Societal trust and firm-level trust: Substitute or complement? An international evidence

Cheng Zhang, School of Economics, Nanjing University of Finance and Economics, Nanjing, China

Kung-Cheng Ho, Pearl River Delta Collaborative Innovation Center of Scientific Finance and Industry, Institute of Regional Finance, School of Finance, Guangdong University of Finance and Economics, China

Cheng Yan, University of Essex, Colchester, UK

Yujing Gong, Wenlan School of Business, Zhongnan University of Economics and Law, Wuhan, China

Societal Trust and Firm-level Trust: Substitute or Complement?

An International Evidence

Abstract

We study the relationship between the level of societal trust in a country and corporate trust-building activities. Using an international sample of firms from 32 countries from the period of 2004-to 2018 and a country-level index for societal trust, we document that societal trust is negatively associated with corporate social responsibility (CSR), serving as the proxy for corporate trust-building investment. Further analyses show that firms in low-trust countries tend to invest more in CSR when they are controlled by large foreign shareholders originating from low-trust countries. The negative impact of societal trust on CSR is pronounced for firms located in less stable countries. Overall, our results suggest that societal trust and firm-level trust act as substitutes. From the perspective of risk management, the results confirm our argument that the marginal benefits of CSR-as-insurance are more crucial for firms located in low-trust countries.

1. Introduction

Societal trust is generalized trust in other people in the society and is a key element of social capital and culture (Guiso et al., 2009). Besides the societal level, trust can accrue at institutional and individual levels as well. Some firms can invest more in social capital to obtain the trust from outside investors and stakeholders (Coleman, 1994; Glaeser et al., 2002). In the scenario of cross-country differences in societal trust, how firms accordingly adjust their investments to improve social capital at the firm level is a critical issue that firms worldwide should deal with. Although prior studies provide ample evidence that societal trust facilitates corporate decision making, such as peer-to-peer lending (Duarte et al., 2012), R&D investment (Ang et al., 2015), cash holdings (Dudley and Zhang, 2016), tax avoidance (Kanagaretnam et al., 2018), risk-taking (Kanagaretnam et al., 2019), and management earnings forecasts (Guan et al., 2020), it has paid little attention to how societal trust influences corporate investment decision on trust-building activities. The objective of our paper is to address this question.

One of the challenges for our research design is how to measure trust-building investment at the firm level. Recent works in finance suggest that a firm's corporate social responsibility (CSR) activities generate social capital in building the trust among its outside shareholders and stakeholders (Sacconi and Degli, 2011; Lins et al., 2017; Dyck et al., 2019). It is a widespread view among practitioners and corporations as well (Fitzgerald, 2003). Accordingly, our paper focus on CSR activities as a measure of trust-building investment at the firm level. We argue that societal trust is empirically relevant in describing the relation between a firm's insiders and its outsiders and their attitude towards corporate CSR engagement. There are two possible reasons why the notion of trust at the societal level may affect corporate trust-building activities.

The first reason is that the improvement of an agent's social capital is more valuable in a society where overall social capital is higher (Putman, 2000). In countries where people have a higher propensity to trust, managers are perceived to be more trustworthy and their engagement in CSR activities is more likely to be viewed as trust-enhancing activities. By contrast, in low-trust countries, a firm's CSR activities tend to be viewed by investors and other stakeholders as window dressing and less genuine activities. Specifically, shareholders are concerned that managers may use the strategical CSR for private benefits at the expense of outsiders. In order to mitigate such incentives, outside investors may choose to put pressure on management to cut costlier

CSR involvements by investing in operation-related projects. In this case, societal trust can act as a complement for corporate trust-building activities. We therefore predict societal trust is positively associated with CSR performance according to this hypothesis.

The second reason involves the firm's desire for risk management. CSR investment can provide valuable insurance-like protection for the firm against event risk (Godfrey, 2005; Godfrey et al., 2009). In high-trust countries, firms can benefit a lot from their trustful investors and stakeholders, such as banks and other debt holders, customers, and employees, especially during the crisis period (Lins et al., 2017). Besides these financial market benefits, high societal trust can as well as decrease individual firm risk (Kanagaretnam et al., 2019). As such, managers could have lower incentives to improve investment in costlier CSR activities. By contrast, firms with managers whom shareholders view as less trustworthy and whose stakeholders are distrustful may have difficulty raising external capital and have a less stable supply chain, weaker customer relationship, and poorer working efficiency employees. Those firms suffer severer losses when they are in the face of a negative shock. In line with the view of risk management, it is essential for managers to build social capital and boost reputation through CSR engagement, which becomes a cushion against negative risks (Minor and Morgan, 2011; Kim et al., 2020). Consequently, the marginal benefits of CSR-as-insurance are limited for firms located in high-trust countries but are more pronounced for firms in low-trust countries. In this case, societal trust and firm-level trust, CSR here, act as substitutes. We therefore deduce societal trust is negatively associated with CSR performance according to this hypothesis.

We examine the two competing hypotheses using a large sample of firms across 32 countries during the period of 2004 to 2018. Following prior studies (e.g., Pevzner et al., 2015; Dudly and Zhang, 2016; Kanagaretnam et al. 2018), we measure societal trust at the country level by its citizens' average response to the following question in the World Values Surveys (WVS): "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?" CSR is measured by environmental and society (E&S) ratings from Refinitiv ESG of Thomson Reuters, which are often used in empirical research into CSR (e.g., Ioannou and Serafeim, 2012; Dyck et al., 2019; Graafland and Noorderhaven, 2020). We find that societal trust negatively affects CSR performance. Specifically, firms located in

countries with lower levels of societal trust invest more in CSR activities. It is consistent with the hypothesis that firm-level trust, i.e., CSR performance here, plays a more important role in risk management in countries where trust is lower, and thus, acts as a substitute for the presence of societal trust. The result is robust when other firm-level, industry-level, and country-level potential determinants of CSR performance, as well as the year and industry fixed effects are controlled. Moreover, our main results are not changed when we employ an alternative proxy of societal trust at the country level. We also find that societal trust is significant and negative associated with each component of CSR, i.e., E or S.

To support a causal interpretation, we construct an instrumental variable specification based on the primary religious beliefs of a given country in our sample (Dudley and Zhang, 2016; Kanagaretnam et al., 2018; Abdelsalam et al., 2021). We continue to document a negative and significant association between societal trust and CSR performance. What's more, the US, the UK, and Japan tend to have a higher degree of societal trust and firms from these countries account for a large proportion of our sample. To mitigate the concern that our results are driven by these observations, we exclude these countries from our sample accordingly, and our results are unaffected.

Having established the causal relationship between societal trust and CSR performance, we next proceed by investigating the impact of the presence of foreign institutional investors on our findings. A recent study by Abdelsalam et al. (2021) provides evidence that large foreign shareholders originating from high-trust countries reduce the market risk of firms. In other words, it indicates that firms controlled by low-trust foreign shareholders suffer greater firm market risk. If the investment in CSR improvement was a desire for risk management, then a firm controlled by foreign shareholders originating from low-trust countries should invest more in CSR activities. In support of this view, we find that the negative impact of societal trust on CSR performance is more pronounced when the firm is controlled by large foreign shareholders originating from low-trust countries.

Lastly, we conduct tests to understand better the empirical importance of CSR in risk management against high risky environments. According to prior studies, we employ country-level political risk produced by the International Country Risk (ICRG), such as government stability, internal conflict, corruption, and bureaucracy quality, to capture some country characteristics related to country risk (Gelos and Wei, 2005;

Driessen and Laeven, 2007). We document that the negative impact of societal trust on CSR performance is stronger in a country with higher country risk. It further confirms our argument that the substitute relationship between societal trust and firm-level trust is from the desire for risk management.

Our study contributes to the literature in three ways. First, we contribute to a new strand of the finance literature that investigates the effects of societal trust on corporate decisions. In our study, we provide empirical insights into how societal trust affects corporate trust-building activities. Our results identify a substitute relationship between societal trust and firm-level trust, enriching the literature on the micro-level effect of societal trust. Second, we extend the strategic management literature that highlights the role of CSR on reputational insurance. Both of Chen and Wan (2020) and Chen et al. (2021) find a positive relationship between the province-level societal trust and CSR performance in China based on either social normative mechanism or expected utility mechanism, respectively. Taking an international perspective, our empirical identification indicates that in low-trust countries, CSR plays a more important role in risk management to signal a firm's trustworthiness to the outside shareholders and stakeholders. Third, we enrich the international business research about the impact of informal institutions on cross-country differences in firms' CSR engagement. Prior studies document that informal institution, national culture, and social norms for example, significantly affect corporate decisions. Our result shows that societal trust as an informal institution crowds out the firm-level trust-building activities.

The remainder of the paper is organized as follows. Section 2 reviews the related literature and develops testable hypotheses. Section 3 describes the research design and sample. Section 4 presents the empirical results. Section 5 concludes this paper.

2. Related literature and hypotheses development

2.1 Related literature on societal trust

Trust is perceived as the subjective probability an individual assigns to an action performed by a potential counterparty that is beneficial or at least not harmful to that individual (Gambetta, 1988). Considered as the core of culture and social capital, prior studies document that a higher level of societal trust facilitates economic growth and social efficiency (La Porta et al., 1997; Zak and Knack, 2001), bilateral trade and

investment (Guiso et al., 2009), stock market participation and financial development (Guiso et al., 2004, 2008). Following these studies, there is a growing branch of literature have started to investigate the impact of societal trust at the micro-level. For instance, Duarte et al. (2012) document that borrowers from high-trust regions have a higher probability of obtaining a loan and paying a lower interest rate than borrowers from low-trust regions.

In a theoretical framework, Carlin et al. (2009) demonstrate that societal trust plays an important role in the interaction between firm insiders and outside investors in the presence of incomplete contracts and the potential concerns of moral hazard. Consistent with this notion, recent empirical works provide the evidence that societal trust influence a firm's R&D investment (Ang et al., 2015), merger and acquisition transition (Ahern et al., 2015), cash holdings (Dudley and Zhang, 2016), tax avoidance (Kanagaretnam et al., 2018), risk-taking behavior (Kanagaretnam et al., 2019), earnings announcement and its forecasts disclosure (Pevzner et al., 2015; Guan et al., 2020).

More recently, there are two papers that discuss the association between trust and corporate social responsibility. In the view of societal trust as a kind of social norms, Chen and Wan (2020) find that Chinese firms in higher societal trust provinces perform better in CSR activities, especially for state-owned companies. From the expected utility perspective, Chen et al. (2021) propose that societal trust will reduce the subjective probability of corporations suffering losses for CSR engagement and enhances their expectations about obtaining higher corresponding returns from stakeholders, thereby increasing their expected utility from CSR. As a result, they argue that the positive impact of societal trust on CSR in China is due to the expected utility mechanism rather than the social normative mechanism.

2.2 Hypotheses development

Prior studies suggest that firms can build social capital to obtain the trust from stakeholders through their CSR activities (Sacconi and Degli, 2011; Lins et al., 2017; Dyck et al., 2019). Those trust-building activities are highly valued in societies where overall social capital is higher (Putman, 2000). Specifically, in more trusting economies where managers are disciplined by social trust norms (Guiso et al., 2006), CSR activities are more likely to enhance loyalty and strengthen bonds and implicit contracts with stakeholders (Ding et al., 2021). Lins et al. (2017) further document that firm-level

trust-building activities paid off during the 2008-2009 financial crisis, especially for firms located in high-trust regions. In a society with a lower level of trust, however, managers are less likely to internalize the values of honesty and trustworthiness into personal codes of conduct (Chen and Wan, 2020). Accordingly, outside shareholders and stakeholders are concerned that managers may adopt CSR strategies for their private benefit at the expense of outsiders. In other words, CSR activities are more likely to be viewed as window dressing and less genuine activities. Consequently, outside investors may put more pressure on managers to cut costlier CSR engagements by investing in operation-related projects. Due to the lack of social networks in areas with lower levels of societal trust (Payne et al., 2011), the returns generated from CSR are less substantial and thus firms have less incentives to engage in CSR (Chen and Wan, 2020). Based upon the above discussion, we propose our first hypothesis as follows:

Hypothesis 1a: Firms in high-trust countries are more likely to perform better in CSR activities.

From the perspective of risk management, the strategic management literature highlights that engaging in CSR activities is similar to purchasing insurance for a firm's reputation (Godfrey, 2005; Peloza, 2006; Koh et al., 2014; Kim et al., 2020). As an investment in moral capital, Godfrey et al. (2009) suggest that a firm's engagement in CSR signals managers' competence and generates an insurance payoff when negative events happen. Koh et al. (2014) document that CSR is more valuable as an ex-ante insurance mechanism for firms with higher litigation risks. Similar results are found in the bond market as well (Shiu and Yang, 2017). Using option-implied volatility as the proxy for ex-ante benefits, Kim et al. (2020) further document that the CSR-as-insurance mechanism is more beneficial to firms that have higher leverage, growth opportunities, or uncertainty but is less useful for sound firms. Lins et al. (2017) find that high-CSR firms had higher stock returns, experienced higher profitability, growth, and sales per employee, and raised more debt during the 2008-2009 financial crisis.

Besides the macroeconomic and financial market benefits of societal trust, prior studies also state that societal trust can decrease firm risk (Kanagaretnam et al., 2019). Garrett et al. (2014) highlight that trust can improve financial reporting quality, further lowering the ability of managers to take the excessive risk (Lim et al., 2014). To reciprocate the trust that society places on managers, they are less likely to engage in

excessive risk-taking activities in high-trust societies. Meanwhile, there is a lower level of pay disparity between CEOs and average employees in high-trust countries (Kanagaretnam et al., 2018). Due to this reduced incentive pay, excessive risk-taking among managers are muted in high-trust countries. Levine et al. (2018) argue that firms in economies with higher levels of societal trust are more resilient to systemic bank crises. Compared to similar firms in low-trust countries, those firms located in high-trust countries can easily access informal finance and suffer smaller drops in corporate profits and employment. Taken together, we argue that firms from low-trust countries have greater firm risk and may experience severer losses, especially in the face of negative shocks. In this case, a firm's CSR efforts are particularly valuable to signal to outsiders that it becomes more trusting and thus can better fulfill its implicit contractual obligations than other firms in the same country. From the perspective of risk management, we therefore deduce the following hypothesis:

Hypothesis 1b: Firms in low-trust countries are more likely to perform better in CSR activities.

3. Sample construction

3.1 Sample

According to Ho et al. (2020), we begin our initial sample with 82 countries from Medrano's (2011) "World Map of Interpersonal Trust". Our country-specific trust data are from WVS. We obtain firm-level financial data and ESG ratings from the Thomson Reuters Worldscope database and Refinitive ESG database, respectively. Since the coverage of firm-level ESG ratings begins in 2004 and is different across countries, our analysis uses the first year of coverage through 2018 as our sample period. We firstly exclude firms from the utility and financial industries because they are highly regulated by governments or greatly financially leveraged. After excluding firms with missing data, there are 30,060 observations in 32 countries left in our final sample.

3.2 Measuring societal trust

We construct our measure of societal trust based on the WVS question "Generally speaking, would you say that most people can be trusted or that you need to be careful in dealing with people?" Specifically, we calculate the average level of trust in a country (*Trust1*) as 100% plus the percentage of participants who responded that most people

can be trusted minus the percentage of participants who responded that cannot be too careful (Brockman et al., 2020). In robustness tests, we define the percentage of people who responded that most people can be trusted as an alternative measure of trust (*Trust2)* (Dudley and Zhang, 2016). For country-years with missing trust values, we fill it based on the most previous wave[1]. A higher value of *Trust1* or *Trust2* is an indicator that the country has a higher level of societal trust.

3.3 Measuring firm-level trust-building investment

According to prior studies, we adopt CSR performance to proxy for firm-level trust-building investment (Sacconi and Degli, 2011; Lins et al., 2017; Dyck et al., 2019). There are four dimensions of Refinitiv ESG ratings, economic (EC score), environmental (EN score), social (S score), and governance (CG score). Following the method used by Dyck et al. (2019) and Bae et al. (2020), we take the logarithm of the average value of Refinitiv's environmental and social scores to construct CSR performance (*Log (Score)*). As robustness checks, we further investigate the impact of societal trust on each dimension of CSR, respectively.

3.4 Summary statistics

Results in Table 2 show that *Log (Score)* has a mean of -0.15 and a standard deviation of 0.73. On average, 36% of participants responded that most people can be trusted at the country level, ranging from the Philippines with the lowest trust of 3% to Norway with the highest trust of 74%. It indicates that there is sufficient cross-country dispersion in the level of societal trust to identify variations in the effect of societal trust on the investment in CSR activities. Table 2 also presents the correlations among CSR performance, the trust measures, and control variables. The Pearson correlation coefficient between *Log(Score)* and *Trust1* (*Trust2*) is significantly negative, i.e., -0.08 (-0.09), suggesting that firms located in high-trust countries invest less in CSR activities. This primary result is consistent with our hypothesis 1b. In addition, all of the variance inflation factors (VIFs) between explanatory variables are well below 10, which indicates that collinearity is not a serious problem in our research setting.

[Insert Table 1]

---

[1] There are four waves of the WVS survey in our sample period, 1999-2004, 2005-2009, 2010-2014, and 2017-2020. According to Guan et al., (2020), we measure the trust variable based on the results of the most recent survey for the specific country-year.

4. Empirical results

4.1 Cross-country societal trust and firms' CSR performance

Our baseline test examines the relation between societal trust in a given country and firms' CSR performance using the specification,

$$Ln(Score)_{ijt} = \beta_0 + \beta_1 Trust_{ijt} + \gamma\, X_{ijt} + \varepsilon_{ijt} \qquad (1)$$

Where the dependent variable is the logarithm of the average scores of environmental and society of firm i in country j in year t. *Trust* is the level of societal trust in a firm's country. *Xijt* is a vector of control variables that capture various firm-level, industry-level, and country-level determinants of CSR performance. In particular, we include the natural logarithm of firm size (*Size)*, long-term debt ratio (*LEV*), turnover (*TURN*), market-to-book ratio (*MB*), return on assets (*ROA*), asset tangibility (*TANG*), sales growth (*GROWTH*), and stock volatility (*VOL*) (Ioannou and Serafeim, 2012; Brogaard et al., 2017). At the country level, we control for inflation rate (*INFLATION*), GDP growth rate (*GGDP*) and economic freedom index (*FREEDOM*) (Kaufmann et al., 2011; Wang et al., 2016). We also control for product market competition (*HHI*) and litigation risk (*LITIGATION*) in a given industry (Deng et al., 2013). All variables are specifically defined in Table 1. Additionally, we control for the year-fixed effect and industry-fixed effect in Eq. (1) to capture the yearly and industry-generic variations in CSR performance, respectively. Last, the regression coefficients are estimated by pooled ordinary least square method, and standard errors are adjusted for heteroscedasticity and firm-level clustering.

We report the results of these tests in Table 3. The negative and significant coefficient on the societal trust at the country level, whereby we adopt *Trust1* or *Trust2* as a proxy in Columns 1 and 3, indicates a positive relation between societal trust and firms' CSR performance, each significant at the 1% level. These results are not only statistically significant but also economically meaningful. A one standard deviation change in *Trust1* (0.24) (*Trust2* (0.12)) is associated with a 6.38% (6.87%) decrease in CSR performance. It further indicates that if there were one more percentage of people who responded that most people can be trusted in a given country, firms located in this

country would perform 1.77% worse in CSR activities.

Although the results are a bit weaker in Columns 2 and 4 when we control for numerous firm-level, industry level, and country-level control variables, the coefficients of *Trust1* and *Trust2* are still significant at the 1% level. It further supports our hypothesis 1b that societal trust and firm-level trust-building activities are substitutes. In addition, results from Table 9 show that each component of CSR, i.e., E or S, is significantly negatively associated with CSR.

[Insert Table 3]

[Insert Table 9]

4.2 The role of foreign shareholder trust

Recent studies provide evidence that foreign shareholder trust can affect local firms' decision-making, such as debt contracting, international capital gains, and risk-taking (Ang et al., 2015; Bottazzi et al., 2016; Brockman et al., 2020; Abdelsalam et al., 2021). We therefore conjecture that foreign shareholder trust should also shape a firm's investment decision in trust-building activities. Firms controlled by foreign trusting shareholders display lower levels of market risk, whereas firms with distrustful foreign controlling shareholders experience greater firm market risk (Abdelsalam et al., 2021). Due to the desire for risk management, we deduce that firms controlled by foreign shareholders originating from low-trust countries invest more in CSR activities. Based on hypothesis 1b, the negative association between societal trust and CSR performance is more pronounced when a firm has low-trust foreign shareholders.

Following Abdelsalam et al. (2021), foreign shareholder trust (*SHTRUST*) is measured as the level of societal trust in the country of the origin of the foreign shareholder, where the level of societal trust is measured by the percentage of respondents that most people can be trusted from the WVS. We estimate the regression model specified in Eq. (2) by focusing on the role of foreign shareholder trust on the impact of societal trust on CSR.

$$Ln(Score)_{ijt} = \beta_0 + \beta_1 Trust_{ijt} + \beta_2 Trust_{ijt} \times SHTRUST_{ijt} \qquad (2)$$
$$+ \beta_3 SHTRUST_{ijt} + \gamma\, X_{ijt} + \varepsilon_{ijt}$$

The results presented in columns (2) and (3) of Table 4 are based on *Trust1*, and

those in columns (4) and (5) are based on *Trust2*. Table 4 reports the estimated results of Eq. (2). We find that regardless of which societal trust measure we used and whether control variables are included or not, the coefficients of *SHTRUST* in Columns 1-4 are all negative and significant at the 1% level. It indicates that firms with low-trust foreign shareholders tend to put more effort into CSR performance. The interaction term between *Trust1* (*Trust2*) and *SHTRUST* is significantly positive for all models, which means the negative impact of societal trust on CSR performance is more pronounced when the firm is controlled by large foreign shareholders originating from low-trust countries. This is consistent with our expectation that societal trust plays a more important role in driving a firm's trust-building investment when its large foreign shareholder is associated with lower levels of societal trust.

[Insert Table 4]

4.3 The role of country-level political stability

National stability has been found to greatly affect corporate investment including CSR activities (Jia and Li, 2020). In a politically unstable country, firms' relations with their stakeholder especially socio-political stakeholders could be more volatile and riskier. The negative shock to the firm due to national instability may raise investors' concern about a firm's ability to fulfill its implicit contractual obligations. In face of a higher political risky environment, firms therefore are more likely to engage in CSR activities to build trust with their stakeholders and signal their commitment to honor the contract. From the view of risk management, we deduce that the effect of societal trust on firm-level trust-building investment could also depend on political stability.

To investigate whether the effect of societal trust on CSR performance varies with the cross-country dimension of political stability, we include the proxy of political stability (*PS*) and the interaction term between *Trust* and *PS* based on the regression of Eq. (1) to form the regression of Eq. (3). Following prior studies, we employ four proxies for political stability from the ICRG database, the government stability score (e.g., popular support) (*GOV*), internal conflict (e.g., terrorism or civil war) (*InternalConflict*), the anti-corruption index (*Corruption*), and bureaucracy quality (*BureaucracyQuality*) for each given country in our sample (Gelos and Wei, 2005; Eleswarapu and Venkataraman, 2006). Each proxy ranges from 0 to 100, with a lower rating indicating lower political stability or higher political risk.

$$Ln(Score)_{ijt} = \beta_0 + \beta_1 Trust_{ijt} + \beta_2 Trust_{ijt} \times PS_{ijt} + \beta_3 PS_{ijt} \qquad (3)$$
$$+ \gamma\, X_{ijt} + \varepsilon_{ijt}$$

The results presented in Panel A-D from Table 5 are based on *InternalConflict*, *Gov*, *Corruption*, and *BureaucracyQuality* as the proxy for political stability, respectively. We find that across all four specifications in each panel, the stand-alone term of societal trust continues to have a significantly negative effect on CSR performance. The coefficients of each proxy for political stability are all negative and significant at the 1% level, suggesting that firms located in a politically unstable country may invest more in CSR for insurance protection. More importantly, the interaction term of *Trust* and *PS* has a significant and negative coefficient in all columns in each panel. This result not only suggests that the negative impact of societal trust on firm-level trust-building is more important in politically unstable countries, but also means that the negative impact of political risk may be expected to be considered significant in countries with poor societal trust. This is consistent with our argument that managers in more unstable countries rely more on societal trust in adjusting their investment-related with trust-building improvement.

[Insert Table 5]

4.4 Excluding the US, the UK, and Japan

There is another concern that our empirical results might be primarily driven by some countries with a relatively high degree of societal trust, such as the US, the UK, and Japan, and firms from those countries account for a large proportion of our sample as well. To mitigate this concern, we exclude these countries out of our sample accordingly and re-estimate Eq. (1). We present the results in Table 6, where Columns 2 to 5 report the estimated results when the US is excluded, and Columns 6 to 9 are the results when the US, the UK, and Japan are excluded, respectively. As shown in Table 6, we continue to find a negative and significant association between societal trust and firm-level CSR performance, suggesting that our results are robust and not driven by these countries.

[Insert Table 6]

4.5 Instrumental variables estimate

The omitted variable problem is a common concern for cross-country studies.

Although we have included as many control variables as we can, this potential concern still exists in our research setting because CSR practices vary across countries along some unobserved dimensions or characteristics that may also correlate with societal trust. In order to address this concern, we employ a two-stage least squares (2SLS) regression framework based on an instrumental variable approach. Following prior studies by Prezner et al. (2015) and Dudley and Zhang (2016), we instrument societal trust with a country's primary religion. Guiso et al. (2004) state that different religions may affect the people's trust toward others differently, which suggests that the primary cross-country religion satisfies the relevance criteria. Moreover, a country's primary religion adheres to is original from their ancestor, religious beliefs therefore are more primitive, and relatively constant over time and, therefore, can be viewed as exogenous (La Porta et al., 1997; Guiso et al., 2006, 2008; Prezner et al., 2015). It further suggests that primary religion is less likely to be directly associated with a firm's CSR performance. In our sample, there are five primary religions, Catholic, Protestant, Muslim, Buddhist, and Indigenous (Stulz and Williamson, 2003; Prezner et al., 2015). Accordingly, we construct five dummy variables to represent a country's religious denomination and include them as our instruments in the first-stage regression of 2SLS.

We present the 2SLS regression results in Panel A of Table 7. Column 2 (3) reports the results from the first-stage regression when *Trust1* (*Trust2*) is used as the proxy for societal trust at the country level. Consistent with prior studies, we find that societal trust is significantly high in countries where the primary religion is Protestant, Buddhist, or Indigenous and significantly low in countries where the primary religion is Catholic or Muslim (Guiso et al., 2003, 2006; Prezner et al., 2015). The absolute *t*-statistics of the coefficients on these five dummies are well above the critical value of 3.16 (Hill et al., 2018), suggesting that the primary religion is not a weak instrument for country-level societal trust. Columns 3 and 4 (5 and 6) represent the second-stage regression results, where the dependent variable is the logarithm of CSR performance, and the main independent variable is the predicted value of *Trust1* (*Trust2*) from the first-stage regression. Consistent with the OLS results represented in Table 3, we find that both measures of societal trust continue to have a significant and negative impact on CSR performance, suggesting that our findings are robust to correcting for the endogeneity of societal trust.

To control for time-invariant unobservable heterogeneity (e.g., time-invariant

country-specific factors), we employ the GMM approach to further alleviate endogeneity concerns in our research setting (Ang et al., 2015). In addition, the cross-country societal trust is not a time-invariant measurement, which allows us to utilize the GMM approach to further address the potential endogeneity of all control variables in the IV regressions that may bias the 2SLS estimates (Arellano and Bond, 1991). Panel B shows the results of the GMM estimations corresponding to our main analysis of Table 3. The results are largely in line with those in Table 3. Firms in countries with higher trustworthiness are less likely to invest in firm-level trust-building activities, further confirming our hypothesis 1b.

[Insert Table 7]

4.6 Alternative measure of societal trust

The results of our research thus far are based on a measure of interpersonal trust of average citizens in a country. Although this measure is widely used in the literature related to the economic outcomes of societal trust, one potential drawback is that this interpersonal measure may not accurately reflect people's attitudes toward corporations and organizations (Ho et al., 2020). Following prior studies, we create an alternative measure of societal trust ($Trust_{GOV}$) based on one question from the WVS, "how much confidence do you have in the government? Is it a great deal of confidence, quite a lot of confidence, not a lot of confidence, or none at all?" Our alternative proxy of societal trust reflects people's attitudes toward the government, which is constructed by adding the percentages of the answers of "a great deal of confidence" and "quite a lot of confidence" for each country in our sample.

Accordingly, we re-estimate Eq. (1) with this alternative societal trust measure and present the results in Table 8. We find that the coefficients of $Trust_{GOV}$ are all negative and significant at the 1% confidence level, confirming the evidence drawn from data on both of *Trust1* and *Trust2*. Moreover, both of the magnitudes of the absolute value of $Trust_{GOV}$ are well larger (1.4702, 0.5901) than those of *Trust1* (0.2657, 0.0468) or *Trust2* (0.5721, 0.1410) in Table 3, suggesting that this alternative measure of societal trust may better capture people's attitudes toward corporate trust-building activities.

[Insert Table 8]

5. Conclusions

In this paper, we explore the role played by societal trust in shaping firms' investment decisions in the improvement of trust-building activities. We test two competing hypotheses about the effect of societal trust on CSR performance. Our first hypothesis predicts that firms located in high-trust countries invest more in CSR activities because the improvement of CSR is more valuable in a society where overall social capital is higher. Societal trust is complementary to firm-level trust. The risk management hypothesis predicts the opposite. According to this hypothesis, the marginal benefits of CSR-as-insurance are more pronounced for firms located in low-trust countries since those firms experience greater risk and suffer more losses in the face of negative events. Societal trust and corporate trust-building activities act as substitutes.

We document three findings that support the risk management hypothesis. We first show that societal trust has a negative effect on CSR performance. The result is robust to controlling for firm-level, industry-level, and country-level potential determinants of CSR performance, as well as the year and industry-fixed effects. The negative relationship still holds for alternative measures of societal trust and for each dimension of E&S. Second, we find that the effect of societal trust on CSR is stronger when the firm is controlled by large foreign shareholders originating from low-trust countries. Third, we show that the role of CSR-as-insurance is more important for firms that are located in more unstable countries. Instrument variable tests suggest a causal interpretation of the effect of societal trust on CSR.

Our findings highlight the role played by societal trust in shaping corporate trust-building engagement. From an international perspective, we contribute to the nascent body of literature by uncovering a micro-level impact of societal trust: CSR, which is a crucial topic that has been ignored by prior studies. In future analyses, we aim to explore the potential mechanism through which societal trust affects CSR. Our results are mainly based on the perspective of risk management, therefore future research that provides more evidence related to the economic consequence of the improvement of CSR is quite meaningful, especially for low-trust countries.

References

Abdelsalam, O., Chantziaras, A., Batten, J. A., & Aysan, A. F. (2021). Major shareholders' trust and market risk: Substituting weak institutions with trust. *Journal of Corporate Finance*, *66*, 101784.

Ahern, K. R., Daminelli, D., & Fracassi, C. (2015). Lost in translation? The effect of cultural values on mergers around the world. *Journal of Financial Economics*, *117*(1), 165-189.

Ang, J. S., Cheng, Y., & Wu, C. (2015). Trust, investment, and business contracting. *Journal of Financial and Quantitative Analysis*, *50*(3), 569-595.

Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, *58*(2), 277-297.

Bae, K. H., El Ghoul, S., Gong, Z. J., & Guedhami, O. (2021). Does CSR matter in times of crisis? Evidence from the COVID-19 pandemic. *Journal of Corporate Finance*, *67*, 101876.

Bottazzi, L., Da Rin, M., & Hellmann, T. (2016). The importance of trust for investment: Evidence from venture capital. *Review of Financial Studies*, *29*(9), 2283-2318.

Brogaard J, Li D, & Xia Y. (2017). Stock liquidity and default risk. J*ournal of Financial Economics*, 124(3): 486-502.

Brockman, P., El Ghoul, S., Guedhami, O., & Zheng, Y. (2020). Does social trust affect international contracting? Evidence from foreign bond covenants. *Journal of International Business Studies*, 1-34.

Carlin, B. I., Dorobantu, F., & Viswanathan, S. (2009). Public trust, the law, and financial investment. *Journal of Financial Economics*, *92*(3), 321-341.

Chen, S., Chen, Y., & Jebran, K. (2021). Trust and corporate social responsibility: From expected utility and social normative perspective. *Journal of Business Research*, *134*, 518-530.

Chen, X., & Wan, P. (2020). Social trust and corporate social responsibility: Evidence from China. *Corporate Social Responsibility and Environmental Management*, *27*(2), 485-500.

Coleman, J. S. (1994). *Foundations of social theory*. Harvard university press.

Deng, X., Kang, J.-K., & Low, B. S. (2013). Corporate social responsibility and stakeholder value maximization: Evidence from mergers. *Journal of Financial Economics*, 110(1), 87–109.

Ding, W., Levine, R., Lin, C., & Xie, W. (2021). Corporate immunity to the COVID-19 pandemic. *Journal of Financial Economics*, *141*(2), 802-830.

Driessen, J., & Laeven, L. (2007). International portfolio diversification benefits: Cross-country evidence from a local perspective. *Journal of Banking & Finance*, *31*(6), 1693-1712.

Duarte, J., Siegel, S., & Young, L. (2012). Trust and credit: The role of appearance in peer-to-peer lending. *Review of Financial Studies*, *25*(8), 2455-2484.

Dudley, E., & Zhang, N. (2016). Trust and corporate cash holdings. *Journal of Corporate Finance*, *41*, 363-387.

Dyck, A., Lins, K. V., Roth, L., & Wagner, H. F. (2019). Do institutional investors drive corporate social responsibility? International evidence. *Journal of Financial Economics*, *131*(3), 693-714.

Eleswarapu, V. R., & Venkataraman, K. (2006). The impact of legal and political institutions on equity trading costs: A cross-country analysis. *Review of Financial Studies*, *19*(3), 1081-1111.

FitzGerald, N. (2003). CSR: Rebuilding Trust in Business, A Perspective on Corporate Social Responsibility. *Speech delivered in October*.

Gambetta, D., 1988. Can we trust? In: Gambetta, D. (Ed.), Trust: Making and breaking cooperative relations, Blackwell, New York, NY, pp. 213–237.

Garrett, J., Hoitash, R., & Prawitt, D. F. (2014). Trust and financial reporting quality. *Journal of Accounting Research*, *52*(5), 1087-1125.

Gelos, R. G., & Wei, S. J. (2005). Transparency and international portfolio holdings. *Journal of Finance*, *60*(6), 2987-3020.

Glaeser, E. L., Laibson, D., & Sacerdote, B. (2002). An economic approach to social capital. *Economic Journal*, *112*(483), F437-F458.

Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. *Academy of Management Review*, 30(4), 777-798.

Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. *Strategic Management Journal*, 30(4), 425-445.

Graafland, J., and Noorderhaven, N. (2020). Culture and institutions: How economic freedom and long-term orientation interactively influence corporate social responsibility. *Journal of International Business Studies*, 51, 1034-1043.

Guan, Y., Lobo, G. J., Tsang, A., & Xin, X. (2020). Societal trust and management earnings forecasts. *Accounting Review*, *95*(5), 149-184.

Guiso, L., Sapienza, P., & Zingales, L. (2004). The role of social capital in financial development. *American Economic Review*, *94*(3), 526-556.

Guiso, L., Sapienza, P., & Zingales, L. (2006). Does culture affect economic outcomes?. *Journal of Economic Perspectives*, *20*(2), 23-48.

Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. *Journal of Finance*, *63*(6), 2557-2600.

Guiso, L., Sapienza, P., & Zingales, L. (2009). Cultural biases in economic exchange?. *The quarterly journal of economics*, *124*(3), 1095-1131.

Hill, R. C., Griffiths, W. E., & Lim, G. C. (2018). *Principles of Econometrics*. John Wiley & Sons.

Ho, K. C., Yen, H. P., Gu, Y., & Shi, L. (2020). Does societal trust make firms more trustworthy? *Emerging Markets Review*, *42*, 100674.

Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance & quest: The role of nation-level institutions. *Journal of International Business Studies*, 43(9): 834–864.

Jia, J., & Li, Z. (2020). Does external uncertainty matter in corporate sustainability performance?. *Journal of Corporate Finance*, *65*, 101743.

Kanagaretnam, K., Lobo, G. J., Wang, C., & Whalen, D. J. (2019). Cross-country evidence on the relationship between societal trust and risk-taking by banks. *Journal of Financial and Quantitative Analysis*, *54*(1), 275-301.

Kanagaretnam, K., Lee, J., Lim, C. Y., & Lobo, G. (2018). Societal trust and corporate tax avoidance. *Review of Accounting Studies*, *23*(4), 1588-162.

Kaufmann D, Kraay A, & Mastruzzi M. (2011). The worldwide governance indicators: Methodology and analytical issues. *Hague Journal on the Rule of Law*, 3(2): 220-246.

Kim, S., Lee, G., & Kang, H. G. (2021). Risk management and corporate social responsibility. *Strategic Management Journal*, *42*(1), 202-230.

Koh, P. S., Qian, C., & Wang, H. (2014). Firm litigation risk and the insurance value of corporate social performance. *Strategic Management Journal*, 35(10), 1464-1482.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1997.Trust in large organizations. *American Economic Review* 87,333–338.

Levine, R., Lin, C., & Xie, W. (2018). Corporate resilience to banking crises: The roles of trust and trade credit. *Journal of Financial and Quantitative Analysis*, *53*(4), 1441-1477.

Lim, C. Y., Kausar, A., Lee, E., & Walker, M. (2014). Bank accounting conservatism, lending behavior and credit crisis. *Journal of Accounting and Public Policy*, *33*, 260-278.

Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *Journal of Finance*, *72*(4), 1785-1824.

Medrano, J., (2011). World Map of Interpersonal Trust. Working Paper. World Value Survey Archive. www.jdsurvey.net.

Minor, D., & Morgan, J. (2011). CSR as reputation insurance: Primum non nocere. *California Management Review*, 53(3), 40-59.

Payne, G. T., Moore, C. B., Griffis, S. E., & Autry, C. W. (2011). Multilevel challenges and opportunities in social capital research. *Journal of Management*, 37(2), 491–520.

Peloza, J. (2006). Using corporate social responsibility as insurance for financial performance. *California Management Review*, 48(2), 52-72.

Pevzner, M., Xie, F., & Xin, X. (2015). When firms talk, do investors listen? The role of trust in stock market reactions to corporate earnings announcements. *Journal of Financial Economics*, *117*(1), 190-223.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon and schuster.

Sacconi, L., & Antoni, G. (Eds.). (2010). *Social capital, corporate social responsibility, economic behaviour and performance*. Springer.

Shiu, Y. M., & Yang, S. L. (2017). Does engagement in corporate social responsibility provide strategic insurance-like effects? *Strategic Management Journal*, 38(2), 455-470.

Stulz, R. M., & Williamson, R. (2003). Culture, openness, and finance. *Journal of Financial Economics*, *70*(3), 313-349.

Wang M, Rieger M O, & Hens T. (2016). How time preferences differ: Evidence from 53 countries. *Journal of Economic Psychology*, 52, 115-135.

Zak, P. J., & Knack, S. (2001). Trust and growth. *Economic Journal*, *111*(470), 295-321.

Table 1 Variable definitions

Variable	Variable definitions
Log (Score)	The logarithm of the average value of environmental and social scores.
Trust1	The time-invariant trust index is calculated based on the formula: 1+(participants who respond "most people can be trusted")-(participants who respond "can't be too careful").
Trust2	The survey question is "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?"
SHTRUST	The level of societal trust in the country of origin of the foreign shareholder (Abdelsalam et al., 2021).
GOV	Government stability (ICRG).
InteralConflict	Interal Conflict (ICRG).
ExternalConflict	External Conflict (ICRG).
Corruption	Corruption (ICRG).
BureaucracyQuality	Bureaucracy Quality (ICRG).
INFLATION	Inflation rate: the annual rate of change on consumer price index. Source: World Bank.
GGDP	GDP growth rate (Meng and Yin, 2019).
FREEDOM	Economic Freedom of the World (EFW) datasets, Worldwide Governance Indicators (Kaufmann et al., 2011; Wang et al., 2016).
	Industry characteristics
HHI	The Herfindahl Hirschman index: the sum of squared market shares of all the firms in a particular industry.
LITIGATION	Dummy variable is defined to be one if a firm operates in a high-litigation industry (SIC codes 2833–2836, 3570–3577, 3600–3674, 5200–5961, 7370–7374, 8731–8734) and zero otherwise.
	Firm characteristics
SIZE	Natural log of assets.
LEV	Debt to total assets.
TURN	The average monthly share turnover over the current fiscal year period minus the average monthly share turnover over the previous fiscal year period, where monthly share turnover is calculated as the monthly trading volume divided by the total number of shares outstanding during the month.
MB	Market value of equity to book value of equity.
ROA	Return on assets: net income divided by the book value of assets (Brogaard et al., 2017).
TANG	The ratio of property, plant, and equipment (PPE) to the book value of total assets (Brogaard et al., 2017).
GROWTH	The sales growth rate, calculated as the ratio of the difference between sales in the current year and prior year to sales in the prior year (Brogaard, 2017).
VOL	Annualized stock return volatility, is computed as the standard deviation of weekly stock return (Brogaard et al., 2017).

Table 2 Sample and Correlation coefficients between independent variables

		Mean	STD	VIF	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1)	Log (Score)	-0.15	0.73																
(2)	Trust1	0.74	0.24	1.16	-0.08														
(3)	Trust2	0.36	0.12		-0.09	1.00													
(4)	SIZE	8.99	3.00	1.33	0.39	-0.09	-0.15												
(5)	LEV	0.55	0.20	1.16	0.17	-0.10	-0.09	0.15											
(6)	MB	3.34	5.19	1.12	0.01	0.01	0.00	-0.02	0.00										
(7)	TURN	0.04	0.33	1.01	-0.05	0.02	0.02	-0.03	-0.03	-0.01									
(8)	ROA	0.11	0.18	1.07	0.13	-0.05	-0.06	0.18	-0.01	0.01	-0.02								
(9)	TANG	0.28	0.23	1.06	0.10	-0.02	-0.02	0.12	0.01	0.02	-0.01	0.05							
(10)	GROWTH	0.10	0.40	1.03	-0.14	0.02	0.03	-0.11	-0.06	0.00	0.07	-0.01	-0.02						
(11)	VOL	0.06	0.22	1.01	-0.01	0.01	0.01	0.04	-0.02	0.00	0.04	-0.04	0.02	0.00					
(12)	HHI	0.16	0.20	1.18	0.04	0.05	0.05	-0.01	-0.04	0.04	0.03	0.00	0.03	0.01	0.05				
(13)	LITIGATION	0.23	0.42	1.09	-0.09	-0.03	-0.03	-0.06	-0.16	-0.01	0.00	0.00	-0.19	0.04	0.01	-0.07			
(14)	GGDP	0.05	0.01	2.18	-0.03	0.28	0.29	-0.22	0.05	-0.09	-0.02	-0.02	-0.12	-0.01	-0.04	-0.32	0.06		
(15)	INFLATION	0.10	0.01	1.84	0.02	0.26	0.25	0.03	0.05	-0.07	-0.03	-0.03	-0.08	-0.06	-0.02	-0.24	0.05	0.64	
(16)	FREEDOM	0.55	0.30	1.12	0.89	-0.07	-0.07	0.25	0.18	0.01	-0.05	0.15	0.06	-0.11	-0.02	0.01	-0.07	0.03	0.01

Noted: Numbers in bold are statistically significant at the 10% confidence level.

Table 3 The effect of trust on ESG

Dependent variable	Log (Score)			
	Model 1	Model 2	Model 3	Model 4
constant	-0.0713 **	-1.8395 ***	-0.0638 **	-1.8385 ***
	(-2.26)	(-43.80)	(-2.02)	(-43.85)
Trust1	-0.2657 ***	-0.0468 ***		
	(-16.29)	(-6.14)		
Trust2			-0.5721 ***	-0.1410 ***
			(-17.27)	(-9.09)
SIZE		0.0385 ***		0.0381 ***
		(56.28)		(55.69)
LEV		0.0736 ***		0.0722 ***
		(7.81)		(7.68)
MB		-0.0012 ***		-0.0012 ***
		(-3.48)		(-3.50)
DTURN		0.0033		0.0036
		(0.65)		(0.71)
ROA		-0.1068 ***		-0.1073 ***
		(-10.95)		(-11.01)
TANG		0.0224 ***		0.0229 ***
		(2.69)		(2.76)
GROWTH		-0.0301 ***		-0.0298 ***
		(-6.89)		(-6.82)
VOL		-0.0247 ***		-0.0245 ***
		(-3.48)		(-3.46)
HHI		0.1318 ***		0.1367 ***
		(13.03)		(13.53)
LITIGATION		-0.0048		-0.0056
		(-0.99)		(-1.15)
GGDP		-0.5669 **		-0.4262 *
		(-2.22)		(-1.67)
INFLATION		1.9505 ***		2.0465 ***
		(3.96)		(4.17)
FREEDOM		2.0214 ***		2.0213 ***
		(329.30)		(329.90)
Time FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Adj. R^2	0.10	0.83	0.10	0.83
Obs.		32,060		

Noted: The t-statistics are reported in parentheses. ***, **, * denote statistical significance at 1%, 5%, and 10%, based on robust standard errors clustered by country, respectively.

Table 4 Dependence of trust on country's SHTRUST

Dependent variable	Log (Score)			
	Model 1	Model 2	Model 3	Model 4
constant	1.3271 ***	-0.1551 ***	1.6155 ***	0.2033 ***
	(15.41) **	(-2.59)	(18.91)	(3.30)
Trust1	-2.2837 ***	-1.3990 ***		
	(-18.62)	(-24.22)		
Trust1*SHTRUST	5.9714 ***	4.0164 ***		
	(18.08)	(25.71)		
Trust2			-2.7180 ***	-1.8244 ***
			(-22.91)	(-33.01)
Trust2*SHTRUST			7.0263 ***	4.9585 ***
			(21.89)	(32.97)
SHTRUST	-4.0827 ***	-3.4801 ***	-4.8314 ***	-4.5434 ***
	(-19.50)	(-33.75)	(-23.16)	(-44.24)
CONTROL	NO	Yes	NO	Yes
Time FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Adj. R^2	0.10	0.84	0.11	0.84
Obs.		31,727		

Noted: The t-statistics are reported in parentheses. ***, **, * denote statistical significance at 1%, 5%, and 10%, based on robust standard errors clustered by country, respectively.

Table 5 *Dependence of trust on country stability*

Panel A: Country's Internal Conflict

Dependent variable	Log (Score)			
	Model 1	Model 2	Model 3	Model 4
constant	1.0795 ***	-1.0760 ***	1.0090 ***	-1.4492 ***
	(17.97) ***	(-22.78)	(17.00)	(-31.20)
Trust1	-2.8666 ***	-0.7742 ***		
	(-30.09)	(-17.67)		
*Trust1*InteralConflict*	28.3684 ***	8.9599 ***		
	(30.04)	(20.56)		
Trust2			-2.9158 ***	-0.6802 ***
			(-30.55)	(-15.11)
*Trust2*InteralConflict*			28.1355 ***	7.2871 ***
			(28.14)	(16.15)
InteralConflict	-13.5013 ***	-7.2352 ***	-12.5570 ***	-5.6972 ***
	(-24.74)	(-22.33)	(-23.51)	(-16.75)
CONTROL	NO	Yes	NO	Yes
Time FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Adj. R^2	0.12	0.84	0.12	0.83
Obs.	32,060			

Panel B: *Country's government stability (GOV)*

Dependent variable	Log (Score)			
	Model 1	Model 2	Model 3	Model 4
constant	0.5451 ***	-1.3429 ***	0.1871 ***	-1.5411 ***
	(11.60)	(-29.80)	(4.24)	(-33.88)
Trust1	-0.9524 ***	-0.1211 ***		
	(-18.37)	(-5.15)		
*Trust1*GOV*	11.8676 ***	2.9822 ***		
	(17.69)	(9.85)		
Trust2			-0.3741 ***	-0.1609 ***
			(-6.98)	(-6.62)
*Trust2*GOV*			3.7195 ***	2.5710 ***
			(5.44)	(8.27)
GOV	-10.7576 ***	-4.1063 ***	-5.6027 ***	-3.8703 ***
	(-21.38)	(-18.38)	(-12.57)	(-19.59)
CONTROL	NO	Yes	NO	Yes
Time FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Adj. R^2	0.10	0.83	0.10	0.83
Obs.	32,060			

Panel C: *Country's corruption*

Dependent variable	Log (Score)			
	Model 1	Model 2	Model 3	Model 4
constant	-0.0805 **	-1.5037 ***	-0.1505 ***	-1.7968 ***
	(-2.13)	(-34.63)	(-4.09)	(-42.21)
Trust1	-0.9114 ***	-0.0290		
	(-21.33)	(-1.41)		
*Trust1*Corruption*	20.4935 ***	3.7252 ***		
	(20.34)	(7.66)		
Trust2			-1.1763 ***	-0.2598 ***
			(-24.23)	(-11.54)
*Trust2*Corruption*			23.9614 ***	6.8450 ***
			(21.99)	(13.30)
Corruption	-4.3856 ***	-4.6983 ***	-1.7790 ***	-2.1855 ***
	(-6.80)	(-11.58)	(-2.97)	(-5.83)
CONTROL	NO	Yes	NO	Yes
Time FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Adj. R^2	0.10	0.83	0.11	0.83
Obs.	32,060			

Panel D: *Country's Bureaucracy Quality*

Dependent variable	Log (Score)			
	Model 1	Model 2	Model 3	Model 4
constant	0.2898 ***	-1.3973 ***	0.2556 ***	-1.7483 ***
	(7.36)	(-32.78)	(6.53)	(-41.30)
Trust1	-1.4587 ***	-0.5424 ***		
	(-26.26)	(-21.72)		
*Trust1*BureaucracyQuality*	37.8889 ***	17.7841 ***		
	(26.03)	(26.93)		
Trust2			-1.3864 ***	-0.4574 ***
			(-24.86)	(-17.34)
*Trust2*BureaucracyQuality*			34.8001 ***	13.6515 ***
			(23.58)	(19.00)
BureaucracyQuality	-15.3393 ***	-11.5653 ***	-13.7894 ***	-8.5144 ***
	(-19.64)	(-22.60)	(-18.14)	(-16.32)
CONTROL	NO	Yes	NO	Yes
Time FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Adj. R^2	0.11	0.84	0.11	0.83
Obs.	32,060			

Noted: The t-statistics are reported in parentheses. ***, **, * denote statistical significance at 1%, 5%, and 10%, based on robust standard errors clustered by country, respectively.

Table 6 Retain countries without the US, UK, and JPN

Dependent variable				*Log (Score)*				
		Exclude US				Exclude US, UK, JPN		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
constant	0.1310 ***	-1.5051 ***	0.1249 ***	-1.4937 ***	0.2139 ***	-1.2579 ***	0.2141 ***	-1.2556 ***
	(3.93)	(-31.84)	(3.76)	(-31.65)	(5.68)	(-25.22)	(5.69)	(-25.19)
Trust1	-0.3286 ***	-0.1184 ***			-0.2627 ***	-0.1165 ***		
	(-20.54)	(-15.26)			(-15.57)	(-15.03)		
Trust2			-0.6627 ***	-0.2558 ***			-0.5397 ***	-0.2443 ***
			(-20.46)	(-16.27)			(-15.81)	(-15.43)
CONTROL	NO	Yes	NO	Yes	NO	Yes	NO	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.10	0.82	0.10	0.82	0.09	0.84	0.09	0.84
Obs.			20,334				12,971	

Noted: The t-statistics are reported in parentheses. ***, **, * denote statistical significance at 1%, 5%, and 10%, based on robust standard errors clustered by country, respectively.

Table 7 *Endogeneity correction*

Panel A: IV-2SLS

	First stage:		Second stage:			
Explanatory Variables	*Trust1*	*Trust2*	*Log (Score)*			
Dependent variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
constant	0.2050 ***	0.1012 ***	0.2790 ***	-1.8778 ***	0.2715 ***	-1.8699 ***
	(6.53)	(6.60)	(7.97)	(-44.46)	(7.83)	(-44.56)
Trust1_hat			-0.7936 ***	-0.1621 ***		
			(-27.83)	(-9.91)		
Trust2_hat					-1.6155 ***	-0.4462 ***
					(-28.34)	(-13.65)
Catholic	-0.4035 ***	-0.1957 ***				
	(-47.96)	(-47.63)				
Protestant	0.1755 ***	0.0966 ***				
	(44.73)	(50.42)				
Muslim	-0.1928 ***	-0.1068 ***				
	(-23.13)	(-26.24)				
Buddhist	0.2790 ***	0.1260 ***				
	(56.98)	(52.70)				
Indigenous	0.3628 ***	0.1935 ***				
	(31.79)	(34.71)				
CONTROL	Yes	Yes	NO	Yes	NO	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.34	0.35	0.11	0.83	0.11	0.83
Obs.				32,060		

Panel B: IV-GMM

Dependent variable	Log (Score)			
	Model 1	Model 2	Model 3	Model 4
constant	0.1357 ***	-1.8159 ***	0.1395 ***	-1.8074 ***
	(3.09)	(-29.20)	(3.24)	(-29.20)
Trust1_hat	-0.7101 ***	-0.1104 ***		
	(-13.08)	(-3.79)		
Trust2_hat			-1.4578 ***	-0.3480 ***
			(-13.50)	(-6.08)
CONTROL	NO	Yes	NO	Yes
Time FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Adj. R^2	0.09	0.83	0.10	0.83
Obs.	32,060			

Noted: The t-statistics are reported in parentheses. ***, **, * denote statistical significance at 1%, 5%, and 10%, based on robust standard errors clustered by country, respectively.

Table 8 Robustness test: Alternative measures of trust

Dependent variable	Log (Score)	
	Model 1	Model 2
constant	0.8009 ***	-1.1430 ***
	(18.86)	(-22.47)
Trust_Gov	-1.4702 ***	-0.5901 ***
	(-36.58)	(-27.60)
CONTROL	NO	Yes
Time FE	Yes	Yes
Industry FE	Yes	Yes
Adj. R^2	0.14	0.84
Obs.	26,128	

Noted: The t-statistics are reported in parentheses. ***, **, * denote statistical significance at 1%, 5%, and 10%, based on robust standard errors clustered by country, respectively.

Table 9 Societal trust and each component of CSR

Dependent Variable	Ln (EN Score)	Ln (S Score)	Ln (EN Score)	Ln (S Score)
	Model 1	Model 2	Model 5	Model 6
constant	-3.0696 ***	-2.0662 ***	-3.0721 ***	-2.0621 ***
	(-53.95)	(-38.22)	(-54.08)	(-38.19)
Trust1	-0.0352 ***	-0.0565 ***		
	(-3.41)	(-5.76)		
Trust2			-0.1373 ***	-0.1416 ***
			(-6.53)	(-7.08)
CONTROL	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Adj. R^2	0.73	0.77	0.74	0.77
Obs.	32,060		32,060	

Noted: The t-statistics are reported in parentheses. ***, **, * denote statistical significance at 1%, 5%, and 10%, based on robust standard errors clustered by country, respectively.