaction between CSP and the uncertainty avoidance cultural value is positively associated with firm value.

III. SAMPLE SELECTION AND VARIABLES

3.1 Sample Selection

Our primary data source is Thomson Reuters' ASSET4, previously used by Cheng et al. (2014), Ioannou and Serafeim (2012), and Eccles et al. (2014). Founded in 2003 in Switzerland, ASSET4 is a leading provider of objective, comparable and systematic information that offers professional investors and corporations with the world's largest database of environmental, social, and governance (ESG) information. ASSET4 employs over 100 analysts to collect relevant, comparable and up-to-date information from publicly available data sources, including CSR annual reports, stock exchange filings, and news sources. Sample selection bias is reduced by using all firms listed on the ASX 300, Bovespa, CAC 40, DAX, FTSE 250, MSCI Emerging Markets, MSCI World, NASDAQ 100, S&P500, SMI, and STOXX 600 stock exchanges. The ASSET4 ESG ratings are equally weighted assessments of company performance based on over 250 key performance indicators. These ratings are standardized and normalized to position the score between 0% and 100%. Annually, more than 750 data points are used as inputs to a default equal-weighted framework to calculate more than 280 key performance indicators (KPIs). The

overall ESG performance score can be further organized into 18 categories under four pillars: (1) environmental performance score, which includes resource reduction, emission reduction and product innovation; (2) social performance score, which considers employment quality, health and safety, training and development, diversity, human rights, community, and product responsibility; (3) corporate governance score, which addresses board structure, compensation policy, board functions, shareholder rights, vision and strategy; and (4) economic performance score, which considers client loyalty, performance, and shareholder loyalty. A firm receives a z-score in each year t for each of the four pillars by benchmarking its performance against the rest of the firms based on the information available in fiscal year $t-1$. For example, an environmental performance score in 2005 reflects a firm's investments in resource reduction, emission reduction and production in 2004. Thus, ESG rating scores are lagged by one year by construction. After matching with all other variables, we have 20,644 firm-year observations from 36 countries between 2001 and 2011. The breakdown of observations by country is shown in Table 1, Panel A. The United States represents 31.22% of sample firm-year observations, followed by Japan (15.51%), the United Kingdom (11.22%), Australia (6.58%) and Canada (5.56%).

3.2 Variables

3.2.1 Measures of CSP and CFP.

Three proxies are used to measure corporate social performance. The first measure is a composite CSP index. Following Ioannou and Serafeim (2012), we use the annual environmental and social scores to create a composite *CSP index*. We exclude annual economic and corporate governance scores because these two pillars do not bear direct relationship with CSP. Because we do not have theoretical guidance regarding the weights of the environmental and social scores

to create the CSP index, we follow convention and assign equal weights to the two pillars (Hillman and Keim 2001; Waddock and Graves 1997). The variable “CSP index” is thus an equally weighted average of the environmental and social pillars of ASSET4 for the focal firm for each year in the panel dataset. We also use the two pillars independently to measure CSP: environmental performance score (*environmental*) and social performance score (*social*). Detailed descriptions of the components of these two scores are presented in Appendix A.

We measure firm value using *Tobin's q*. Tobin's q has been widely used in finance and accounting to proxy for firm valuation (Lang, Lins and Miller 2004; Lewellen and Badrinath 1997) and as an indicator of intangible value in economics (Lindenberg and Ross 1981). Tobin's q is defined as $(\text{book value of assets} + (\text{market value of equity} - \text{book value of equity}))/\text{book value of assets}$. The use of Tobin's q in this study is two-fold: first, it reflects historical firm performance; and second, it encompasses investors' perception of likely future performance. To the extent that investors' perceptions about a company are influenced by culture and corporate social investments, there should be an impact on firm valuation.

3.2.2 Measures of culture.

The six measures of national cultural values that we use in our study are Hofstede's (1980, 2001, 2010) dimensions of individualism, indulgence, long-term orientation, power distance, masculinity, and uncertainty avoidance. Similar to other recent studies using Hofstede's cultural values (Li et al. 2011, 2013; Lievenbruck and Schmid 2014; Shao et al. 2013), these measures are time-invariant. Given that cultural values are relatively stable over time, we do not perceive that such invariant measures will significantly affect our findings.

3.2.3 Other variables of interest

We include a number of firm-level variables that can affect CFP. First, we control for *firm size*, capital investment intensity (*capital intensity*), research and development intensity (*R&D intensity*), percentage of shares held by block holders (*blockholder ratio*), *corporate governance score*, *cash holding ratio*, *intangible asset ratio*, *leverage ratio*, the percentage of shares held by foreign and domestic institutional owners (*foreign institutional ownership/domestic institutional ownership*), and the *sales growth rate*. In addition, we include *international sale ratio* as a control variable because foreign stakeholders' cultural values may play a more salient role in affecting CFP when firms have high levels of international sales. At the country level, we include the following variables as controls: per capital gross domestic product (*per capita GDP*), *market capitalization to GDP*, *annual GDP growth rate*, *anti-director index*, *anti self-dealing index*, and *financial openness*. The definitions of variables and data sources used in this study are presented in Appendix B.

IV. EMPIRICAL METHODS

After matching all the variables used in our study, we have firms from 36 different countries. At the firm level, we have over 3,500 firms. Given the multilevel data structure (with culture being a country-level variable and CSP/CFP being firm-specific variables), it is important to distinguish the effects at the country level from those at the individual firm level, to understand the role of country- versus firm-level factors, and to model their interactions properly. Following existing literature, we employ a hierarchical linear model (HLM) to examine the multilevel data (Goldstein 2003; Peterson, Arregle and Martin 2012; Raudenbush and Bryk 2002). The set of firms within countries form the base-level observations while countries form

the higher-level observations. Using a HLM has three advantages (Li et al. 2013). First, HLM separates the variance in firm-level financial performance into what is determined at the firm-level versus country-level predictors by using a mean-centered approach to firm-level variables. Second, the HLM framework allows for correction of the distortion caused by varying sample sizes across countries. Third, HLM can better incorporate cross-level interactions between the firm- and country-level variables because HLMs enable the pooling of firm-level effects across countries while examining country-level relationships simultaneously.

We pre-process the data to decompose the country- and firm-level variance in firm financial performance (Li et al. 2013). For country-level variables, we center by their grand means (averaged across countries) with every transformed variable having a mean of zero. We add the suffix “_ctry” to denote these variables. For firm-level variables, we center by their grand means (averaged across firms and countries), with these transformed variables also having a mean of zero. Afterwards, we create country-level mean values (averaged within a country) on these grand-mean-centered variables and add the suffix “_ctrymean”. Lastly, we create within-country residuals by taking the grand-mean adjusted variables and subtracting the corresponding within-country means. These firm-level deviations from their corresponding country-level means are named by adding the suffix “_firmdev”.

Such a treatment of data has the following advantages (Li et al. 2011, 2013). By centering within-country variables (varying by firm) and adding country-level means, we are able to separate the between-country covariance from the within-country covariance. Moreover, this decomposition helps examine the potentially distinct effects of firm characteristics at the individual firm- and average country-level. In addition, mean-centered independent variables enable more efficient estimation and interpretation of interactions.

To explore the interaction effect of cultural values and CSP on CFP, we regress CFP measures on variables that capture firm characteristics and country-level cultural values. The HLM specification is shown as following, with the intercept term α set as a random coefficient:

$$\begin{aligned} \text{Firm performance} = & \alpha_j + \beta_1 \text{capital_intensity_firmdev}_{ij} + \beta_2 \text{blockholder_firmdev}_{ij} + \beta_3 \text{RD_intensity_firmdev}_{ij} \\ & + \beta_4 \text{intangible_ratio_firmdev}_{ij} + \beta_5 \text{firm_size_firmdev}_{ij} + \beta_6 \text{debt_ratio_firmdev}_{ij} + \beta_7 \text{international_sale_firmdev}_{ij} \\ & + \beta_8 \text{CSP_firmdev}_{ij} + \beta_9 \text{capital_intensity_ctrymean}_{ij} + \beta_{10} \text{blockholder_ctrymean}_{ij} + \beta_{11} \text{RD_intensity_ctrymean}_{ij} \\ & + \beta_{12} \text{intangible_ratio_ctrymean}_{ij} + \beta_{13} \text{firm_size_ctrymean}_{ij} + \beta_{14} \text{debt_ratio_ctrymean}_{ij} + \beta_{15} \text{international_sale_ctrymean}_{ij} \\ & + \beta_{16} \text{CSP_ctrymean}_j + \beta_{17} \text{per_capital_GDP_ctry}_j + \beta_{18} \text{creditor_ctry}_j + \beta_{19} \text{shareholder_ctry}_j + \beta_{21} \text{GDP_growth_ctry}_j + \beta_{22} \text{gini_ctry}_j \\ & + \beta_{23} \text{market_capitalization_ctry}_j + \beta_{24} \text{cultural_value_ctry}_j + \text{Industry FEs} + \text{Year FEs} \\ & + \beta_{25} \text{CSP_firmdev}_{ij} * \text{cultural_value_ctry}_j + e_{ij} \end{aligned}$$

For firm i from country j , our performance measure is Tobin's q . CSP can be the CSP index, environmental performance, or social performance. Cultural values can be individualism, indulgence, long-term orientation, power distance, masculinity, or uncertainty avoidance. Following Li et al. (2013), we interact national cultural values with firm-level CSP deviations. We also include two-digit SIC code dummies and year dummies in all regression models. The dependent variable is measured at time t , with all other variables measured at time $t-1$.

V. RESULTS

Table 1, Panel B and Panel C show summary statistics for country-level and firm-level variables respectively.

Table 2 presents the estimation results. Panel A reports interactions between individualism and the three CSP measures. In Table 2, Panel A we find that the coefficient estimate of the CSP measure “_firmdev” is negative and statistically significant for the CSP index and the environmental score CSP proxy (-0.019 for CSP index, -0.001 for environmental score), while the coefficient estimate of the CSP measure “_ctrymean” is also negative and statistically significant for these two proxies (-0.168 for CSP index, -0.014 for environmental

score). Such a finding suggests that at the country level, high CSP is negatively associated with Tobin's q and that a firm's deviation above the country-level average CSP is also negatively associated with Tobin's q. The interactions between individualism and all three CSP measures (CSP index, environmental performance, and social performance) are all negative and statistically significant, lending support to Hypothesis 1.

Table 2, Panel B reports interactions between uncertainty avoidance and the three CSP measures. We find no statistically significant interactions between uncertainty avoidance and the three measures of CSP and as such, no support for Hypothesis 6. Table 2, Panel C reports interactions between long-term orientation and the three CSP measures. We find statistically significant positive interactions between long-term orientation and the three measures of CSP, lending support to Hypothesis 3. Table 2, Panel D reports interactions between indulgence and the three CSP measures. We find statistically significant negative interactions between indulgence and the three measures of CSP, lending support to Hypothesis 2. Table 2, Panel E reports interactions between power distance and the three CSP measures. We find statistically significant positive interactions between power distance and the three measures of CSP, lending support to Hypothesis 4. Table 2, Panel F reports interactions between masculinity and the three CSP measures. We find no statistically significant interactions between masculinity and the three measures of CSP and as such, no support for Hypothesis 5.

In summary, results from Table 2 suggest that the interactions between individualism/indulgence and CSP exert a negative influence on firm value whereas the interactions between long-term orientation/power distance and CSP measures exert a positive influence on firm value, supporting the cultural value conformity hypothesis. The negative and statistically significant coefficient estimate of CSP “_ctrymean” for CSP index and

environmental score corroborates the findings of previous studies by Fogler and Nutt 1975, Frooman 1997, Griffin and Mahon 1997, and Vance 1975.

VI. SUPPLEMENTARY ANALYSES

6.1. OLS Regressions

Our main analyses use a hierarchical linear model to estimate the interaction effect of culture and CSP on firm valuation. However, recognizing the fact that OLS regressions are more commonly used, we supplement our analyses with pooled time-series OLS regressions. Table 3 summarizes the results. In general, the results are consistent with the HLM analyses. More specifically, the interaction effect between CSP and individualism is negative (-0.027 coefficient estimate), the interaction effect between CSP and indulgence is negative (-0.018 coefficient estimate), and the interaction effect between CSP and power distance is positive (0.033 coefficient estimate). However, the interaction effect between CSP and long-term orientation, while positive (0.006 coefficient estimate), is now statistically insignificant. The relation between CSP and Tobin's q is negative, consistent with results from our HLM analyses above. Lastly, the main effect of the cultural dimensions on firm valuation is positive for individualism and indulgence but negative for long-term orientation, uncertainty avoidance, power distance, and masculinity. For all OLS regressions, both industry and year fixed effects are included.

6.2. Subgroup Analyses

The cultural value conformity hypothesis states that the optimal strategy to maximize firm performance is to conform to social norms with respect to CSP expenditures. As such, the question remains as to why some firms still deviate from this optimal point. In an attempt to address this question, Table 4, Panel A splits the sample into two time periods: (1) early –

defined as the years 2003 to 2008; and (2) late – defined as the years 2009 to 2012. Since focus on CSP is a relatively new phenomenon in many countries, we expect to see the interaction effect of CSP and culture to be stronger in the later years as firms attempt to reach this optimal point. The results are broadly consistent with expectations. For example, looking at individualism, the significance on the interaction term has increased from 5% significance in the early period to 1% significance in the later period (co-efficient magnitude of -0.001 for both periods). Turning to long-term orientation, the magnitude/significance of the interaction term has increased from 0.000 (10% significance) to 0.001 (5% significance). For indulgence, the magnitude/significance of the interaction term has increased from -0.001 (10% significance) to -0.002 (1% significance). Finally, for power distance, the magnitude/significance has increased from 0.001 (10% significance) to 0.002 (1% significance).

Table 4, Panel B presents a similar analysis to that shown in Panel A. However, instead of partitioning on years, Panel B partitions on low and high levels of institutional ownership where low/high is defined as below/above median. Based on firm fundamentals, then, a pragmatic investor (i.e. institutional investor) is not influenced by firm “window dressing” i.e. spending resources on CSP to meet cultural convention. Retail investors, on the other hand, are likely influenced by firms’ strategic allocation of resources to CSP expenditures. Panel B results are in line with expectations. For each of individualism, long-term orientation, indulgence, and power distance, the interaction of CSP with culture is only significant for the subsample where institutional ownership is low. More specifically, the coefficient on individualism is -0.001, the coefficient on long-term orientation is 0.001, the coefficient on indulgence is -0.002, and the coefficient on power distance is 0.002.

6.3. Other Robustness Checks

To verify that our results are not driven by the one year time lag between a CSP performance score in year t reflecting a firm's corresponding CSP investment in year $t-1$, we lag our dependent variables by two years instead of one year. We find similar results to those reported in Table 2. Third, Kreft (1996) suggests that there needs to be at least 30 observations per group in HLM models. As the number of firm-year observations for some countries is less than 30 in our dataset, we re-examine our hypotheses without including these countries and find similar results.

VII. CONCLUSION

Using Hofstede's six cultural value dimensions – individualism, indulgence, long-term orientation, power distance, masculinity, and uncertainty avoidance - to proxy for country level cultural values, we investigate how firm financial performance is affected by corporate social performance initiatives and national cultural values. Based on a sample of 3,591 firms from 36 countries, we find that the interactions between CSP measures and individualism/indulgence negatively affect firm value whereas the interactions between CSP measures and long-term orientation/power distance positively impact firm value.

The impact of CSP initiatives on corporate financial performance has been contentious, from both a theoretical perspective and from related empirical evidence. While Friedman (1970) and other neoclassical economists would argue that adopting environmental and social policies can be detrimental to shareholders' wealth and value, other scholars adopting a stakeholder theory perspective would argue that high CSP can translate into high CFP because managing

relationships with stakeholders, in addition to shareholders, are conducive to building a company's competitive advantage (Donaldson & Preston, 1995; Freeman, 1984).

We provide strong empirical support for a cultural value conformity hypothesis, whereby corporate financial performance is maximized when a firm's CSP initiatives are aligned with the cultural values of the country where the firm resides (i.e. "when in Rome, do as the Romans do"). Said another way, our findings highlight the importance of stakeholders' cultural values in shaping their perceptions about CSP initiatives, which in turn influences the CSP-CFP relationship. High CSP is more likely to be evaluated positively in those countries where national cultural values are compatible with the theme of corporate social investments.

This paper contributes to a growing field of research that explores the influence of CSP on CFP by illustrating the moderating effect of cultural values. Future research could examine whether cultural and CSP initiatives interact in a similar way when CSP initiatives are explored at the individual CEO level in addition to the firm level. In conclusion, we strongly believe that identifying the boundary of cultural values and its impact on the CSP/CFP relationship is an emerging area of interest; one that will continue to provide useful insights to our society in the future.

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APPENDIX A. Description of Asset4 Categories

Category	Description
<i>Environmental Performance Pillar</i>	The environmental pillar measures a company's impact on living and non-living natural systems, including the air, land and water, as well as complete ecosystems. It reflects how well a company uses best management practices to avoid environmental risks and capitalize on environmental opportunities in order to generate long term shareholder value.
Emission Reduction	The emission reduction category measures a company's management commitment and effectiveness towards reducing environmental emission in the production and operational processes. It reflects a company's capacity to reduce air emissions (greenhouse gases, F-gases, ozone-depleting substances, NOx and SOx, etc.), waste, hazardous waste, water discharges, spills or its impacts on biodiversity and to partner with environmental organisations to reduce the environmental impact of the company in the local or broader community.
Product Innovation	The product innovation category measures a company's management commitment and effectiveness towards supporting the research and development of eco-efficient products or services. It reflects a company's capacity to reduce the environmental costs and burdens for its customers, and thereby creating new market opportunities through new environmental technologies and processes or eco-designed, dematerialized products with extended durability.
Resource Reduction	The resource reduction category measures a company's management commitment and effectiveness towards achieving an efficient use of natural resources in the production process. It reflects a company's capacity to reduce the use of materials, energy or water, and to find more eco-efficient solutions by improving supply chain management.
<i>Social Performance Pillar</i>	The social pillar measures a company's capacity to generate trust and loyalty with its workforce, customers and society, through its use of best management practices. It is a reflection of the company's reputation and the health of its license to operate, which are key factors in determining its ability to generate long term shareholder value.
Customer /Product Responsibility	The customer/product responsibility category measures a company's management commitment and effectiveness towards creating value-added products and services upholding the customer's security. It reflects a company's capacity to maintain its license to operate by producing quality goods and services integrating the customer's health and safety, and preserving its integrity and privacy also through accurate product information and labelling.
Society /Community	The society/community category measures a company's management commitment and effectiveness towards maintaining the company's reputation within the general community (local, national and global). It reflects a company's capacity to maintain its license to operate by being a good citizen (donations of cash, goods or staff time, etc.), protecting public health (avoidance of industrial accidents, etc.) and respecting business ethics (avoiding bribery and corruption, etc.).
Society /Human Rights	The society/human rights category measures a company's management commitment and effectiveness towards respecting the fundamental human rights conventions. It reflects a company's capacity to maintain its license to operate by guaranteeing the freedom of association and excluding child, forced or compulsory labour.
Workforce /Diversity and Opportunity	The workforce/diversity and opportunity category measures a company's management commitment and effectiveness towards maintaining diversity and equal opportunities in its workforce. It reflects a company's capacity to increase its workforce loyalty and productivity by promoting an effective life-work balance, a family friendly environment and equal opportunities regardless of gender, age, ethnicity, religion or sexual orientation.

Category	Description
Workforce /Employment Quality	The workforce/employment quality category measures a company's management commitment and effectiveness towards providing high-quality employment benefits and job conditions. It reflects a company's capacity to increase its workforce loyalty and productivity by distributing rewarding and fair employment benefits, and by focusing on long-term employment growth and stability by promoting from within, avoiding lay-offs and maintaining relations with trade unions.
Workforce /Health & Safety	The workforce/health & safety category measures a company's management commitment and effectiveness towards providing a healthy and safe workplace. It reflects a company's capacity to increase its workforce loyalty and productivity by integrating into its day-to-day operations a concern for the physical and mental health, well-being and stress level of all employees.
Workforce /Training and Development	The workforce/training and development category measures a company's management commitment and effectiveness towards providing training and development (education) for its workforce. It reflects a company's capacity to increase its intellectual capital, workforce loyalty and productivity by developing the workforce's skills, competences, employability and careers in an entrepreneurial environment.

Appendix B. Variable Definitions and Data Sources

Panel A: Firm-level variables

Variable	Definition	Source
Blockholder ownership ratio	Number of shares held collectively by blockholders as a percentage of total shares outstanding, where each blockholder must own at least 5% of total outstanding shares. Blockholders typically include insiders, other corporations, pension/benefit plans, and individuals.	World Scope
Capital expenditure ratio	Total capital expenditures divided by total assets.	World Scope
Cash holding ratio	Total cash and short-term investments divided by total assets.	World Scope
CSP index	The equally weighted average of two ASSET4 pillars - environmental and social performance scores. These ratings are z-scored.	ASSET4
Corporate governance score	A measure of corporate governance related to board structure, compensation policy, board functions and shareholder rights	ASSET4
Domestic institutional ownership	The percentage of shares held by domestic institutional investors	Factset
Environmental performance score	A measure of emission reduction, product innovation, and resource reduction. It is an equally weighted computer calculation of relative company performance, the benchmark being the ASSET4 company universe. These ratings are z-scored and normalized to position the score between 0% and 100%. (see Appendix A for further details)	ASSET4
Foreign institutional ownership	The percentage of shares held by foreign institutional investors	Factset
Intangible asset ratio	Total intangible assets divided by total assets.	World Scope
International sale ratio	Total international sales divided by total sale revenues.	World Scope
Leverage ratio	Total debt divided by total assets.	World Scope
Market value	Natural logarithm of market capitalization.	World Scope
R&D intensity	Total research and development expenditures divided by total assets.	World Scope
Sales growth rate	Sales revenue divided by prior year sales revenue minus one	World Scope
Social performance score	A measure of customer/product responsibility, society/community, society/human rights, workforce/diversity and opportunity, workforce/employment quality, workforce/health & safety, and workforce/training and development (see Appendix A for further details) It is an equally weighted computer calculation of relative company performance, the benchmark being the ASSET4 company universe. These ratings are z-scored and normalized to position the score between 0% and 100%. (see Appendix A for further details)	ASSET4
Tobin's q	Book value of assets + (market value of equity – book value of equity))/book value of assets.	World Scope

Panel B: Country-level variables

Variable	Definition	Source
Anti-director index	Revised anti-director rights index; it is an aggregate index of shareholder rights. The index is formed by summing: (1) vote by mail (one if yes, zero if no); (2) shares not deposited (one if yes, zero if no); (3) cumulative voting (one if yes, zero if no); (4) oppressed minority (one if yes, zero if no); (5) pre-emptive rights (one if yes, zero if no); and (6) capital to call a meeting (one if yes, zero if no).	Djankov et al. (2008)
Anti self-dealing index	An index of anti-self-dealing, formed by taking the average of ex ante and ex post private control of self-dealing indices. The index of ex ante control of self-dealing transactions is an average of approval by disinterested shareholders and ex ante disclosure. The index of ex post control of self-dealing transactions is an average of disclosures in periodic filings and ease of proving wrongdoing.	Djankov et al. (2008b)
Financial openness	An index which captures the extent of openness in a country's capital account transactions.	Chinn and Ito (2007)
GDP growth rate	Annual GDP growth rate (%).	World Bank
Individualism	Individualism scores; with low scores representing low individualism (high collectivism) and high scores representing high individualism (low collectivism).	Hofstede (2010)
Indulgence	Indulgence scores; with low scores representing high restraint (low indulgence) and high scores representing low restraint (high indulgence).	Hofstede (2010)
Long-term orientation	Long-term orientation; with low scores representing short-term orientation and high scores representing long-term orientation.	Hofstede (2010)
Market capitalization to GDP	The ratio of stock market capitalization to GDP (%).	World Bank
Masculinity	Masculinity scores; with low scores representing low masculinity and high scores representing high masculinity.	Hofstede (2010)
Per capita GDP	Natural logarithm of GDP per capita.	World Bank
Power distance	Power distance scores; with low scores representing low power distance and high scores representing high power distance.	Hofstede (2010)
Uncertainty avoidance	Uncertainty avoidance scores; with low scores representing low uncertainty avoidance and high scores representing high uncertainty avoidance.	Hofstede (2010)

Table 1 Summary Statistics

Panel A: Sample firms by country

Country	Observations	% of observations	Firms
Australia	1,358	6.58%	333
Austria	127	0.62%	17
Belgium	142	0.69%	27
Brazil	159	0.77%	69
Canada	1,147	5.56%	247
Chile	63	0.31%	18
Colombia	18	0.09%	7
Denmark	131	0.63%	22
Finland	161	0.78%	25
France	704	3.41%	94
Germany	510	2.47%	80
Greece	137	0.66%	21
Hong Kong	334	1.62%	56
India	247	1.20%	81
Indonesia	50	0.24%	23
Ireland	165	0.80%	25
Israel	51	0.25%	15
Italy	317	1.54%	51
Japan	3,201	15.51%	405
South Korea	309	1.50%	101
Malaysia	127	0.62%	44
Mexico	50	0.24%	19
Netherlands	279	1.35%	44
New Zealand	82	0.40%	11
Norway	138	0.67%	18
Philippines	51	0.25%	21
Portugal	80	0.39%	12
Singapore	291	1.41%	45
South Africa	230	1.11%	114
Spain	378	1.83%	53
Sweden	326	1.58%	52
Switzerland	407	1.97%	70
Thailand	37	0.18%	19
Turkey	74	0.36%	23
United Kingdom	2,317	11.22%	336
United States	6,444	31.22%	993
Total	20,644	100.00%	3,591

Table 1 Summary Statistics

Panel B: Country level summary statistics

This table presents summary statistics for country level variables. Please refer to Appendix B for variable definitions.

Country	Power distance	Individualism	Masculinity	Uncertainty avoidance	Long-term orientation	Indulgence	GDP per capita (log)	Market capitalization to GDP (%)	GDP growth rate (%)	Anti-director index	Anti self-dealing index	Financial openness
Australia	36.00	90.00	61.00	51.00	21.16	71.43	10.84	108.82	2.78	4.00	0.79	0.75
Austria	11.00	55.00	79.00	70.00	60.45	62.72	10.62	30.35	1.61	2.50	0.21	0.25
Belgium	65.00	75.00	54.00	94.00	81.86	56.70	10.59	61.81	1.23	3.00	0.54	0.42
Brazil	69.00	38.00	49.00	76.00	43.83	59.15	9.29	60.45	3.63	5.00	0.29	0.25
Canada	46.50	76.50	48.50	54.00	36.02	68.30	10.68	116.92	1.57	4.00	0.65	0.92
Chile	63.00	23.00	28.00	86.00	30.98	68.00	9.45	122.16	4.31	4.00	0.63	0.58
Colombia	67.00	13.00	64.00	80.00	13.10	83.04	8.81	65.52	4.81	3.00	0.58	0.42
Denmark	18.00	74.00	16.00	23.00	34.76	69.64	10.88	64.60	0.42	4.00	0.47	0.58
Finland	33.00	63.00	26.00	59.00	38.29	57.37	10.64	80.76	1.32	3.50	0.46	0.50
France	68.00	71.00	43.00	86.00	63.48	47.77	10.53	76.53	0.97	3.50	0.38	0.75
Germany	35.00	67.00	66.00	65.00	82.87	40.40	10.55	42.96	1.26	3.50	0.28	0.42
Greece	60.00	35.00	57.00	112.00	45.34	49.55	10.10	42.98	-0.21	2.00	0.23	0.33
Hong Kong	68.00	25.00	57.00	29.00	60.96	16.96	10.34	448.69	4.54	5.00	0.96	0.92
India	77.00	48.00	56.00	40.00	50.88	26.12	7.24	73.28	6.68	5.00	0.55	0.92
Indonesia	78.00	14.00	46.00	48.00	61.96	37.72	7.99	43.06	6.02	4.00	0.68	0.50
Ireland	28.00	70.00	68.00	35.00	24.43	64.96	10.81	45.41	1.74	5.00	0.79	0.67
Israel	13.00	54.00	47.00	81.00	37.53	N/A	10.25	81.22	3.80	4.00	0.71	0.67
Italy	50.00	76.00	70.00	75.00	61.46	29.69	10.39	32.22	-0.07	2.00	0.39	0.67

Table 1 Summary Statistics

Panel B: Country level summary statistics (continued)

This table presents summary statistics for country level variables. Please refer to Appendix B for variable definitions.

Country	Power distance	Individualism	Masculinity	Uncertainty avoidance	Long-term orientation	Indulgence	GDP per capita (log)	Market capitalization to GDP (%)	GDP growth rate (%)	Anti-director index	Anti self-dealing index	Financial openness
Japan	54.00	46.00	95.00	92.00	87.91	41.74	10.57	79.98	0.67	4.50	0.48	0.75
South Korea	60.00	18.00	39.00	85.00	100.00	29.46	9.93	95.10	3.82	4.50	0.46	0.75
Malaysia	104.00	26.00	50.00	36.00	40.81	57.14	9.12	143.91	5.09	5.00	0.95	0.92
Mexico	81.00	30.00	69.00	82.00	24.18	97.32	9.12	36.15	2.23	3.00	0.18	0.58
Netherlands	38.00	80.00	14.00	53.00	67.00	68.30	10.65	86.84	1.05	2.50	0.21	0.50
New Zealand	22.00	79.00	58.00	49.00	32.75	74.55	10.34	41.56	1.55	4.00	0.95	0.67
Norway	31.00	69.00	8.00	50.00	34.51	55.13	11.23	57.78	1.62	3.50	0.44	0.58
Philippines	94.00	32.00	64.00	44.00	27.46	41.96	7.72	77.57	5.15	4.00	0.24	0.83
Portugal	63.00	27.00	31.00	104.00	28.21	33.26	9.92	37.66	-0.12	2.50	0.49	0.42
Singapore	74.00	20.00	48.00	8.00	71.54	45.54	10.53	177.20	6.38	5.00	1.00	1.00
South Africa	49.00	65.00	83.00	49.00	34.00	63.00	8.90	161.71	2.63	5.00	0.81	0.83
Spain	57.00	51.00	42.00	86.00	47.61	43.53	10.25	86.00	1.22	5.00	0.37	0.50
Sweden	31.00	71.00	5.00	29.00	52.90	77.68	10.72	105.21	2.26	3.50	0.34	0.58
Switzerland	34.00	68.00	70.00	58.00	73.55	66.07	11.05	212.81	1.79	3.00	0.27	0.67
Thailand	64.00	20.00	34.00	64.00	31.74	45.09	8.48	77.59	3.00	4.00	0.85	0.92
Turkey	66.00	37.00	45.00	85.00	45.59	49.11	9.21	32.88	4.22	3.00	0.43	0.50
United Kingdom	35.00	89.00	66.00	35.00	51.13	69.42	10.56	124.21	1.16	5.00	0.93	0.83
United States	40.00	91.00	62.00	46.00	25.69	68.08	10.74	114.54	1.60	3.00	0.65	1.00
High	104.00	91.00	95.00	112.00	100.00	97.32	11.23	448.69	6.68	5.00	1.00	1.00
Low	11.00	13.00	5.00	8.00	13.10	16.96	7.24	30.35	-0.21	2.00	0.18	0.25
Mean	52.29	52.40	50.51	61.64	47.94	55.31	9.97	92.96	2.55	3.81	0.54	0.65
St. Dev.	22.45	24.40	20.72	24.66	20.94	17.63	0.99	74.64	1.89	0.93	0.25	0.21

Table 1 Summary Statistics

Panel C: Firm-level variable means by country

This table presents summary statistics for firm level variables. Please refer to Appendix A and Appendix B for variable definitions.

Country	CSP index	Envir. CSP	Social CSP	Tobin's q	Market value (Log)	Cap. Expend (%)	R&D (%)	International sale ratio	Block ratio	Corp. gov. score	Cash holding ratio	Intan asset ratio	Lev. Ratio	Foreign instit. Own	Dom. instit. Own	Sales growth rate
Australia	-0.78	37.74	37.62	1.90	20.91	10.64	0.40	0.26	0.30	59.75	0.15	0.17	0.22	10.03	2.23	46.73
Austria	0.43	58.69	54.92	1.39	21.58	7.75	0.45	0.52	0.37	32.23	0.12	0.09	0.27	17.70	1.82	17.41
Belgium	0.30	58.09	51.57	1.44	21.82	7.57	1.03	0.28	0.26	50.54	0.06	0.19	0.30	14.57	2.84	16.15
Brazil	0.50	51.23	64.28	1.99	22.47	7.37	0.26	0.06	0.29	28.65	0.15	0.16	0.30	21.14	2.58	29.30
Canada	-0.52	41.50	42.29	1.71	21.68	11.86	0.30	0.34	0.09	75.22	0.09	0.11	0.22	21.68	26.66	29.62
Chile	-0.35	44.19	44.70	1.53	22.51	7.50	0.00	0.19	0.60	10.06	0.06	0.07	0.28	7.78	0.87	23.29
Colombia	-0.52	36.31	47.23	1.45	22.79	5.24	0.06	0.00	0.58	22.26	0.09	0.10	0.16	1.70	0.06	25.12
Denmark	-0.08	50.30	47.35	1.95	21.51	7.15	3.76	0.50	0.21	33.05	0.11	0.13	0.26	12.61	9.24	13.16
Finland	1.51	77.27	70.32	1.51	21.79	5.50	1.72	0.63	0.19	58.94	0.08	0.14	0.26	20.85	10.91	10.86
France	1.61	74.45	76.12	1.50	22.78	5.18	1.52	0.52	0.31	51.58	0.11	0.26	0.28	17.39	8.33	9.62
Germany	1.10	67.75	66.76	1.47	22.52	5.70	2.47	0.55	0.25	31.90	0.11	0.18	0.24	20.55	7.75	7.04
Greece	-0.35	42.46	46.39	1.66	21.19	6.52	0.04	0.16	0.29	16.57	0.14	0.10	0.28	11.79	0.43	22.53
Hong Kong	-0.39	42.46	45.30	1.38	22.75	4.41	0.10	0.29	0.53	36.64	0.13	0.04	0.20	11.91	2.49	20.40
India	0.30	51.09	58.31	2.27	22.69	10.66	0.35	0.23	0.51	25.80	0.09	0.06	0.25	13.73	3.95	30.25
Indonesia	0.03	39.52	61.23	2.76	22.42	7.67	0.10	0.01	0.48	22.97	0.13	0.03	0.15	11.58	0.01	17.86
Ireland	-0.17	48.52	46.06	1.72	21.93	4.49	1.19	0.55	0.15	65.39	0.14	0.25	0.31	47.12	0.91	10.91
Israel	-0.74	37.90	38.97	1.84	22.39	3.60	1.75	0.49	0.27	32.74	0.11	0.18	0.26	29.33	0.96	12.69
Italy	0.35	50.82	59.91	1.34	22.47	4.30	0.24	0.29	0.31	39.56	0.06	0.20	0.36	12.43	2.22	12.85

Table 1 Summary Statistics

Panel C: Firm-level variable means by country (continued)

This table presents summary statistics for firm level variables. Please refer to Appendix A and Appendix B for variable definitions.

Country	CSP index	Envir. CSP	Social CSP	Tobin's q	Market value (Log)	Cap. Expend (%)	R&D (%)	International sale ratio	Block ratio	Corp. gov. score	Cash holding ratio	Intan asset ratio	Lev. Ratio	Foreign instit. Own	Dom. instit. Own	Sales growth rate
Japan	0.27	62.67	45.95	1.32	22.17	4.76	2.18	0.21	0.28	11.81	0.14	0.03	0.23	9.18	4.71	5.80
South Korea	0.60	62.55	56.30	1.39	22.36	7.78	0.80	0.19	0.30	15.67	0.15	0.04	0.28	14.41	0.12	15.80
Malaysia	-0.22	41.75	51.32	1.90	22.19	5.29	0.03	0.23	0.42	43.65	0.15	0.11	0.23	8.81	0.69	12.82
Mexico	-0.22	44.45	48.57	1.91	23.09	6.49	0.00	0.29	0.21	14.93	0.13	0.11	0.24	15.74	1.01	12.56
Netherlands	1.16	63.65	72.72	1.59	22.52	5.62	1.94	0.68	0.19	62.61	0.12	0.21	0.28	32.11	3.72	7.92
New Zealand	-0.24	48.59	43.89	1.75	21.11	6.27	0.80	0.27	0.43	55.67	0.04	0.17	0.36	10.60	3.01	9.34
Norway	0.79	62.62	62.11	1.73	21.79	7.43	0.89	0.62	0.30	57.05	0.14	0.16	0.24	21.25	11.55	13.70
Philippines	-0.99	32.26	36.62	1.75	21.53	5.44	0.00	0.06	0.51	30.14	0.13	0.05	0.27	13.40	0.24	19.31
Portugal	1.49	70.03	76.82	1.34	22.08	6.19	0.00	0.34	0.46	51.70	0.05	0.13	0.41	8.32	1.84	6.57
Singapore	-0.77	36.50	39.42	1.62	21.79	4.81	0.51	0.37	0.49	43.35	0.15	0.05	0.24	16.48	2.39	16.18
South Africa	0.90	55.62	72.27	1.79	21.57	7.44	0.09	0.26	0.26	59.50	0.10	0.09	0.17	13.82	5.69	13.49
Spain	1.42	69.81	74.64	1.77	22.53	5.53	0.54	0.29	0.39	46.93	0.09	0.14	0.35	11.98	2.98	14.10
Sweden	0.93	66.34	62.78	1.71	21.82	5.63	1.20	0.54	0.14	53.77	0.08	0.18	0.31	14.47	21.82	14.08
Switzerland	0.41	57.62	55.27	2.13	22.31	3.83	3.19	0.59	0.17	51.54	0.18	0.18	0.21	28.66	5.67	12.76
Thailand	0.09	47.12	55.64	2.06	22.17	6.20	0.00	0.15	0.26	41.41	0.10	0.01	0.29	8.20	1.45	13.39
Turkey	0.11	48.65	54.69	1.66	22.45	5.06	0.22	0.10	0.58	19.08	0.13	0.06	0.23	15.77	0.10	13.34
United Kingdom	0.76	60.18	63.51	1.74	21.50	5.79	0.92	0.38	0.16	70.18	0.11	0.19	0.26	12.72	19.48	12.10
United States	-0.28	43.57	47.48	1.98	22.64	5.57	2.32	0.27	0.11	74.79	0.14	0.19	0.25	6.40	74.08	11.10
High	1.61	77.27	76.82	2.76	23.09	11.86	3.76	0.68	0.60	75.22	0.18	0.26	0.41	47.12	74.08	46.73
Low	-0.99	32.26	36.62	1.32	20.91	3.60	0.00	0.00	0.09	10.06	0.04	0.01	0.15	1.70	0.01	5.80
Mean	0.23	52.34	54.98	1.72	22.11	6.34	0.87	0.33	0.32	41.60	0.11	0.13	0.26	15.73	6.80	16.12
St. Dev.	0.71	11.94	11.64	0.30	0.53	1.85	0.98	0.19	0.14	18.55	0.03	0.07	0.06	8.41	13.14	8.17

Table 2 Regression Analyses of Corporate Financial Performance (CFP) on Corporate Social Performance (CSP) and Culture
Panel A: Interaction between CSP and individualism – HLM Regressions

This table presents the HLM regressions of Tobin's q (CFP) on corporate social performance (CSP), individualism (Hofstede cultural value dimension), the interaction between CSP and individualism and control variables for the full sample. All variables are defined in the Appendices. Clustered standard errors by firm are reported in parentheses. ***, **, and * indicate statistical significance at the 1 percent, 5 percent and 10 percent levels (two-tailed) respectively.

Variables	CSP index as predictor			Environmental score as predictor			Social score as predictor		
	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>
<i>Firm characteristics</i>									
CSP measure	-0.019*** (0.007)	-0.168** (0.075)		-0.001*** (0.000)	-0.014*** (0.005)		-0.001 (0.000)	-0.004 (0.004)	
Market value (log)	0.061*** (0.014)	0.048 (0.087)		0.060*** (0.014)	0.044 (0.082)		0.058*** (0.014)	-0.001 (0.091)	
Capital exp ratio	0.180 (0.153)	5.347** (2.190)		0.182 (0.153)	6.267*** (2.213)		0.186 (0.153)	4.065* (2.121)	
R&D intensity	3.517*** (0.984)	8.698* (5.035)		3.532*** (0.982)	10.286** (5.055)		3.494*** (0.984)	9.469* (5.284)	
International sale ratio	-0.190*** (0.052)	0.159 (0.316)		-0.189*** (0.052)	0.300 (0.311)		-0.193*** (0.052)	-0.069 (0.313)	
Blockholder ratio	0.055 (0.041)	0.057 (0.352)		0.056 (0.041)	-0.013 (0.351)		0.054 (0.041)	0.156 (0.353)	
Corporate gov score	-0.000 (0.000)	0.009** (0.004)		-0.000 (0.000)	0.008** (0.004)		-0.001 (0.000)	0.008* (0.004)	
Cash holding ratio	1.684*** (0.151)	3.398*** (1.102)		1.686*** (0.151)	3.470*** (1.059)		1.690*** (0.152)	2.923** (1.147)	
Intangible asset ratio	-0.571*** (0.097)	0.665 (0.925)		-0.573*** (0.097)	0.492 (0.917)		-0.569*** (0.097)	0.644 (0.933)	
Leverage ratio	-0.269*** (0.094)	1.252* (0.737)		-0.267*** (0.094)	1.629** (0.746)		-0.275*** (0.094)	0.979 (0.723)	
Foreign inst own	0.171 (0.125)	-1.065 (0.711)		0.174 (0.125)	-1.343** (0.681)		0.168 (0.125)	-0.408 (0.689)	
Domestic inst own	-0.063 (0.104)	-0.140 (0.337)		-0.063 (0.103)	-0.240 (0.324)		-0.056 (0.104)	0.109 (0.334)	
Sales growth rate	0.113*** (0.034)	-0.315 (0.618)		0.114*** (0.034)	-0.591 (0.597)		0.115*** (0.034)	0.267 (0.610)	
<i>Country characteristics</i>									
Per capita GDP (Log)			-0.298*** (0.041)			-0.273*** (0.041)			-0.289*** (0.046)
Market cap to GDP			0.001*** (0.000)			0.001*** (0.000)			0.001*** (0.000)
GDP growth rate			0.007* (0.004)			0.006* (0.004)			0.006* (0.004)
Anti director index			-0.022 (0.048)			0.005 (0.051)			-0.062 (0.044)
Anti self-dealing index			0.157 (0.228)			0.071 (0.232)			0.284 (0.220)
Financial openness			-0.773*** (0.216)			-0.733*** (0.203)			-0.660*** (0.226)
Individualism			-0.000 (0.003)			0.001 (0.003)			-0.001 (0.003)
<i>Interaction</i>									
CSP x individualism			-0.001*** (0.000)			-0.000*** (0.000)			-0.000*** (0.000)
Constant			1.671*** (0.142)			1.678*** (0.143)			1.673*** (0.143)
Observations			20,644			20,644			20,644
Number of firm clusters			3,591			3,591			3,591
Industry Fixed Effects			Yes			Yes			Yes
Year Fixed Effects			Yes			Yes			Yes
Adjusted R-squared			0.309			0.311			0.306

Table 2 Regression Analyses of Corporate Financial Performance (CFP) on Corporate Social Performance (CSP) and Culture
Panel B: Interaction between CSP and uncertainty avoidance – HLM Regressions

This table presents the HLM regressions of Tobin's q (CFP) on corporate social performance (CSP), uncertainty avoidance (Hofstede cultural value dimension), the interaction between CSP and uncertainty avoidance and control variables for the full sample. All variables are defined in the Appendices. Clustered standard errors by firm are reported in parentheses. ***, **, and * indicate statistical significance at the 1 percent, 5 percent and 10 percent levels (two-tailed) respectively.

Variables	CSP index as predictor			Environmental score as predictor			Social score as predictor		
	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>
<i>Firm characteristics</i>									
CSP measure	-0.020*** (0.007)	-0.125 (0.082)		-0.001*** (0.000)	-0.012** (0.005)		-0.001 (0.000)	-0.003 (0.004)	
Market value (log)	0.061*** (0.014)	0.059 (0.083)		0.061*** (0.014)	0.038 (0.078)		0.057*** (0.014)	0.045 (0.087)	
Capital expenditure ratio	0.189 (0.153)	6.766*** (2.479)		0.189 (0.153)	6.859*** (2.442)		0.193 (0.153)	6.383** (2.500)	
R&D intensity	3.522*** (0.985)	9.899** (4.647)		3.526*** (0.984)	11.276** (4.638)		3.506*** (0.984)	10.042** (4.776)	
International sale ratio	-0.191*** (0.052)	-0.377 (0.439)		-0.191*** (0.052)	-0.071 (0.470)		-0.194*** (0.052)	-0.613 (0.403)	
Blockholder ratio	0.056 (0.041)	0.074 (0.341)		0.057 (0.041)	0.018 (0.342)		0.056 (0.041)	0.129 (0.341)	
Corporate governance score	-0.000 (0.000)	0.008** (0.004)		-0.000 (0.000)	0.008** (0.004)		-0.001 (0.000)	0.007* (0.004)	
Cash holding ratio	1.687*** (0.152)	3.132*** (0.997)		1.687*** (0.151)	3.083*** (0.960)		1.692*** (0.152)	2.990*** (1.023)	
Intangible asset ratio	-0.578*** (0.097)	0.968 (0.719)		-0.580*** (0.097)	0.874 (0.714)		-0.575*** (0.097)	0.885 (0.737)	
Leverage ratio	-0.271*** (0.094)	1.078 (0.679)		-0.268*** (0.094)	1.357* (0.715)		-0.276*** (0.094)	0.947 (0.662)	
Foreign institutional ownership	0.156 (0.126)	-0.937 (0.719)		0.160 (0.126)	-1.214* (0.711)		0.157 (0.126)	-0.517 (0.679)	
Domestic institutional ownership	-0.055 (0.103)	-0.340 (0.354)		-0.056 (0.103)	-0.329 (0.338)		-0.052 (0.103)	-0.246 (0.360)	
Sales growth rate	0.114*** (0.034)	-0.567 (0.659)		0.115*** (0.034)	-0.655 (0.630)		0.116*** (0.035)	-0.301 (0.666)	
<i>Country characteristics</i>									
Per capita GDP (Log)			-0.248*** (0.050)			-0.244*** (0.047)			-0.237*** (0.052)
Market capitalization to GDP			0.001*** (0.000)			0.001*** (0.000)			0.001*** (0.000)
GDP growth rate			0.006 (0.004)			0.005 (0.004)			0.006 (0.004)
Anti director index			-0.052 (0.052)			-0.016 (0.057)			-0.085* (0.046)
Anti self-dealing index			0.046 (0.224)			0.004 (0.229)			0.114 (0.218)
Financial openness			-0.694*** (0.209)			-0.669*** (0.195)			-0.633*** (0.218)
Uncertainty avoidance			-0.003* (0.002)			-0.002 (0.002)			-0.004** (0.002)
<i>Interaction</i>									
CSP x Uncertainty avoidance			0.000 (0.000)			0.000 (0.000)			-0.000 (0.000)
Constant			1.674*** (0.143)			1.678*** (0.141)			1.677*** (0.144)
Observations			20,644			20,644			20,644
Number of firm clusters			3,591			3,591			3,591
Industry FE			Yes			Yes			Yes
Year FE			Yes			Yes			Yes
Adjusted R-squared			0.308			0.309			0.305

Table 2 Regression Analyses of Corporate Financial Performance (CFP) on Corporate Social Performance (CSP) and Culture
 Panel C: Interaction between CSP and long-term orientation – HLM Regressions

This table presents the HLM regressions of Tobin's q (CFP) on corporate social performance (CSP), long-term orientation (Hofstede cultural value dimension), the interaction between CSP and long-term orientation and control variables for the full sample. All variables are defined in the Appendices. Clustered standard errors by firm are reported in parentheses. ***, **, and * indicate statistical significance at the 1 percent, 5 percent and 10 percent levels (two-tailed) respectively.

Variables	CSP index as predictor			Environmental score as predictor			Social score as predictor		
	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>
<i>Firm characteristics</i>									
CSP measure	-0.019*** (0.007)	-0.090 (0.080)		-0.001*** (0.000)	-0.010** (0.005)		-0.001 (0.000)	0.001 (0.005)	
Market value (log)	0.061*** (0.014)	0.055 (0.081)		0.060*** (0.014)	0.049 (0.077)		0.057*** (0.014)	0.021 (0.083)	
Capital expenditure ratio	0.185 (0.154)	6.648*** (2.252)		0.187 (0.153)	7.265*** (2.286)		0.191 (0.154)	6.035*** (2.188)	
R&D intensity	3.500*** (0.985)	10.647** (4.617)		3.510*** (0.983)	11.850** (4.635)		3.489*** (0.985)	11.644** (4.810)	
International sale ratio	-0.189*** (0.052)	0.049 (0.306)		-0.188*** (0.052)	0.188 (0.303)		-0.191*** (0.052)	-0.114 (0.299)	
Blockholder ratio	0.056 (0.041)	0.002 (0.344)		0.057 (0.041)	-0.060 (0.344)		0.055 (0.041)	0.054 (0.344)	
Corporate governance score	-0.000 (0.000)	0.006 (0.004)		-0.000 (0.000)	0.006* (0.004)		-0.001 (0.000)	0.003 (0.004)	
Cash holding ratio	1.687*** (0.152)	3.704*** (0.994)		1.688*** (0.151)	3.600*** (0.966)		1.691*** (0.152)	3.536*** (1.020)	
Intangible asset ratio	-0.578*** (0.097)	0.490 (0.712)		-0.579*** (0.097)	0.584 (0.696)		-0.574*** (0.097)	0.234 (0.735)	
Leverage ratio	-0.268*** (0.094)	1.479** (0.701)		-0.265*** (0.094)	1.664** (0.710)		-0.275*** (0.094)	1.460** (0.698)	
Foreign institutional ownership	0.162 (0.125)	-0.706 (0.706)		0.164 (0.125)	-1.104* (0.670)		0.162 (0.126)	-0.113 (0.681)	
Domestic institutional ownership	-0.061 (0.104)	-0.250 (0.348)		-0.064 (0.103)	-0.341 (0.340)		-0.055 (0.104)	-0.081 (0.344)	
Sales growth rate	0.113*** (0.034)	-0.550 (0.635)		0.114*** (0.034)	-0.782 (0.625)		0.115*** (0.035)	-0.166 (0.613)	
<i>Country characteristics</i>									
Per capita GDP (Log)			-0.259*** (0.044)			-0.249*** (0.042)			-0.239*** (0.049)
Market capitalization to GDP			0.001*** (0.000)			0.001*** (0.000)			0.001*** (0.000)
GDP growth rate			0.006* (0.004)			0.006* (0.004)			0.006* (0.004)
Anti director index			-0.042 (0.048)			-0.011 (0.051)			-0.076* (0.044)
Anti self-dealing index			0.268 (0.223)			0.149 (0.226)			0.397* (0.220)
Financial openness			-0.626*** (0.226)			-0.627*** (0.208)			-0.497** (0.233)
Long-term orientation			-0.004** (0.002)			-0.003** (0.002)			-0.005*** (0.002)
<i>Interaction</i>									
CSP x Long-term orientation			0.001*** (0.000)			0.000*** (0.000)			0.000* (0.000)
Constant			1.696*** (0.145)			1.696*** (0.144)			1.705*** (0.146)
Observations			20,644			20,644			20,644
Number of firm clusters			3,591			3,591			3,591
Industry FE			Yes			Yes			Yes
Year FE			Yes			Yes			Yes
Adjusted R-squared			0.308			0.31			0.306

Table 2 Regression Analyses of Corporate Financial Performance (CFP) on Corporate Social Performance (CSP) and Culture
 Panel D: Interaction between CSP and indulgence – HLM Regressions

This table presents the HLM regressions of Tobin's q (CFP) on corporate social performance (CSP), indulgence (Hofstede cultural value dimension), the interaction between CSP and indulgence and control variables for the full sample. All variables are defined in the Appendices. Clustered standard errors by firm are reported in parentheses. ***, **, and * indicate statistical significance at the 1 percent, 5 percent and 10 percent levels (two-tailed) respectively.

Variables	CSP index as predictor			Environmental score as predictor			Social score as predictor		
	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>
<i>Firm characteristics</i>									
CSP measure	-0.020*** (0.007)	-0.070 (0.085)		-0.001*** (0.000)	-0.010** (0.005)		-0.001 (0.000)	0.003 (0.005)	
Market value (log)	0.062*** (0.014)	0.060 (0.081)		0.061*** (0.014)	0.058 (0.077)		0.058*** (0.014)	0.021 (0.084)	
Capital expenditure ratio	0.181 (0.153)	5.783*** (2.224)		0.184 (0.153)	6.725*** (2.244)		0.186 (0.153)	4.871** (2.141)	
R&D intensity	3.529*** (0.987)	10.482** (4.620)		3.536*** (0.985)	11.548** (4.634)		3.507*** (0.986)	12.147** (4.840)	
International sale ratio	-0.187*** (0.052)	-0.090 (0.321)		-0.186*** (0.052)	0.082 (0.315)		-0.190*** (0.052)	-0.300 (0.313)	
Blockholder ratio	0.054 (0.041)	0.449 (0.372)		0.055 (0.041)	0.309 (0.365)		0.053 (0.041)	0.613* (0.372)	
Corporate governance score	-0.000 (0.000)	0.008** (0.004)		-0.000 (0.000)	0.008** (0.004)		-0.001 (0.000)	0.005 (0.004)	
Cash holding ratio	1.688*** (0.152)	3.246*** (1.000)		1.688*** (0.152)	3.271*** (0.956)		1.693*** (0.152)	2.857*** (1.040)	
Intangible asset ratio	-0.572*** (0.097)	0.216 (0.731)		-0.575*** (0.097)	0.398 (0.709)		-0.568*** (0.097)	-0.180 (0.761)	
Leverage ratio	-0.271*** (0.094)	1.576** (0.697)		-0.268*** (0.094)	1.732** (0.710)		-0.276*** (0.094)	1.669** (0.695)	
Foreign institutional ownership	0.166 (0.127)	-0.614 (0.758)		0.166 (0.126)	-1.098 (0.708)		0.166 (0.127)	0.114 (0.736)	
Domestic institutional ownership	-0.056 (0.104)	-0.084 (0.342)		-0.057 (0.103)	-0.234 (0.329)		-0.053 (0.103)	0.144 (0.337)	
Sales growth rate	0.113*** (0.034)	-0.131 (0.647)		0.114*** (0.034)	-0.509 (0.622)		0.115*** (0.035)	0.423 (0.629)	
<i>Country characteristics</i>									
Per capita GDP (Log)			-0.269*** (0.043)			-0.258*** (0.041)			-0.245*** (0.048)
Market capitalization to GDP			0.001*** (0.000)			0.001*** (0.000)			0.001*** (0.000)
GDP growth rate			0.006 (0.004)			0.006 (0.004)			0.006 (0.004)
Anti director index			-0.051 (0.050)			-0.014 (0.052)			-0.092** (0.045)
Anti self-dealing index			0.221 (0.228)			0.092 (0.233)			0.364 (0.225)
Financial openness			-0.573** (0.236)			-0.596*** (0.213)			-0.388 (0.247)
Indulgence			0.005*** (0.002)			0.004** (0.002)			0.006*** (0.002)
<i>Interaction</i>									
CSP x Indulgence			-0.001*** (0.000)			-0.000*** (0.000)			-0.000** (0.000)
Constant			1.681*** (0.144)			1.684*** (0.143)			1.687*** (0.147)
Observations			20,593			20,593			20,593
Number of firm clusters			3,576			3,576			3,576
Industry FE			Yes			Yes			Yes
Year FE			Yes			Yes			Yes
Adjusted R-squared			0.309			0.311			0.306

Table 2 Regression Analyses of Corporate Financial Performance (CFP) on Corporate Social Performance (CSP) and Culture
 Panel E: Interaction between CSP and power distance – HLM Regressions

This table presents the HLM regressions of Tobin's q (CFP) on corporate social performance (CSP), power distance (Hofstede cultural value dimension), the interaction between CSP and power distance and control variables for the full sample. All variables are defined in the Appendices. Clustered standard errors by firm are reported in parentheses. ***, **, and * indicate statistical significance at the 1 percent, 5 percent and 10 percent levels (two-tailed) respectively.

Variables	CSP index as predictor			Environmental score as predictor			Social score as predictor		
	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>
<i>Firm characteristics</i>									
CSP measure	-0.020*** (0.007)	-0.191** (0.077)		-0.001*** (0.000)	-0.015*** (0.005)		-0.001 (0.000)	-0.004 (0.005)	
Market value (log)	0.062*** (0.014)	0.081 (0.089)		0.061*** (0.014)	0.058 (0.081)		0.058*** (0.014)	0.026 (0.095)	
Capital expenditure ratio	0.183 (0.153)	5.990*** (2.214)		0.186 (0.153)	6.789*** (2.224)		0.187 (0.153)	4.309** (2.159)	
R&D intensity	3.536*** (0.984)	7.268 (4.510)		3.539*** (0.983)	9.836** (4.586)		3.514*** (0.984)	8.070* (4.825)	
International sale ratio	-0.189*** (0.052)	0.087 (0.315)		-0.188*** (0.052)	0.196 (0.317)		-0.192*** (0.052)	-0.075 (0.308)	
Blockholder ratio	0.058 (0.041)	0.154 (0.360)		0.058 (0.041)	0.072 (0.361)		0.057 (0.041)	0.210 (0.361)	
Corporate governance score	-0.000 (0.000)	0.010** (0.004)		-0.000 (0.000)	0.009** (0.004)		-0.001 (0.000)	0.008* (0.004)	
Cash holding ratio	1.685*** (0.151)	3.600*** (0.992)		1.685*** (0.151)	3.427*** (0.943)		1.691*** (0.152)	3.195*** (1.050)	
Intangible asset ratio	-0.573*** (0.097)	0.830 (0.699)		-0.575*** (0.097)	0.815 (0.690)		-0.569*** (0.097)	0.515 (0.728)	
Leverage ratio	-0.273*** (0.094)	1.182* (0.673)		-0.270*** (0.094)	1.482** (0.690)		-0.278*** (0.094)	1.026 (0.658)	
Foreign institutional ownership	0.162 (0.125)	-1.218* (0.729)		0.164 (0.125)	-1.468** (0.683)		0.163 (0.125)	-0.435 (0.724)	
Domestic institutional ownership	-0.053 (0.104)	-0.259 (0.369)		-0.055 (0.103)	-0.338 (0.345)		-0.050 (0.103)	0.066 (0.376)	
Sales growth rate	0.113*** (0.034)	-0.575 (0.643)		0.114*** (0.034)	-0.771 (0.614)		0.115*** (0.034)	0.139 (0.650)	
<i>Country characteristics</i>									
Per capita GDP (Log)			-0.295*** (0.041)			-0.266*** (0.041)			-0.290*** (0.046)
Market capitalization to GDP			0.001*** (0.000)			0.001*** (0.000)			0.001*** (0.000)
GDP growth rate			0.006* (0.004)			0.006 (0.004)			0.006* (0.004)
Anti director index			-0.009 (0.050)			0.017 (0.052)			-0.058 (0.046)
Anti self-dealing index			0.064 (0.252)			-0.029 (0.250)			0.268 (0.252)
Financial openness			-0.724*** (0.223)			-0.647*** (0.213)			-0.671*** (0.227)
Power distance			-0.002 (0.002)			-0.002 (0.002)			-0.001 (0.002)
<i>Interaction</i>									
CSP x Power distance			0.001*** (0.000)			0.000*** (0.000)			0.000*** (0.000)
Constant			1.669*** (0.143)			1.676*** (0.142)			1.672*** (0.144)
Observations			20,644			20,644			20,644
Number of firm clusters			3,591			3,591			3,591
Industry FE			Yes			Yes			Yes
Year FE			Yes			Yes			Yes
Adjusted R-squared			0.31			0.311			0.306

Table 2 Regression Analyses of Corporate Financial Performance (CFP) on Corporate Social Performance (CSP) and Culture
 Panel F: Interaction between CSP and masculinity – HLM Regressions

This table presents the HLM regressions of Tobin's q (CFP) on corporate social performance (CSP), masculinity (Hofstede cultural value dimension), the interaction between CSP and masculinity and control variables for the full sample. All variables are defined in the Appendices. Clustered standard errors by firm are reported in parentheses. ***, **, and * indicate statistical significance at the 1 percent, 5 percent and 10 percent levels (two-tailed) respectively.

Variables	CSP index as predictor			Environmental score as predictor			Social score as predictor		
	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>	<i>_firmdev</i>	<i>_ctrymean</i>	<i>_ctry</i>
<i>Firm characteristics</i>									
CSP measure	-0.020*** (0.007)	-0.165** (0.077)		-0.001*** (0.000)	-0.014*** (0.005)		-0.000 (0.000)	-0.004 (0.005)	
Market value (log)	0.061*** (0.014)	0.014 (0.080)		0.061*** (0.014)	0.004 (0.075)		0.058*** (0.014)	-0.018 (0.083)	
Capital expenditure ratio	0.193 (0.154)	4.645** (2.168)		0.192 (0.154)	5.571** (2.181)		0.196 (0.153)	3.453 (2.102)	
R&D intensity	3.545*** (0.986)	9.984** (4.709)		3.542*** (0.984)	11.924** (4.768)		3.527*** (0.985)	10.052** (4.856)	
International sale ratio	-0.190*** (0.052)	-0.182 (0.363)		-0.190*** (0.052)	-0.007 (0.360)		-0.193*** (0.052)	-0.380 (0.360)	
Blockholder ratio	0.057 (0.041)	0.073 (0.347)		0.057 (0.041)	-0.002 (0.345)		0.055 (0.041)	0.157 (0.348)	
Corporate governance score	-0.000 (0.000)	0.009** (0.004)		-0.000 (0.000)	0.007** (0.003)		-0.001 (0.000)	0.007* (0.004)	
Cash holding ratio	1.687*** (0.152)	2.794*** (1.002)		1.687*** (0.151)	2.761*** (0.969)		1.692*** (0.152)	2.574*** (1.033)	
Intangible asset ratio	-0.579*** (0.097)	1.115 (0.728)		-0.580*** (0.097)	1.039 (0.717)		-0.575*** (0.097)	0.920 (0.744)	
Leverage ratio	-0.270*** (0.094)	0.502 (0.798)		-0.267*** (0.094)	0.917 (0.808)		-0.276*** (0.094)	0.311 (0.785)	
Foreign institutional ownership	0.157 (0.125)	-0.918 (0.709)		0.160 (0.125)	-1.217* (0.675)		0.158 (0.126)	-0.298 (0.687)	
Domestic institutional ownership	-0.055 (0.103)	-0.199 (0.352)		-0.057 (0.103)	-0.275 (0.336)		-0.051 (0.103)	0.018 (0.349)	
Sales growth rate	0.114*** (0.034)	-0.393 (0.641)		0.115*** (0.034)	-0.594 (0.616)		0.116*** (0.035)	0.107 (0.627)	
<i>Country characteristics</i>									
Per capita GDP (Log)			-0.276*** (0.041)			-0.255*** (0.041)			-0.273*** (0.045)
Market capitalization to GDP			0.001*** (0.000)			0.001*** (0.000)			0.001*** (0.000)
GDP growth rate			0.006 (0.004)			0.006 (0.004)			0.006 (0.004)
Anti director index			-0.015 (0.048)			0.011 (0.051)			-0.053 (0.043)
Anti self-dealing index			0.081 (0.222)			-0.001 (0.228)			0.218 (0.212)
Financial openness			-0.640*** (0.203)			-0.601*** (0.190)			-0.558*** (0.214)
Masculinity			-0.002 (0.001)			-0.002 (0.001)			-0.002* (0.001)
<i>Interaction</i>									
CSP x masculinity			-0.000 (0.000)			-0.000 (0.000)			-0.000 (0.000)
Constant			1.669*** (0.143)			1.675*** (0.142)			1.672*** (0.145)
Observations			20,644			20,644			20,644
Number of firm clusters			3,591			3,591			3,591
Industry FE			Yes			Yes			Yes
Year FE			Yes			Yes			Yes
Adjusted R-squared			0.308			0.31			0.305

Table 3 Regression Analyses of Corporate Financial Performance (CFP) on Corporate Social Performance (CSP) and Culture

Interaction between CSP and all cultural dimensions – OLS Regressions

This table presents the OLS regressions of Tobin's q (CFP) on corporate social performance (CSP), individualism, long-term orientation, uncertainty avoidance, indulgence, power distance, masculinity (Hofstede cultural value dimensions), the interaction between CSP and each of these Hofstede cultural value dimensions and control variables for the full sample. All variables are defined in the Appendices. Clustered standard errors by firm are reported in parentheses. ***, **, and * indicate statistical significance at the 1 percent, 5 percent and 10 percent levels (two-tailed) respectively.

Variables	(1) Tobin's q	(2) Tobin's q	(3) Tobin's q	(4) Tobin's q	(5) Tobin's q	(6) Tobin's q	(7) Tobin's q
<i>Firm characteristics</i>							
CSP Index	-0.071*** (0.010)	-0.062*** (0.009)	-0.070*** (0.010)	-0.068*** (0.010)	-0.070*** (0.010)	-0.075*** (0.010)	-0.057*** (0.010)
Market value (log)	0.125*** (0.013)	0.112*** (0.013)	0.115*** (0.013)	0.125*** (0.013)	0.116*** (0.013)	0.116*** (0.014)	0.138*** (0.014)
Capital expenditure ratio	1.322*** (0.221)	1.429*** (0.221)	1.474*** (0.221)	1.395*** (0.220)	1.427*** (0.220)	1.441*** (0.220)	1.242*** (0.220)
R&D intensity	3.429*** (0.902)	3.503*** (0.895)	3.535*** (0.906)	3.407*** (0.905)	3.497*** (0.908)	3.645*** (0.906)	3.664*** (0.877)
International sale ratio	-0.117** (0.053)	-0.088* (0.054)	-0.150*** (0.055)	-0.104* (0.053)	-0.102* (0.053)	-0.137** (0.056)	-0.148*** (0.055)
Blockholder ratio	0.264*** (0.068)	0.204*** (0.065)	0.227*** (0.067)	0.289*** (0.069)	0.260*** (0.068)	0.205*** (0.067)	0.256*** (0.068)
Corporate governance score	0.001 (0.001)	0.001 (0.001)	0.002** (0.001)	0.001 (0.001)	0.003*** (0.001)	0.002** (0.001)	-0.001* (0.001)
Cash holding ratio	2.585*** (0.175)	2.600*** (0.175)	2.615*** (0.176)	2.593*** (0.175)	2.612*** (0.176)	2.623*** (0.175)	2.564*** (0.172)
Intangible asset ratio	-0.122 (0.096)	-0.040 (0.093)	-0.004 (0.094)	-0.050 (0.094)	0.002 (0.094)	-0.022 (0.094)	-0.158* (0.096)
Leverage ratio	-0.306*** (0.098)	-0.322*** (0.098)	-0.316*** (0.099)	-0.302*** (0.099)	-0.318*** (0.099)	-0.345*** (0.098)	-0.307*** (0.096)
Foreign institutional ownership	0.192 (0.123)	0.167 (0.125)	0.031 (0.126)	0.147 (0.125)	0.124 (0.126)	0.078 (0.124)	0.128 (0.124)
Domestic institutional ownership	0.070 (0.085)	0.022 (0.086)	0.081 (0.088)	0.060 (0.087)	0.091 (0.089)	0.170** (0.084)	-0.057 (0.089)
Sales growth rate	0.119*** (0.039)	0.112*** (0.039)	0.142*** (0.039)	0.126*** (0.039)	0.134*** (0.039)	0.133*** (0.039)	0.104*** (0.039)

Table 3 Regression Analyses of Corporate Financial Performance (CFP) on Corporate Social Performance (CSP) and Culture

Interaction between CSP and all cultural dimensions (continued) – OLS Regressions

This table presents the OLS regressions of Tobin's q (CFP) on corporate social performance (CSP), individualism, long-term orientation, uncertainty avoidance, indulgence, power distance, masculinity (Hofstede cultural value dimensions), the interaction between CSP and each of these Hofstede cultural value dimensions and control variables for the full sample. All variables are defined in the Appendices. Clustered standard errors by firm are reported in parentheses. ***, **, and * indicate statistical significance at the 1 percent, 5 percent and 10 percent levels (two-tailed) respectively.

Variables	(1) Tobin's q	(2) Tobin's q	(3) Tobin's q	(4) Tobin's q	(5) Tobin's q	(6) Tobin's q	(7) Tobin's q
<i>Country characteristics</i>							
Per capita GDP (Log)	-0.283*** (0.031)	-0.156*** (0.032)	-0.194*** (0.030)	-0.274*** (0.030)	-0.304*** (0.035)	-0.193*** (0.031)	-0.224*** (0.041)
Market capitalization to GDP	0.001*** (0.000)	0.000 (0.000)	-0.000 (0.000)	0.001*** (0.000)	0.000 (0.000)	-0.000 (0.000)	0.001* (0.000)
GDP growth rate	0.020*** (0.005)	-0.000 (0.006)	-0.004 (0.006)	0.003 (0.006)	0.013** (0.005)	-0.005 (0.006)	-0.001 (0.006)
Anti director index	-0.049* (0.029)	-0.002 (0.034)	-0.089*** (0.028)	-0.080*** (0.028)	-0.097*** (0.028)	-0.079*** (0.029)	-0.003 (0.037)
Anti self-dealing index	0.388*** (0.150)	0.210 (0.161)	0.308** (0.157)	0.402*** (0.145)	0.534*** (0.149)	0.730*** (0.141)	0.087 (0.184)
Financial openness	-0.636*** (0.147)	-0.416*** (0.144)	-0.508*** (0.150)	-0.414*** (0.147)	-0.352** (0.165)	-0.412*** (0.145)	-0.320* (0.168)
Individualism	0.253*** (0.032)						0.154*** (0.045)
Long-term orientation		-0.214*** (0.032)					-0.068* (0.038)
Uncertainty avoidance			-0.145*** (0.027)				-0.050 (0.032)
Indulgence				0.210*** (0.023)			0.081*** (0.028)
Power distance					-0.141*** (0.029)		0.014 (0.040)
Masculinity						-0.101*** (0.020)	-0.070*** (0.021)
<i>Interaction</i>							
CSP x individualism	-0.027*** (0.008)						-0.044*** (0.017)
CSP x long-term orientation		0.006 (0.006)					-0.018 (0.013)
CSP x uncertainty avoidance			-0.005 (0.006)				-0.029*** (0.009)
CSP x indulgence				-0.018** (0.007)			0.001 (0.012)
CSP x power distance					0.033*** (0.010)		0.023 (0.017)
CSP x masculinity						0.008 (0.007)	0.019** (0.008)
Constant	1.635*** (0.444)	0.555 (0.485)	1.214*** (0.451)	1.542*** (0.448)	1.903*** (0.460)	0.799 (0.488)	0.763 (0.522)
Observations	20,644	20,644	20,644	20,593	20,644	20,644	20,593
R-squared	0.328	0.326	0.323	0.329	0.323	0.323	0.340
Adjusted R-squared	0.326	0.324	0.321	0.327	0.321	0.321	0.338

Table 4 Subgroup Analyses

This table presents the HLM regressions of Tobin's Q on corporate social performance (CSP), Hofstede's cultural value dimensions, the interaction between CSP and each Hofstede dimension, and control variables for the full sample for two subgroup periods of time: (1) the years 2003 to 2008; and (2) the years 2009 to 2012. All variables are defined in the Appendix. Clustered standard errors by firm are reported in parentheses. ***, **, and * indicate statistical significance at the 1 percent, 5 percent and 10 percent levels (two-tailed) respectively. Control variables are not reported here to conserve space.

Panel A. Subgroup analyses based on time period

Variables	Individualism		Uncertainty avoidance		Long-term orientation		Indulgence		Power distance		Masculinity	
	Early	Late	Early	Late	Early	Late	Early	Late	Early	Late	Early	Late
CSP index_firmdev	-0.019** (0.007)	-0.024** (0.012)	-0.020*** (0.008)	-0.015 (0.012)	-0.019** (0.008)	-0.016 (0.011)	-0.020*** (0.008)	-0.019* (0.012)	-0.019** (0.008)	-0.023** (0.011)	-0.020*** (0.008)	-0.015 (0.011)
Ctry_cultural value	-0.002 (0.003)	0.000 (0.003)	-0.003 (0.002)	-0.001 (0.002)	-0.006*** (0.002)	0.001 (0.002)	0.005** (0.002)	0.005*** (0.002)	-0.004 (0.003)	0.000 (0.002)	-0.002 (0.002)	-0.003** (0.002)
Ctry_cultural value x CSP index_firmdev	-0.001** (0.000)	-0.001*** (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000* (0.000)	0.001** (0.000)	-0.001* (0.000)	-0.002*** (0.000)	0.001* (0.001)	0.002*** (0.001)	-0.000 (0.000)	0.000 (0.000)
CSP index_ctrymean	-0.101 (0.100)	-0.236*** (0.079)	-0.058 (0.109)	-0.229*** (0.088)	0.004 (0.098)	-0.255*** (0.087)	0.022 (0.111)	-0.140 (0.089)	-0.125 (0.102)	-0.249*** (0.080)	-0.105 (0.102)	-0.236*** (0.081)
Observations	12,771	7,871	12,771	7,871	12,771	7,871	12,749	7,842	12,771	7,871	12,771	7,871
Industry 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
Model R-squared	0.342	0.299	0.342	0.292	0.344	0.294	0.343	0.296	0.343	0.298	0.343	0.293

Table 4 Subgroup Analyses (continued)

This table presents the HLM regressions of Tobin's Q on corporate social performance (CSP), Hofstede's cultural value dimensions, the interaction between CSP and each Hofstede dimension, and control variables for the full sample for two subgroups: (1) those firms with low institutional ownership; and (2) those firms with high institutional ownership. Low/high institutional ownership is defined as those firms where ownership is below/above the sample median. All variables are defined in the Appendix. Clustered standard errors by firm are reported in parentheses. ***, **, and * indicate statistical significance at the 1 percent, 5 percent and 10 percent levels (two-tailed) respectively. Control variables are not reported here to conserve space.

Panel B. Subgroup analyses based on institutional ownership

Variables	Individualism		Uncertainty avoidance		Long-term orientation		Indulgence		Power distance		Masculinity	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
CSP index_firmdev	-0.025*** (0.008)	-0.028*** (0.011)	-0.025*** (0.008)	-0.029*** (0.011)	-0.024*** (0.008)	-0.028*** (0.011)	-0.025*** (0.008)	-0.029*** (0.011)	-0.025*** (0.008)	-0.029*** (0.011)	-0.024*** (0.008)	-0.029*** (0.011)
Ctry_cultural value	0.001 (0.003)	-0.002 (0.003)	-0.001 (0.003)	-0.004* (0.002)	-0.005** (0.002)	-0.003 (0.002)	0.002 (0.002)	0.006*** (0.002)	-0.002 (0.003)	-0.000 (0.003)	-0.001 (0.002)	-0.004*** (0.001)
Ctry_cultural value x CSP index_firmdev	-0.001*** (0.000)	-0.001 (0.000)	0.000 (0.000)	-0.000 (0.000)	0.001*** (0.000)	0.000 (0.000)	-0.002*** (0.000)	-0.000 (0.000)	0.002*** (0.001)	0.001 (0.001)	-0.000 (0.000)	-0.000 (0.000)
CSP index_ctrymean	-0.154 (0.095)	-0.170* (0.096)	-0.132 (0.107)	-0.126 (0.107)	-0.057 (0.097)	-0.136 (0.106)	-0.086 (0.105)	-0.062 (0.111)	-0.182* (0.099)	-0.183* (0.094)	-0.149 (0.098)	-0.181* (0.099)
Observations	10,331	10,311	10,331	10,311	10,331	10,311	10,305	10,286	10,331	10,311	10,331	10,311
Industry 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
Model R-squared	0.299	0.357	0.296	0.357	0.299	0.358	0.298	0.358	0.300	0.357	0.297	0.358