

Article

Corporate Social Responsibility: Does Religious Community Matter?

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Abstract: Corporate social responsibility is crucial to the sustainability of a firm, yet its motivating forces remain obscure. Therefore, this paper uses 1130 listed firms over the period 2010–2021 as the sample to explore the effect of religious community on corporate social responsibility in China. Using a firm and year-fixed effects model for empirical analysis. The findings reveal that the number of religious communities around a firm within a radius of less than 10, 50, and 100 km all has a favorable influence on corporate social responsibility. Moreover, the results of heterogeneity analysis show that religious community has a smaller positive impact on corporate social responsibility in low-polluting firms than in high-polluting ones. Additionally, using the robustness test, it is conceivable to conclude that the findings presented in this study are reliable and robust. This paper contributes to and broadens the existing body of research on corporate social responsibility and religious community, which has significant ramifications for the importance of religious community in the conduct of business.

Keywords: religious community; corporate social responsibility; firm and year-fixed effects model; low-polluting firms; high-polluting firms



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1. Introduction

China is a religiously diverse country. Religion, as a component of the informal social system, is intimately connected to all facets of social life and has a substantial influence on social and economic activities (Pan et al. 2022). Naturally, the actions and behaviors of firms are also included in these activities. Corporate social responsibility may be viewed as a kind of behavior demonstrated by firms, and is an essential component of the firms' ability to achieve sustained development (ElAlfy et al. 2020). As is known, corporate social responsibility is a self-regulating business model that enables firms to be socially responsible for themselves, their stakeholders, and the general public. By engaging in corporate social responsibility, also known as corporate citizenship, firms may become aware of the influence they have on the economic, social, and environmental elements of society. China falls behind other countries in regard to the development of corporate social responsibility. The challenge of a lack of social responsibility on the part of firms remains critical at present (Wong 2009). This presents scholars with the possibility of investigating the determinants that affect corporate social responsibility in China. Chi et al. (2019) discovered that managers' location connection, the identification of historical value, and perceptions of favorable tourist benefits influenced their corporate social responsibility views. According to Zu and Song (2009)'s research, the economic success of firms has a favorable effect on the level of corporate social responsibility. In addition, Qu (2007) found that regulations, ownership structure, and market orientation greatly impacted corporate social responsibility. Following a vast number of literature reviews, there has been little research on the influence of religious community on corporate social responsibility in China, since it is an informal system.

As a result, in this article, a sample of 1130 (four kinds of firms are excluded: financial firms; the small and medium-sized enterprises' board and the growth firm market; firms with negative net earnings in the most recent two or three years; and firms without data on the variables under investigation, with a total of 1130 listed firms that were obtained) listed firms in China was used to investigate the influence that religious community has on corporate social responsibility. The empirical findings reveal that the number of religious communities around a firm within a radius of less than 10, 50, and 100 km all had a beneficial effect on corporate social responsibility, utilizing data ranging from 2010 to 2021 and employing a firm and year-fixed effects model for empirical study. In addition, the findings of the heterogeneity study suggest that religious community has a lower beneficial influence on corporate social responsibility in low-polluting corporations than it does in high-polluting ones. This outcome was found to be the case when comparing the two kinds of firms.

This body of work makes two separate and significant contributions to the corpus of previous studies are made as a result of this body of work. To begin with, the findings of this study provide fresh information on the factors that drive corporate social responsibility initiatives in China by addressing the subject from the perspective of less formal institutions, such as religions. Then, this article uncovered a disparity in the religious community and corporate social responsibility relationships between firms that produce high levels of pollution and those that produce low levels of pollution. Specifically, it was found that firms that produce high levels of pollution have more positive religious community and corporate social responsibility relationships than firms that produce low levels of pollution.

The remainder of the paper is structured as follows: In Section 2, the literature review is presented. Section 3 covers variables and models. The empirical findings are presented in Section 4, and the study is concluded in Section 5.

2. Literature Review

To provide a theoretical foundation for this empirical investigation, the objective of this section is to organize and present a summary of the existing literature on the influence of religion on corporate social responsibility. This section will be divided into two subsections: one to study the influence of religion on corporate social responsibility, while the other investigates the heterogeneity of this impact.

2.1. Effect of Religion on Corporate Social Responsibility

Within the setting of a large sample consisting of over 17,000 people drawn from 20 different countries, [Brammer et al. \(2007\)](#) investigated the link between a person's religious denomination and their individual views regarding corporate social responsibility. They discovered that people who practice religion had a tendency to have a more expansive understanding of the idea of corporate social responsibility than people who did not practice religion. Meanwhile, [Ramamamy et al. \(2010\)](#) assessed the impact that customers' religious beliefs have on their support of firms that uphold high standards of social responsibility in Hong Kong and Singapore. They discovered that primary data that were obtained from consumers in these locations showed a large direct association between religious belief and support for corporate social responsibility initiatives. Specifically, this mindset in Hong Kong was motivated by both humanitarian and selfish considerations. This was mostly attributable to the second factor in Singapore. The findings showed that plans for corporate social responsibility in these two cities should be guided by distinct objectives. To investigate if religion had an effect on the level of environmental responsibility shown by corporations in China, [Du et al. \(2014\)](#) conducted their research between 2008 and 2010, employing a sample of listed firms operating within the pollution sector. They produced strong and convincing evidence that religion was substantially positively linked with corporate environmental responsibility, utilizing hand-collected religious data and corporate environmental reporting ratings. Moreover, [Griffin and Sun \(2018\)](#) conducted research to investigate the link between stakeholders' disclosure practices of their corporate social responsibility and the local religious traditions to which they adhere. They discovered that

corporations in places with high adherence report corporate social responsibility activities less often than firms in locations with high affiliation. In addition, they discovered that managers made corporate social responsibility disclosure choices that increased the firm's worth by catering to the religious and social standards of the local community. Using the latest literature, [Chen et al. \(2021\)](#) investigated how Buddhism and Taoism, the most prevalent and important religions in China, might influence corporate culture, organizational and individual behaviors to increase corporate social responsibility. They discovered that religion made a significant contribution to the advancement of corporate social responsibility in corporate environmental governance by using Chinese firms listed that disclosed environmental governance information from 2007 to 2016. Furthermore, [MacLeod \(2011\)](#), [Cui et al. \(2017\)](#), and [Murphy and Smolarski \(2020\)](#) all concurred with these findings, which further bolstered their reliability. As a result of the examination of the relevant literature, the following hypothesis was formulated:

Hypothesis 1 (H1). *Religious community has a favorable effect on corporate social responsibility.*

2.2. Heterogeneity of This Impact

According to a review of relevant published material, a large number of academics have researched various aspects of corporate social responsibility from a variety of perspectives. However, it is not difficult to figure out that the characteristics of the firms themselves will also produce heterogeneity among these impacting factors ([Hąbek 2017](#); [Szczepankiewicz and Mućko 2016](#)). Using a Tobit regression approach, [Dyduch and Krasodomska \(2017\)](#) investigated whether a variety of factors had an effect on the amount of information on corporate social responsibility that was included in the annual reports of Polish firms with a sample of 60 reports. They discovered that the environmental sensitivity of an industry has a considerable effect on the disclosures made by corporate social responsibility. [Albertsen et al. \(2006\)](#) and [Hareli and Eisikovits \(2006\)](#) found that religious people felt considerably more remorse over their erroneous items, despite the fact that mistakes were accidental. This sense of shame led to the inclination for religious people to correct their misbehavior. Therefore, both [Jiang and Akbar \(2018\)](#) and [Matuszak and Różańska \(2017\)](#) believed that polluting sectors were the primary source of environmental issues and that these sectors were often sensitive to corporate social responsibility owing to their negative effects. In accordance with [Tsang \(2015\)](#) and [Deng and Yang \(2013\)](#), executives in areas with high levels of religiosity may be more motivated to engage in corporate social responsibility initiatives in high-polluting firms than in low-polluting industries. Regarding the risk impact of religion, however, executives in locations with high levels of religiosity were more inclined to engage in corporate social responsibility efforts toward other stakeholders in highly polluting firms in order to avoid possible punitive measures. In addition, [Fallah and Mojarrad \(2018\)](#), [Wang et al. \(2019\)](#), [Chen et al. \(2018\)](#) all reached the same conclusions, which lends even more credence to the dependability of these results. The following hypothesis has been developed as a consequence of an analysis of the relevant literature, which is as follows:

Hypothesis 2 (H2). *Religious community has a lower beneficial effect on corporate social responsibility in firms with low levels of pollution than in firms with high levels of pollution.*

3. Variable and Model

3.1. Variable

Corporate social responsibility entails that corporations must not only generate profits and fulfill their legal responsibilities to shareholders and workers, they must also comply with their responsibilities to customers, communities, and the environment. Corporate social responsibility necessitates that corporations move beyond the conventional perception that profits are the only objective, recognizing human worth in the manufacturing process and the contribution to the environment, customers, and society. Corporate social

responsibility score is used as a dependent variable in this study. This was obtained from Hexun.com (accessed on 25 September 2022).

He et al. (2021a), and Wang and Lin (2014) stated that religion had an impact on almost every facet of human civilization due to its unique status as a social ideology and cultural phenomenon. From previous studies (He et al. 2021b; Zeng et al. 2021), there are a variety of methods available to evaluate religion. Following Li and Cai (2016), and El Ghoul et al. (2012), this study defines religion as the number of religious community. Specifically, according to Callen and Fang (2015) and Lu and Wu (2020), Baidu Earth Map is utilized in conjunction with three indices to designate the religious community. The first indication is the number of religious communities + 1 around a firm with a radius of less than 10 km centered around firms. The second indication is the number of religious communities + 1 around a firm with a radius of less than 50 km centered around firms. The third indication is the number of religious communities + 1 around a firm with a radius of less than 100 km centered around firms.

Some control variables have been included in this study in order to ensure that the findings presented in this research are as accurate and reliable as possible. In accordance with Dyduch and Krasodomska (2017), Muttakin and Khan (2014), Fifka (2013), and Boubakri et al. (2021), this paper includes the firm's age, leverage, profitability, scale, cash flow, property rights, managers' duality, board size, and research and development. Table 1 lays out the characteristics of the variables that are the focus of this article, so that the reader can obtain a solid understanding of the subject matter.

Table 1. Results of variable description.

Variable	Form	Definition
Corporate social responsibility	csr	Corporate social responsibility score in log.
Religion 1	re1	Number of religious communities + 1 around a firm within a radius of 10 km in log.
Religion 2	re2	Number of religious communities + 1 around a firm within a radius of 50 km in log.
Religion 3	re3	Number of religious communities + 1 around a firm within a radius of 100 km in log.
Age	age	Firm's age in log.
Leverage	lev	Firm's total debt/total assets.
Profitability	pro	Profits before interest and taxes as a percentage of total assets.
Scale	sca	Firm's book value of total assets (unit: billion yuan) in log.
Cash flow	cas	Ratio of net cash flow from operational operations to total assets.
Property rights	rig	If the firm is state-owned, the value is set to one; otherwise, zero.
Managers' duality	dua	If the chairman and chief executive officer are the same one, the value is set to one; otherwise, zero.
Board size	boa	Number of board members in total in log.
Research and development	res	Value of research and development (unit: billion yuan) in log.

Note: The use of the number of religious communities + 1 around a firm is to avoid zero value.

3.2. Model

To investigate the impact of religious community on corporate social responsibility, the following regression model is constructed:

$$csr_{i,t} = a_0 + a_1 rel_{i,t} + a_2 age_{i,t} + a_3 lev_{i,t} + a_4 pro_{i,t} + a_5 sca_{i,t} + a_6 cas_{i,t} + a_7 rig_{i,t} + a_8 dua_{i,t} + a_9 boa_{i,t} + a_{10} res_{i,t} + \eta_i + \mu_t + \epsilon_{i,t} \quad (1)$$

where i denotes the firm; t denotes the year; a_0 denotes the constant; $[a_1, a_{10}]$ denote the estimated coefficients; η_i denotes the firm fixed-effect; μ_t denotes the year fixed-effect; $\epsilon_{i,t}$ denotes the white noise. Moreover, a_1 is the coefficient of religious community. If its value is more than zero and statistically significant, it is possible to infer that religious community would heighten corporate social responsibility. On the contrary, if its value is less than zero and statistically significant, it is feasible to deduce that religious community would lower corporate social responsibility. Otherwise, religious community has no effect on corporate social responsibility.

Furthermore, consideration is also given to the influence of heterogeneity across industries with low and high pollution levels on the effect of religious community on corporate social responsibility. The following regression model is constructed:

$$csr_{i,t} = b_0 + b_1rel_{i,t} + b_2rel_{i,t} \cdot dum_{i,t} + b_3dum_{i,t} + b_4age_{i,t} + b_5lev_{i,t} + b_6pro_{i,t} + b_7sca_{i,t} + b_8cas_{i,t} + b_9rig_{i,t} + b_{10}dua_{i,t} + b_{11}boa_{i,t} + b_{12}res_{i,t} + \eta_i + \mu_t + \epsilon_{i,t}, \quad (2)$$

where b_0 denotes the constant; $[b_1, b_{12}]$ denote the estimated coefficients; dum denotes the dummy variable (If the firm is in a low-polluting industry, the value is set to zero; otherwise, the value is set to one.). In addition, b_2 is the coefficient of interaction term. If its value is more than zero and statistically significant, it is possible to infer that religious community has a considerably lesser impact on low-polluting industries' corporate social responsibility than on high-polluting ones. Conversely, if its value is less than zero and statistically significant, it is feasible to deduce that religious community has a significantly greater impact on low-polluting industries' corporate social responsibility than on high-polluting ones. Otherwise, there is no difference across industries with low and high pollution levels in the effect of religious community on corporate social responsibility.

4. Results and Decision

4.1. Analysis of Basic Statistics

A fundamental statistical analysis is carried out in this subsection in order to better understand the relationships between the variables that are the subject of this inquiry. The examination of the characteristics of the variables involved and the correlation test are included. The results are presented in Table 2.

Table 2. Results of analysis of basic statistics.

Panel A: Variable Characteristic Statistics													
V & S	csr	re1	re2	re3	age	lev	rig	sca	cas	pro	dua	boa	res
Mean	1.203	0.023	0.292	0.505	0.954	0.556	0.593	2.947	0.022	0.018	0.143	0.745	0.017
Min	1.041	0	0	0	0.778	0.114	0	1.107	−0.135	−0.218	0	0.477	−1.215
Max	1.863	0.477	0.698	1.079	1.176	1.146	1	3.131	0.198	0.132	1	1.114	0.062
Std	0.046	0.010	0.014	0.012	0.259	0.698	0.394	0.971	0.725	0.154	0.589	0.084	0.558
Panel B: Correlation Test													
V	csr	re1	re2	re3	age	lev	rig	sca	cas	pro	dua	boa	res
csr	1.000 (----)												
re1	0.021 *** (0.000)	1.000 (----)											
re2	0.068 *** (0.000)	0.994 *** (0.000)	1.000 (----)										
re3	0.090 *** (0.000)	0.982 *** (0.000)	0.925 *** (0.000)	1.000 (----)									
age	−0.064 *** (0.000)	−0.127 ** (0.028)	−0.213 * (0.039)	−0.138 *** (0.000)	1.000 (----)								
lev	−0.037 *** (0.000)	−0.143 *** (0.000)	−0.252 * (0.078)	−0.199 ** (0.042)	−0.296 ** (0.034)	1.000 (----)							
pro	0.252 *** (0.000)	−0.152 * (0.065)	−0.271 (0.274)	−0.261 (0.220)	−0.085 (0.114)	−0.510 (0.296)	1.000 (----)						
sca	0.296 *** (0.000)	0.372 ** (0.019)	0.252 ** (0.037)	0.328 ** (0.013)	0.542 *** (0.002)	0.487 *** (0.009)	0.342 ** (0.022)	1.000 (----)					
cas	0.173 *** (0.000)	0.177 (0.104)	0.239 (0.193)	0.359 (0.118)	0.155 (0.157)	0.197 (0.162)	0.182 ** (0.016)	0.149 ** (0.012)	1.000 (----)				
rig	0.101 * (0.072)	−0.091 (0.157)	−0.026 (0.234)	−0.094 (0.121)	0.357 ** (0.024)	0.319 * (0.077)	0.132 (0.142)	0.214 *** (0.005)	0.291 ** (0.021)	1.000 (----)			
dua	−0.037 *** (0.000)	0.046 (0.114)	0.032 (0.146)	0.097 (0.162)	−0.388 ** (0.015)	−0.291 ** (0.013)	−0.415 * (0.064)	−0.297 * (0.074)	−0.403 * (0.068)	−0.269 * (0.098)	1.000 (----)		
boa	0.141 ** (0.026)	−0.152 ** (0.014)	−0.157 ** (0.024)	−0.093 ** (0.013)	−0.481 (0.119)	−0.509 (0.113)	−0.485 ** (0.021)	−0.317 (0.132)	−0.449 (0.161)	−0.245 (0.517)	−0.086 (0.383)	1.000 (----)	
res	0.198 *** (0.000)	0.187 (0.116)	0.254 (0.142)	0.144 * (0.096)	0.069 (0.348)	0.336 (0.266)	0.211 (0.231)	0.418 (0.208)	0.182 (0.374)	0.284 (0.226)	0.091 * (0.051)	0.375 ** (0.032)	1.000 (----)

Note: p -value shown in the parenthesis; V variable; S statistics; Min minimum; Max maximum; Std standard deviation; * a 10% significant level; ** a 5% significant level; *** a 1% significant level.

In Table 2, we give a summary of the statistical information on the primary variables that were investigated in this research. As the results in Panel A show, the fact that the mean value for corporate social responsibility is 1.203 and is much lower than the maximum value implies that corporate social responsibility is relatively low in China. The means of the number of religious communities centered around firms in log with a radius of less than 10, 50, and 100 km are 0.023, 0.292, and 0.505, respectively. This lends credence to the notion that there is a tendency toward the establishment of religious communities in China. As the results of the correlation test are suggested in Panel B, it was found that the number of religious communities centered around firms with a radius of less than 10, 50, and 100 km is positively correlated with corporate social responsibility. This suggests that there are more religious communities in the surrounding area of the firm, which might result in increased levels of corporate social responsibility. Moreover, this outcome was supported by [van Aaken and Buchner \(2020\)](#). Due to the fact that the purpose of this study is to investigate the influence that religious community has on corporate social responsibility, the other variables will not be analyzed separately in this subsection.

4.2. Analysis of the Effect of Religious Community on Corporate Social Responsibility

Both [Cui et al. \(2017\)](#) and [Du et al. \(2014\)](#) came to the same conclusion, which is that religion is one of the most significant elements, and cannot be ignored when determining how corporations behave in terms of their social responsibilities. As a result, the goal of this subsection is to investigate the impact that religious community has on corporate social responsibility. Table 3 has an exhibit of the findings.

Table 3. Results of the effect of religious community on corporate social responsibility.

Variable and Model	Model (1)	Model (2)	Model (3)
re1	0.030 *** (6.489)		
re2		0.043 *** (6.092)	
re3			0.088 *** (6.322)
age	−0.095 (−1.469)	−0.129 (−1.049)	−0.132 (−1.129)
lev	−0.325 *** (−4.678)	−0.447 *** (−4.516)	−0.359 *** (−4.909)
pro	0.881 ** (2.227)	0.835 ** (2.239)	0.893 *** (2.827)
sca	0.414 *** (8.126)	0.437 *** (9.136)	0.426 *** (8.908)
cas	0.574 *** (9.242)	0.615 *** (9.306)	0.672 *** (9.298)
rig	0.023 *** (3.781)	0.017 *** (4.705)	0.027 *** (4.794)
dua	−0.176 (−1.599)	−0.154 (−1.432)	−0.147 (−1.060)
boa	0.069 (0.863)	0.055 (1.051)	0.071 (0.954)
res	0.575 ** (2.009)	0.606 ** (2.273)	0.592 ** (2.249)
c	2.815 *** (7.565)	2.849 *** (7.927)	1.888 *** (7.088)
Firm-fixed effect	Yes	Yes	Yes
Year-fixed effect	Yes	Yes	Yes
R ²	0.332	0.432	0.408
F-statistics	92.119 ***	99.449 ***	106.828 ***
Observations	13,560	13,560	13,560

Note: value of t-statistics shown in the parenthesis; ** a 5% significant level; *** a 1% significant level.

According to the findings shown in Table 3, it was found that the coefficients indicating the number of religious communities centered around firms with a radius of less than 10, 50, and 100 km are positive and statistically significant. Specifically, the number of religious communities located in firms within a radius of less than 10, 50, and 100 km grew by 1%, indicating an increase in corporate social responsibility of 0.030%, 0.043%, and 0.088%, respectively. These findings provide evidence in support of Hypothesis 1 (H1). There are two possibilities that could explain these findings. One reason for this is that if the extent of religious freedom expands even more, the likelihood of religious factors having an impact on business endeavors will also grow. The other reason is that as the living standards of the Chinese people continue to rise, it becomes increasingly difficult for people's material lives to fulfill all their demands. As a result, people are paying an increasing amount of attention to their spiritual lives. This, in turn, encourages people to participate more actively in activities that are connected to religious community in order to fulfill their spiritual requirements. In addition, [Waymer and VanSlette \(2021\)](#) and [Murphy and Smolarski \(2020\)](#) both provide their support for these findings.

Similarly, the findings in Table 3 indicate that leverage has a detrimental impact on corporate social responsibility. This result is consistent with [Ho et al. \(2021\)](#), and [Sheikh \(2019\)](#). Contrariwise, a firm's profitability, scale, cash flow, and property rights have a favorable impact on its corporate social responsibility. Moreover, [Creixans-Tenas et al. \(2019\)](#), [Udayasankar \(2008\)](#), [Gregory et al. \(2014\)](#), [Islam et al. \(2021\)](#), and [Polishchuk \(2009\)](#) confirm these findings. Surprisingly, the coefficients of a firm's age, manager's duality, and board size are not statistically significant. It is possible that this is due to the tiny sample size employed in this paper. Fortunately, the symbols for these variables are identical to those for [D'Amato and Falivena \(2020\)](#), [Barnea and Rubin \(2010\)](#), [Liao et al. \(2018\)](#), and [Endrikat et al. \(2021\)](#).

4.3. Heterogeneity Analysis

The purpose of this subsection of the study is to discuss the social responsibility of religious community for low-pollution firms and high-pollution firms. This is because the different characteristics of firms will lead to differences in the level of corporate social responsibility that is exercised by those firms. On the basis of data on the emissions, production, and emission reductions of water pollutants, gas pollutants, solid pollutants, and energy consumption, firms are classified as either high- or low-polluters. Therefore, a dummy variable is set up. Specifically, if the firm is in a low-polluting industry, the value is set to zero; otherwise, the value is set to one. This practice has also been approved by [Du et al. \(2014\)](#), and [Chatjuthamard-Kitsabunnarat et al. \(2014\)](#). The results of the influence of heterogeneity across industries with low and high pollution levels on the effect of religious community on corporate social responsibility are shown in Table 4.

According to Table 4, the coefficients reflecting the number of religious communities located on firms within a radius of less than 10, 50, and 100 km are still positive and statistically significant. However, these three coefficients of interaction term are negative and statistically significant. Nevertheless, each of these three coefficients of interaction terms is negative and statistically significant. That is to say, these findings imply that the favorable influence of religious community on corporate social responsibility is less prominent in low-polluting firms than in high-polluting ones. These results also support Hypothesis 2 (H2). There are two possible explanations for these results. The first argument that might explain this phenomenon is that religious belief, functioning as an informal system, would have a certain limiting influence on high-pollution firms, compelling such firms to pay greater attention to their corporate social responsibility obligations. Another explanation might be that protecting the environment was one of the responsibilities of social responsibility for firms. From this viewpoint, low-pollution firms are unquestionably superior to high-pollution firms; hence, the system (the informal system) places fewer restrictions on low-pollution firms than it does on high-pollution firms. Obviously, the results of [Du et al. \(2016\)](#) and [Cui et al. \(2015\)](#) back up the conclusions drawn in this paper.

Table 4. Results of heterogeneity analysis.

Variable and Model	Model (4)	Model (5)	Model (6)
re1	0.154 *** (4.756)		
redum	−0.082 *** (−7.679)		
re2		0.181 *** (4.775)	
redum		−0.076 *** (−7.916)	
re3			0.166 *** (4.486)
redum			−0.089 (−7.068)
cv	Yes	Yes	Yes
c	1.264 *** (5.129)	2.217 *** (5.619)	1.630 *** (5.956)
Firm-fixed effect	Yes	Yes	Yes
Year-fixed effect	Yes	Yes	Yes
R ²	0.238	0.339	0.355
F-statistics	99.966 ***	102.139 ***	102.614 ***
Observations	13,560	13,560	13,560

Note: value of t-statistics shown in the parenthesis; *** a 1% significant level; cv control variable.

4.4. Robustness Test

This section's objective is to perform a robustness test to assess the effect of religious community on corporate social responsibility in order to strengthen the reliability and robustness of the article's conclusion. In the wake of [Zhao et al. \(2022\)](#) and [Yu et al. \(2020\)](#), this empirical study utilizes the corporate social responsibility rating as an another proxy for corporate social responsibility obtained from Hexun.com. The results are presented in Table 5.

Table 5. Results of robustness test.

Variable and Model	Model (7)	Model (8)	Model (9)
re1	0.027 *** (9.118)		
re2		0.034 *** (8.522)	
re3			0.053 *** (9.953)
cv	Yes	Yes	Yes
c	2.427 *** (4.860)	1.705 *** (5.431)	2.514 *** (5.449)
Firm-fixed effect	Yes	Yes	Yes
Year-fixed effect	Yes	Yes	Yes
R ²	0.332	0.316	0.301
F-statistics	137.873 ***	107.364 ***	123.971 ***
Observations	13,560	13,560	13,560

Note: value of t-statistics shown in the parenthesis; *** a 1% significant level; cv control variable.

According to the findings that are presented in Table 5, it is discovered that the coefficients indicating the number of religious communities centered around firms with a radius of less than 10, 50, and 100 km are also positive and statistically significant, while there is only a small change in the magnitude of these coefficients. In other words, we are able to draw the inference that the results presented in this work are trustworthy and robust.

5. Conclusions

Corporate social responsibility is an unavoidable aspect of the sustainable development of firms. In light of this, the goal of this article is to investigate the determinants of corporate social responsibility in China from the viewpoint of the informal religious system. The empirical research was conducted using 1130 listed firms over the period of 2010–2021, employing the firm and year-fixed effects model. The findings indicate that the number of religious communities around a firm within a radius of less than 10, 50, and 100 km has a positive influence on corporate social responsibility in all three distance categories. In addition, the findings of the heterogeneity study demonstrate that religious community has a less significant beneficial influence on corporate social responsibility in low-polluting firms than it does in high-polluting ones. Based on the results of the robustness test, one could draw the conclusion that the discoveries provided in this work are trustworthy and robust.

Following the presentation of the aforementioned empirical findings, several appropriate policy implications are suggested. First, the Chinese government has the ability to make advancements and increase religious freedom due to the positive influence that religious community has on corporate social responsibility. This is beneficial not just to the sustainable development of firms but also to the peaceful advancement of society as a whole. Second, since religious community has a more far-reaching influence on the corporate social responsibility of high-pollution firms, these kinds of firms should pay more attention to the establishment of cultural systems (religion as an informal cultural system) for the long-term development of firms.

This work makes two distinct and important contributions to the existing body of research. First, this research presents fresh evidence on the drivers of corporate social responsibility in China by approaching the topic from the standpoint of informal institutions such as religious community. Second, the disparity in the religious community and corporate social responsibility relationships between firms that produce high levels of pollution and those that produce low levels of pollution has been discovered in this article.

In summary, a number of limitations and recommendations for further study are presented. First, however, because China is home to a wide variety of religious communities, the term “religious community” that will be used throughout this article will refer to a more general concept. This is so that subsequent researchers will be able to differentiate between various religious communities and investigate how they affect corporate social responsibility. It is possible that this will result in additional fascinating findings. Second, this article does not consider other variables that may have an effect on corporate social responsibility, such as management ownership and board independence. Therefore, future scholars can take these elements into account when they revisit this issue, and as a result, might come up with far more fascinating conclusions.

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References

- Albertsen, Elizabeth J., Lynn E. O’connor, and Jack W. Berry. 2006. Religion and interpersonal guilt: Variations across ethnicity and spirituality. *Mental Health, Religion & Culture* 9: 67–84.
- Barnea, Amir, and Amir Rubin. 2010. Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics* 97: 71–86. [\[CrossRef\]](#)
- Boubakri, Narjess, Sadok El Ghouli, Omrane Guedhami, and He Helen Wang. 2021. Corporate social responsibility in emerging market economies: Determinants, consequences, and future research directions. *Emerging Markets Review* 46: 100758. [\[CrossRef\]](#)

- Brammer, Stephen, Geoffrey Williams, and John Zinkin. 2007. Religion and attitudes to corporate social responsibility in a large cross-country sample. *Journal of Business Ethics* 71: 229–43. [\[CrossRef\]](#)
- Callen, Jeffrey L., and Xiaohua Fang. 2015. Religion and stock price crash risk. *Journal of Financial and Quantitative Analysis* 50: 169–95. [\[CrossRef\]](#)
- Chatjuthamard-Kitsabunnarat, Pattanaporn, Pornsit Jiraporn, and Shenghui Tong. 2014. Does religious piety inspire corporate social responsibility (CSR)? Evidence from historical religious identification. *Applied Economics Letters* 21: 1128–33. [\[CrossRef\]](#)
- Chen, Kejing, Wenqi Guo, Yanling Kang, and Qingqing Wan. 2021. Does religion improve corporate environmental responsibility? Evidence from China. *Corporate Social Responsibility and Environmental Management* 28: 808–18. [\[CrossRef\]](#)
- Chen, Yi-Chun, Mingyi Hung, and Yongxiang Wang. 2018. The effect of mandatory CSR disclosure on firm profitability and social externalities: Evidence from China. *Journal of Accounting and Economics* 65: 169–90. [\[CrossRef\]](#)
- Chi, Christina Geng-qing, Chaozhi Zhang, and Yuanyuan Liu. 2019. Determinants of corporate social responsibility (CSR) attitudes: Perspective of travel and tourism managers at world heritage sites. *International Journal of Contemporary Hospitality Management* 31: 2253–69. [\[CrossRef\]](#)
- Creixans-Tenas, Judit, Germà Coenders, and Núria Arimany-Serrat. 2019. Corporate social responsibility and financial profile of Spanish private hospitals. *Heliyon* 5: e02623. [\[CrossRef\]](#) [\[PubMed\]](#)
- Cui, Jinhua, Hoje Jo, and Haejung Na. 2017. Corporate social responsibility, religion, and firm risk. *Asia-Pacific Journal of Financial Studies* 46: 305–40. [\[CrossRef\]](#)
- Cui, Jinhua, Hoje Jo, and Manuel G. Velasquez. 2015. The influence of Christian religiosity on managerial decisions concerning the environment. *Journal of Business Ethics* 132: 203–31. [\[CrossRef\]](#)
- D'Amato, Antonio, and Camilla Falivena. 2020. Corporate social responsibility and firm value: Do firm size and age matter? Empirical evidence from European listed companies. *Corporate Social Responsibility and Environmental Management* 27: 909–24. [\[CrossRef\]](#)
- Deng, Yanhua, and Guobin Yang. 2013. Pollution and protest in China: Environmental mobilization in context. *The China Quarterly* 214: 321–36. [\[CrossRef\]](#)
- Du, Xingqiang, Wei Jian, Quan Zeng, and Yingjie Du. 2014. Corporate environmental responsibility in polluting industries: Does religion matter? *Journal of Business Ethics* 124: 485–507. [\[CrossRef\]](#)
- Du, Xingqiang, Yingjie Du, Quan Zeng, Hongmei Pei, and Yingying Chang. 2016. Religious atmosphere, law enforcement, and corporate social responsibility: Evidence from China. *Asia Pacific Journal of Management* 33: 229–65. [\[CrossRef\]](#)
- Dyduch, Justyna, and Joanna Krasodomska. 2017. Determinants of corporate social responsibility disclosure: An empirical study of Polish listed companies. *Sustainability* 9: 1934. [\[CrossRef\]](#)
- El Ghoul, Sadok, Omrane Guedhami, Yang Ni, Jeffrey Pittman, and Samir Saadi. 2012. Does religion matter to equity pricing? *Journal of Business Ethics* 111: 491–518. [\[CrossRef\]](#)
- ElAlfy, Amr, Nicholas Palaschuk, Dina El-Bassiouny, Jeffrey Wilson, and Olaf Weber. 2020. Scoping the evolution of corporate social responsibility (CSR) research in the sustainable development goals (SDGs) era. *Sustainability* 12: 5544. [\[CrossRef\]](#)
- Endrikat, Jan, Charl De Villiers, Thomas W. Guenther, and Edeltraud M. Guenther. 2021. Board characteristics and corporate social responsibility: A meta-analytic investigation. *Business & Society* 60: 2099–2135.
- Fallah, Mohammad Ali, and Fayegh Mojarad. 2018. Corporate governance effects on corporate social responsibility disclosure: Empirical evidence from heavy-pollution industries in Iran. *Social Responsibility Journal* 15: 208–25. [\[CrossRef\]](#)
- Fifka, Matthias S. 2013. Corporate responsibility reporting and its determinants in comparative perspective—a review of the empirical literature and a meta-analysis. *Business Strategy and the Environment* 22: 1–35. [\[CrossRef\]](#)
- Gregory, Alan, Rajesh Tharyan, and Julie Whittaker. 2014. Corporate social responsibility and firm value: Disaggregating the effects on cash flow, risk and growth. *Journal of Business Ethics* 124: 633–57. [\[CrossRef\]](#)
- Griffin, Paul A., and Estelle Y. Sun. 2018. Voluntary corporate social responsibility disclosure and religion. *Sustainability Accounting, Management and Policy Journal* 9: 63–94. [\[CrossRef\]](#)
- Habek, Patrycja. 2017. CSR reporting practices in Visegrad group countries and the quality of disclosure. *Sustainability* 9: 2322. [\[CrossRef\]](#)
- Hareli, Shlomo, and Zvi Eisikovits. 2006. The role of communicating social emotions accompanying apologies in forgiveness. *Motivation and Emotion* 30: 189–97. [\[CrossRef\]](#)
- He, Yugang, Jingnan Wang, and Baek-Ryul Choi. 2021a. Religious Participation: Does It Matter for Sustainable Culture and Entertainment Consumption? *Sustainability* 13: 7999. [\[CrossRef\]](#)
- He, Yugang, Yinhui Wang, and Xiaodan Gao. 2021b. What Role Does Religion Have in Shaping Human Consumption? *Religions* 13: 8. [\[CrossRef\]](#)
- Ho, Kung-Cheng, Qian Wang, Xianming Sun, and Leonard F. S. Wang. 2021. How does corporate social responsibility affect firm leverage? *Kybernetes*. [\[CrossRef\]](#)
- Islam, Shah Md Taha, Ratan Ghosh, and Asia Khatun. 2021. Slack resources, free cash flow and corporate social responsibility expenditure: Evidence from an emerging economy. *Journal of Accounting in Emerging Economies* 11: 533–51. [\[CrossRef\]](#)
- Jiang, Xinfeng, and Ahsan Akbar. 2018. Does increased representation of female executives improve corporate environmental investment? Evidence from China. *Sustainability* 10: 4750. [\[CrossRef\]](#)
- Li, Wenfei, and Guilong Cai. 2016. Religion and stock price crash risk: Evidence from China. *China Journal of Accounting Research* 9: 235–50. [\[CrossRef\]](#)

- Liao, Lin, Teng Philip Lin, and Yuyu Zhang. 2018. Corporate board and corporate social responsibility assurance: Evidence from China. *Journal of Business Ethics* 150: 211–25. [\[CrossRef\]](#)
- Lu, Liping, and Yiping Wu. 2020. Does religion enhance firm performance? Evidence from private firms in China. *China Economic Review* 62: 101480. [\[CrossRef\]](#)
- MacLeod, Michael. 2011. Religion and the rise of global corporate social responsibility. *The Review of Faith & International Affairs* 9: 29–36.
- Matuszak, Lukasz, and Ewa Róžańska. 2017. An examination of the relationship between CSR disclosure and financial performance: The case of Polish banks. *Accounting and Management Information Systems* 16: 522–33. [\[CrossRef\]](#)
- Murphy, Maurice J., and Jan M. Smolarski. 2020. Religion and CSR: An Islamic “political” model of corporate governance. *Business & Society* 59: 823–54.
- Muttakin, Mohammad Badrul, and Arifur Khan. 2014. Determinants of corporate social disclosure: Empirical evidence from Bangladesh. *Advances in Accounting* 30: 168–75. [\[CrossRef\]](#)
- Pan, Stephen W., Yuxin Liang, Shiqiang Wu, Wanqi Wang, Xinwen Hu, Jing Wang, and Wenting Huang. 2022. Health Effects of Religion, Spirituality, and Supernatural Beliefs in Mainland China: A Systematic Review. *Journal of Religion and Health* 61: 2726–42. [\[CrossRef\]](#)
- Polishchuk, Leonid. 2009. Corporate social responsibility or government regulation: An analysis of institutional choice. *Problems of Economic Transition* 52: 73–94. [\[CrossRef\]](#)
- Qu, Riliang. 2007. Corporate social responsibility in China: Impact of regulations, market orientation and ownership structure. *Chinese Management Studies* 1: 198–207. [\[CrossRef\]](#)
- Ramasamy, Bala, Matthew CH Yeung, and Alan KM Au. 2010. Consumer support for corporate social responsibility (CSR): The role of religion and values. *Journal of Business Ethics* 91: 61–72. [\[CrossRef\]](#)
- Sheikh, Shahbaz. 2019. Corporate social responsibility and firm leverage: The impact of market competition. *Research in International Business and Finance* 48: 496–510. [\[CrossRef\]](#)
- Szczepankiewicz, Elżbieta Izabela, and Przemysław Mućko. 2016. CSR reporting practices of Polish energy and mining companies. *Sustainability* 8: 126. [\[CrossRef\]](#)
- Tsang, Yiu Fai. 2015. Environmental protection and pollution management in China. *The Entrepreneurial Rise in Southeast Asia* 14: 309–34.
- Udayasankar, Krishna. 2008. Corporate social responsibility and firm size. *Journal of Business Ethics* 83: 167–75. [\[CrossRef\]](#)
- van Aaken, Dominik, and Florian Buchner. 2020. Religion and CSR: A systematic literature review. *Journal of Business Economics* 90: 917–45. [\[CrossRef\]](#)
- Wang, Qunyong, and Xinyu Lin. 2014. Do religious beliefs affect economic growth? Evidence from provincial-level panel data in China. *China Economic Review* 31: 277–87. [\[CrossRef\]](#)
- Wang, Wei, Xue-Zhou Zhao, Feng-Wen Chen, Chia-Huei Wu, Sangbing Tsai, and Jiangtao Wang. 2019. The effect of corporate social responsibility and public attention on innovation performance: Evidence from high-polluting industries. *International Journal of Environmental Research and Public Health* 16: 3939. [\[CrossRef\]](#) [\[PubMed\]](#)
- Waymer, Damion, and Sarah VanSlette. 2021. Religion matters: Explicating religion’s underexamined role in corporate social advocacy (CSA) conceptualization and research. *Journal of Public Relations Research* 33: 267–83. [\[CrossRef\]](#)
- Wong, Loong. 2009. Corporate social responsibility in China: Between the market and the search for a sustainable growth development. *Asian Business & Management* 8: 129–48.
- Yu, Feifei, Ye Shi, and Teng Wang. 2020. R&D investment and Chinese manufacturing SMEs’ corporate social responsibility: The moderating role of regional innovative milieu. *Journal of Cleaner Production* 258: 120840.
- Zeng, Sheng, Zijian Peng, and Lin Wu. 2021. Is There a Role of Religion? The Moderation Role of Religious Identity and Religious Practice between Traditional Media Usage and Moral Evaluation. *Religions* 12: 137. [\[CrossRef\]](#)
- Zhao, Xuezhou, Libing Fang, and Ke Zhang. 2022. How foreign institutional shareholders’ religious beliefs affect corporate social performance? *Journal of Business Ethics* 178: 377–401. [\[CrossRef\]](#)
- Zu, Liangrong, and Lina Song. 2009. Determinants of managerial values on corporate social responsibility: Evidence from China. *Journal of Business Ethics* 88: 105–17. [\[CrossRef\]](#)